# Corporate Political Spending and State Tax Policy: Evidence from *Citizens United*[*]

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**Abstract**

To what extent is U.S. state tax policy affected by corporate political contributions? The 2010 Supreme Court *Citizens United v. Federal Election Commission* ruling provides an exogenous shock to corporate campaign spending, allowing corporations to spend on elections in 23 states which previously had spending bans. Ten years after the ruling and for a wide range of outcomes, we are not able to identify economically or statistically significant effects of corporate independent expenditures on state tax policy, including tax rates, discretionary tax breaks, and tax revenues.

**JEL Classification:** D72, H20, H71, H72
**Keywords:** campaign finance, political contributions, Citizens United, independent spending, state taxes, state revenues, state expenditures

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Political contributions are often highly regulated, due to concerns about the influence of donations on election outcomes and, consequently, public policies. In particular, contributions from *organizations*, such as corporations and labor unions, are often more restricted than those made by individuals. As of 2021, 22 U.S. states prohibit corporations from directly contributing to state elections, and three have stricter limits for corporations than for individuals (NCSL, 2021). The concern over the potential influence of organizations is particularly acute in the setting of tax policy: while corporations may have neutral or offsetting preferences over social issues, tax rules (especially the corporate tax rules) have direct effects on their financial well-being. The question remains whether corporations are able to use political contributions to decrease their tax burden.

In this paper we study the effect of political contributions by corporations on U.S. state tax rates, rules, revenues, and discretionary tax breaks. We identify the causal effect of political contributions on tax policy by exploiting exogenous variation in corporations' ability to spend in elections borne by *Citizens United v. Federal Election Commission*. In January 2010 the United States Supreme Court overturned a 20 year precedent and prohibited the federal government from restricting independent political expenditures by an organization. The ruling thus allowed corporations, unions and other organizations to make unlimited independent contributions—expenditures on activities aimed at supporting the candidates that are not given directly to the election campaigns. At the time of the decision 23 states had laws that banned corporations from spending in state elections. These states now had to comply with the federal ruling, which meant that corporations were free to spend in elections where they had previously been constrained. The ruling facilitates a difference-in-differences strategy, comparing tax policy outcomes in states that were affected by the 2010 ruling to those that were not, before and after 2010.

The *Citizens United* decision was highly controversial, and its critics warned of devastating impacts from independent spending by corporations. At the time of the ruling, the editorial board of the *New York Times* wrote that it "paved the way for corporations to use their vast treasuries to overwhelm elections and intimidate elected officials into doing their bidding" (Editorial, 2010). President Barack Obama also criticized the ruling, declaring it "a major victory for big oil, Wall Street banks, health insurance companies and the other powerful interests that marshal their power every day in Washington to drown out the voices of everyday Americans" (Barnes and Eggen, 2010). Overall, the decision was widely covered

in the media. The New York Times mentioned *Citizens United* in 580 articles over the next two years—an average of 0.8 articles per day![1]

The *Citizens United* ruling was in fact followed by a substantial increase in independent spending. Spencer and Wood (2014) use the variation in state bans described above and find the increase in independent expenditures was twice as large in treatment states. Similarly, Petrova et al. (2019) finds that *Citizens United* led to significant increases in political advertising. Therefore, we take the increase in corporate political spending as established knowledge, and study the effect of the increased spending on tax policy outcomes.

Taxes are important to corporations—they are in the top 3 issues lobbied by companies in each year of the past decade (OpenSecrets, 2022).[2] Our main analysis considers multiple tax outcomes: tax rates and base rules, discretionary tax breaks, and tax revenues. We focus on three tax rates: the top corporate tax rate, top personal income tax rate and the sales tax rate. Intuitively, reductions of top corporate and top personal tax rates would be most beneficial to corporations and their wealthy owners. Lower sales tax rates—through their effect on demand for goods—are favored by corporations. Corporations may also support changes in less salient tax rules, which can be just as financially beneficial. For this reason, we also study effects on other corporate tax features: investment tax credit, number of years allowed for loss carryforward and sales apportionment weights.[3]

Beyond explicitly changing tax policy, firms may be able to use contributions to elect or support politicians that, in return, offer them firm-specific tax breaks. After all, lowering the corporate tax rate has immediate revenue consequences that are salient to voters. On the other hand, firm-specific tax breaks are often viewed as a job creation policy, whose revenue consequences are realized in the future, thus making such tax deals more palatable to voters. Anecdotal evidence of a relationship between corporate spending and tax breaks has been reported on across the United States. The Los Angeles Times published a 3 part series on Disneyland's local political involvement in 2017, providing evidence that Disney was heavily spending on city council elections to elect "supportive politicians"—council members who had voted for Disney tax breaks in the past. Disney has received an estimated $1 billion in tax breaks from the city of Anaheim in the last 20 years, and spent $1.2 million in the

[1] Based on article search between January 21, 2010 and January 21, 2013.
[2] "Federal budget and appropriations" and "health issues" are the other top issues.
[3] We consider a number of additional outcomes in Appendix C.

2016 city council election alone.[4] For this reason, in addition to tax policy outcomes, we study the effect of the *Citizens United* ruling on discretionary tax breaks from 2002-2017 from Slattery (2020). Finally, we also consider whether the *Citizens United* ruling led to changes in overall tax revenues.

In our difference-in-differences specification, the treatment group consists of 21 states that enacted contribution bans before 2000, and our control group consists of the 27 states that did not enact bans prior to 2010.[5] In our main analysis we consider all states with bans as treated, irrespective of whether they enacted bans only on corporate expenditures or both on corporate and union expenditures. Across all outcomes, we find no statistically or economically significant effects of independent political contributions on tax outcomes. For most tax rates, we find that we are able to reject tax increases and decreases greater than 10-20%. We place this estimate in the context of the large tax changes occurring in general during the studied period; we are able to reject effects on tax changes that are larger in magnitude than the average tax change implemented by states during business as usual. We also find no statistically significant effect of the *Citizens United* ruling on the frequency or magnitude of discretionary tax breaks or other firm-specific tax incentives. Finally, we find no statistically significant effect of the increased political contributions on tax revenues overall.

We supplement our analysis on the cancellation of the independent contribution bans due to *Citizens United* with an equivalent event-study analysis of the ban introductions. Since ban introductions were enacted by the state legislators themselves, ban enactments are arguably less exogenous than the ban cancellations resulting from the Supreme Court ruling. Therefore, we treat this evidence as suggestive, rather than causal. Our results are consistent: once again, across outcomes and specifications, we do not detect a statistically or economically significant effects of ban enactments on tax policy outcomes.

Despite the fear that *Citizens United* would unleash corporate interests, our results suggest that independent corporate contributions are unlikely to drive tax policies outright.

[4] In D.C., NPR reporters linked campaign contributions by building developers to an increased probability in winning tax breaks or discounted public land. Over $640 million (one-third of the total subsidies) went to ten developers who had donated the most money on city council campaigns.

[5] Excluding the states that enacted bans after 2000 (CO and SD) provides a balanced panel and reassurance that treated states are no longer experiencing changes due to the adoption of the bans. One may worry that the restriction is not sufficiently stringent. We show that our results are robust to restricting to states that enacted bans before 1990, allowing us to observe pre-trends for 20 years before *Citizens United* ruling.

Of course, we cannot conclude that corporate political influence has no effect on other pro-business regulations. However, lower taxes, an objective that unifies corporations of all types, were not realized in the wake of the Supreme Court ruling. One reason for this could be that the companies with the most potential influence are multinational corporations that are already able to avoid most state and local tax burden. Alternatively, tax policy may not have changed as a result of *Citizens United* decision not because money has no effect but because the independent contribution bans did not limit corporate influence in the first place.

Our paper contributes to two broad sets of literature. First, we contribute to a literature that explores the causal effects of political contributions on policy outcomes (e.g., Bronars and Lott, 1997; Stratmann, 2002; Roscoe and Jenkins, 2005; Hall, 2016; Butcher and Milyo, 2020; Fouirnaies and Fowler, 2021). We differ from this previous work in three key ways: we focus on state rather than federal policies, we study tax policy outcomes that the previous work has largely ignored, and we provide plausibly causal evidence. Within this literature, a small number of papers explore the consequences of the *Citizens United* decision specifically, showing that it led to increased campaign contributions (Spencer and Wood, 2014; Petrova et al., 2019; Bassetti et al., 2020); increased conservatism and Republican election probabilities (Klumpp et al., 2016; Harvey and Mattia, 2019; Petrova et al., 2019; Abdul-Razzak et al., 2020; Cox, 2021); and reduced incentives for "revolving door employments" (Weschle, 2021).

The closest paper in this literature, Gilens et al. (2021), also looks at the effect of *Citizens United* on the state corporate tax rate. The authors employ a synthetic control method, and although they find a statistically significant effect, the effect is economically small: their results imply that *Citizens United* led to a 4% decrease (0.28pp) in the average state corporate income tax during this period. We argue that the difference-in-differences approach is more robust and avoids subjectivity inherent in synthetic control methods. Therefore, we can conclude that instead of a small negative effect, increased independent expenditures has no effect on state corporate tax rates, or any other state tax polices.

Second, we contribute to a vast literature that studies the policy choices of federal, state, and local governments. This literature considers various channels, including fiscal competition, preference-based sorting, politics, institutional rules and more (see Robinson and Tazhitdinova (2022) for a partial summary). A significant share of these studies focus on the importance of politics, such as political structures (e.g., Alt and Lowry, 1994; Bernecker,

2016), political cycles (e.g., Alesina et al., 1997; Nelson, 2000), and the political benefits of policies in general (e.g., Slattery, 2022; Aobdia et al., 2019). We contribute to this literature by studying another channel through which politics may shape the tax setting processes—via independent political contributions.

# 1 Background and Data

## 1.1 Campaign Finance and Corporations

Campaign finance refers to all funds used or raised to support a candidate, party, or issue. These funds come in two main forms: direct contributions ("hard money") and independent expenditures ("soft money"). Therefore, a corporation seeking to support a candidate in their election may either contribute directly to their campaign, or fund advertising for that candidate, which is usually coordinated by a political action committee (PAC).

A direct contribution is a monetary or in-kind contribution to a candidate's campaign. States require that candidates disclose all contributions to their campaign, and regulate the amount an individual, corporation, PAC, and political party can contribute to a candidate with contribution limits. These contribution limits vary by type of contributor, office of candidate, and state. Independent expenditures, on the other hand, are defined as any spending on communication, i.e. advertising, in support or against a candidate. The important distinction from direct contributions is that the candidate themselves did not coordinate or approve the advertisement.

Concern about corporate influence in politics is not new. The first legislation to prohibit corporations from making campaign contributions directly to political candidates was the Tillman Act, which was passed by Congress in 1907. This was part of a movement to limit corporate interests over state legislatures, an effort to prevent corruption by large corporate contributors. The Taft-Hartley Act followed in 1947, further limiting corporate involvement by prohibiting independent expenditures in federal elections by both corporations and unions. However, due to a lack of campaign finance disclosure requirements, these regulations were relatively ineffective.

The Federal Election Campaign Act was passed in 1971, and remains the primary U.S. federal law regulating campaign spending and fundraising. With this act and the subsequent

creation of the Federal Election Commission (FEC), regulations began to be put into place to limit the role of money in politics. The act was amended in 1974 to place legal limits on campaign contributions and expenditures.

Between 1970 and 1980, nine states enacted bans that prohibited corporations and/or unions from making independent expenditures to state campaigns. By 2010, the number of states with independent expenditures bans increased to 23 (Klumpp et al., 2016). Figure 1 shows the map of the states in three groups: those that never enacted a ban on independent contributions, those that enacted a ban on corporate contributions only, and those that enacted a ban on both corporate and union contributions.[6] For the latter two groups, Figure 1 also displays the year the ban was enacted. For more details on campaign regulations, see Appendix A.

## 1.2 *Citizens United v. Federal Election Commission*

In January 2010, decades of legal precedent were overturned when the Supreme Court, in *Citizens United v. FEC* decided that the government cannot restrict independent political expenditures by corporations, labor unions, and other associations. The Supreme Court ruled, in a 5-4 decision, that banning corporate and union independent expenditures violated the First Amendment. This meant that corporations would still be subject to a state's legislation on direct to candidate contributions, but would be able to spend on PACs and other associations to buy media advertising in support of their favored candidate. The Court had upheld bans on contributions in the past, arguing that contributions may encourage "quid pro quo arrangements," and regulating such contributions would prevent corruption. However, they interpret independent expenditures as being, by definition, *independent* from the candidate, and thus not a source of quid pro quo corruption.

The ruling came as a surprise to Democrats and Republicans alike, as they had worked together 8 years earlier to pass the 2002 Bipartisan Campaign Reform Act (McCain-Feingold), which restricted independent expenditures at the federal level. President Barack Obama responded publicly in his 2010 State of the Union Address, stating, "Last week, the Supreme Court reversed a century of law to open the floodgates for special interests...to spend without limit in our elections. Well, I don't think American elections should be bankrolled by

[6]The last group includes New Hampshire even though the state substituted its ban with a $5,000 limit effective 2000. Since this limit is so low, we treat it as a ban.

America's most powerful interests." Ten years later the *Citizens United* ruling is still being discussed: in 2021, members of the House and Senate introduced constitutional amendments to overturn the decision, with Rep. Jaime Raskin stating, "We have seen the damage it has caused in the hundreds of millions of dollars of dark money pouring unaccountably into our political system from corporations" (Raskin, 2021).

While most of the media attention was focused on the potential adverse effects of *Citizens United* at the federal level, the decision was relevant to elections at all levels of government. At the time of this ruling, 23 states (our treatment group) prohibited corporations from spending in state elections. The *Citizens United vs. FEC* ruling effectively invalidated these laws. Immediately after the ruling, the D.C. Court of Appeals invalidated various limits on contributions to independent expenditure groups, citing *Citizens United*; "after *Citizens United* independent expenditures do not implicate [quid pro quo corruption.]" Most states immediately overturned previous legislation to comply with the federal law. A few states were forced to make changes by court orders. For example, Montana, mindful of a history of corruption in their state politics, continued to restrict corporate campaign spending after *Citizens United*. In June 2012, the Supreme Court reversed a decision of the Montana Supreme Court in *Western Tradition Partnership, Inv. v. Montana* (2011), which had upheld the law limiting political spending by corporations.

Appendix Figure A.1 shows the increase in independent spending for all state elections in the cycles following the ruling. Spencer and Wood (2014) use the variation in state bans described above and show that while independent expenditures increased in all states between 2006 and 2010, the increase was more than twice as large in the treated states. Petrova et al. (2019) use a similar strategy and find that *Citizens United* increased political advertisements. Thus, previous work has documented that the cancellation of bans indeed led to an increase in independent political contributions by corporations and unions. In this paper we will study the effect of that increase in independent contributions on state tax policy.

## 1.3 Data

In order to study the effect of independent political contributions on tax policy we assemble data on a variety of tax outcomes at the state level. Table 1 presents descriptive statistics

for the following tax outcomes:

**Tax Rates.** We collect data on the top corporate income tax, the top personal income tax and sales taxes from the Council of State Governments Book of the States from 1949 to 2020.[7] We record the new tax rate in the year it becomes effective even if the change occurs at the end of the calendar year. Table 1 shows that treated states change tax rates more often in the pre-period, but the levels are similar.

**Tax Base.** We use data from Suarez Serrato and Zidar (2018) on corporate tax base features. The tax base rules we use as outcomes in the paper include the investment tax credit rate, the number of years for loss carryforward, and sales tax apportionment weights. We extend these variables to 2020.[8]

**Tax Revenue.** The source for the state tax revenue data is the Census Annual Surveys of State Government Tax Collections and State Government Finances, as well as The Government Finance Database, from 1977 to 2020. The treatment and control states have similar tax revenue per capita in the pre-period—around $200 for the corporate tax and $1,000 for the individual income and sales tax (Table 1).

**Tax Incentives.** We use data on discretionary tax incentives, also known as "subsidy deals", from Slattery (2020). This is a data set of 400 subsidy deals that firms received in exchange for locating or expanding in a specific location between 2002-2017, and can be thought of as the universe of large ($10 million+) deals in this time period. The majority of the funding for the deal comes in the form of a tax abatement for that establishment. For example, a subsidy deal might entail that the Ford plant does not have to pay payroll taxes for 10 years, while all other manufacturing plants in the state still pay payroll taxes.

The average subsidy deal in the data set is valued at about $164 million over 10 years, for a firm promising 1,500 jobs and an investment of $840 million. We aggregate the data to the state-year level, to create statistics on how often a state is offering discretionary tax incentives to firms, and the magnitude of that subsidy spending. Treatment states offer more subsidy deals, but the average deal size is smaller than in the control states.

**Legislation, Contributions, Controls.** Data on the year of independent expenditure bans in each state were assembled by Klumpp et al. (2016), and data on independent

[7] We also have data on excise taxes from the same source, results for these outcomes are in Appendix C.

[8] We choose these three tax base rules because they are attractive to most corporations and there are changes in the period of interest (2000-2020). Other tax base rules that explain much of the variation in tax revenue in Suarez Serrato and Zidar (2018) do not change in the post period.

expenditures to show the increase in spending post *Citizens* is from Follow the Money. Additional explanatory variables were obtained from Robinson and Tazhitdinova (2022), covering a wide range of political, institutional and demographic factors. These variables are used as controls and are summarized in Appendix Table B.1.

# 2 The Effect of Political Spending on State Tax Policy

## 2.1 Methodology

We use an event study approach to study both the roll out of independent expenditure bans and their cancellation due to the *Citizens United* ruling. Using outcome data on tax rates, base, revenues, and incentives we estimate

$$\log(Outcome_{st}) = \sum_{\substack{k=2000 \\ k\neq 2009}}^{2020} \beta_k \; Treat_s \; 1_{t=k} + \delta \; X_{st} + \sigma_s + \eta_t + \varepsilon_{st} \tag{1}$$

where $s$ identifies states and $t$ years, $Treat_s$ is equal to one if a state ever enacted a ban on independent contributions and zero otherwise, $\sigma_s$ are state indicators, $\eta_t$ are year indicators, and $X_{st}$ are various controls. The coefficients of interest, $\beta_k$, represent the effect of the ban cancellation in year $k$ relative to 2009, the year prior to *Citizens United*.

When analyzing the cancellation of the bans in 2010, we omit states that enacted bans during the study window (CO and SD) thus using a balanced panel and ensuring that dynamic adjustments to the ban introductions are not contaminating the sample. When analyzing a given outcome, we omit states that do not have that tax type or tax revenue source. We focus on the intensive margin response because tax adoptions and cancellations are very rare. As a result, when studying tax rates and revenues our outcome variable is always non-zero and we are able to employ a logarithmic specification. For tax rules and tax incentives, which take on zero values, we employ an equivalent inverse hyperbolic sine specification. We cluster robust standard errors at the state level. Depending on the specification, our analysis employs between 30 to 50 clusters. Therefore, we also calculate wild bootstrap confidence intervals clustered at the state level and using Rademacher weights. These confidence intervals are slightly larger and thus further confirm our finding of no

statistical significance.

### 2.1.1 Robustness to Event Study Methodology

Our difference-in-differences specification employs treatment and control groups that start at unequal baselines, contrary to the canonical model. As shown by Tazhitdinova and Vazquez-Bare (2022), such an approach may lead to biased estimates if the treatment effect is not constant or non-immediate. This issue is unlikely to affect our results for two reasons. First, in Section 2.3, we show that ban enactments do not appear to have effects on tax policy, thus suggesting a constant null treatment effect. Second, as a robustness check in Appendix D.2, we extend our pre-period to 1991 and exclude states that enacted bans after 1991 (OK, OH, AK, RI, CO, and SD), yielding a 20-year pre-period and giving us reassurance that treated states are no longer experiencing changes due to the adoption of the bans. We find similar results.

Recent work has documented that inclusion of time-varying controls in two-way fixed effect regressions may lead to misleading estimates if such controls could themselves be affected by the treatment, or if the treatment effect is heterogeneous with respect to these controls (Caetano et al., 2022). To ensure that our results are robust to this issue, we include in the appendix results that only include state and year fixed effects as controls and find very similar results. Our results, however, are robust to other issues highlighted by de Chaisemartin and D'Haultfoeuille (2020); Sun and Abraham (2021); Callaway et al. (2021); Goodman-Bacon (2021) because our treatment is binary and non-staggered – the treatment occurs in the same year for all treated units.

## 2.2 Main Results

This section presents the estimates of specification (1) using a full set of controls. The treatment group includes the 21 states that have enacted a ban on corporate and/or union independent contributions prior to 2000. The control group includes the 27 states that never enacted a ban.

**Tax Rates.** The top three figures of Figure 2 shows the results of estimating (1) with the logarithm of tax rate levels (in percentage points) as the outcome variable. For all tax rates, we see no statistically significant increase or decrease in tax rates after the *Citizens United*

ruling. Our results are not driven by lack of power: the simple difference-in-differences (DiD) estimates are shown in the bottom left corner, and are also statistically and economically insignificant. DiD with separate indicators for groups of years, e.g. for 2010-2015 and 2016-2020, are also insignificant. Economically, our DiD point estimates imply a 5% or 0.40pp decrease for top corporate income tax rate, a 7% or 0.46pp decrease for top personal income taxes and a 1% or 0.06pp decrease for sales taxes, though these estimates are not statistically significant.[9]

Importantly, for most tax rates, the confidence intervals are reasonably tight around zero: overall, we can rule out tax decreases above 10-20%. These magnitudes can be compared with the size of average tax changes in the baseline period (2000-2009) in Table 1. While tax rates are fairly persistent over time, states make frequent changes that are often substantial in size (Robinson and Tazhitdinova, 2022). For example, between 2000 and 2009, treated states that adjusted their top personal income tax rate made changes with an average magnitude of 12%, and changes over five years with an average magnitude of 18%. We can thus place our estimates of how states respond to *Citizens United* within the context of how states change tax rates during business as usual. Overall, we can rule out tax decreases or increases that are larger in magnitude than average tax changes – the green horizontal lines on the graph mark the average tax increases and decreases of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009.

The results are not driven by pre-trends: we see fairly tight confidence intervals around zero in the pre-cancellation period.[10] In the appendix, we show that our results are robust to the exclusion of controls: Figure D.8 is estimated using a version of (1) with only treatment, year and state indicators. Our difference-in-differences estimates are also supported by visual examination of raw tax rate data. Raw time series of tax rates in each state are available in Appendix Figure E.11.

The closest study, Gilens et al. (2021) show that the *Citizens United* decision led to the adoption of more "corporate-friendly" policies, including lower corporate tax rates. Our analysis differs in three ways: we use a simple difference-in-differences identification strategy

[9]Results for excise tax rates are available in Appendix Figure C.3 and are similar.

[10]In particular, this provides reassurance that in our study window, states that had bans are no longer experiencing changes related to the introduction of those bans. If the ban introductions in 1908-1988 were continuing to have dynamic effects after 2000, this would appear in the pre-trends. Estimates with longer pre-periods are available in Figure D.6.

instead of a synthetic control approach, we employ a logarithmic specification thus focusing on percent changes rather than absolute changes, and we study a wider range of tax-related outcomes (i.e. various types of tax rates, tax rules, tax incentives, tax revenues). We believe that our approach is more robust and avoids subjectivity inherent in synthetic control methods.[11] Importantly, while Gilens et al. (2021) find a statistically significant effect, the effect is economically small: their results imply that *Citizens United* led to a 4% decrease (0.28pp) in the average state corporate income tax during this period.

**Tax Revenues.** The second panel of Figure 2 shows the results of estimating (1) with a logarithm of tax revenue in 2020 dollars as an outcome variable. The results for tax revenues are consistent with our findings about the tax rate levels. Once again, we see fairly flat pre-trends and no statistically significant increase or decrease in tax revenues post *Citizens United* ruling. The confidence intervals are larger, but all event studies rule out notable revenue decreases beyond 10-20%. Again, comparing these to average revenue changes in Table 1 suggests that we can rule out non-average decreases in tax revenue. The lack of large changes in tax revenues implies that even if corporations receive preferential treatment as a result of *Citizens United*, the overall magnitude of these benefits is likely to be relatively small, since a substantial increase in handouts would result in lower tax revenues. Results for excise tax revenues and overall tax revenue are available in Appendix Figure C.3 and are similar.

**Tax Base.** We know that corporations also advocate for changes in less salient tax rules. For this reason, we also study effects on corporate tax base rules: investment tax credit rate, number of years allowed for loss carryforward, and the sales tax apportionment weights. Since these outcomes take on zero values, we estimate specification (1) using inverse hyperbolic sine transformation. Note that the interpretation of coefficients is similar to log specification when the outcome variables take on large values (e.g. generally greater than 10), but must be adjusted otherwise. The results of estimating (1) for corporate tax base rules are summarized in the first panel of Figure 3. Overall we find no statistically or economically

[11] The parallel trend assumption does not hold when comparing absolute levels of tax rates, necessitating Gilens et al. (2021) to employ a synthetic control method. This is not surprising given that such specification is inherently driven by larger outcome values, and works best when average outcomes are similar in treated and control states, which is not the case in our setting. We show that parallel trend assumption, however, *is* satisfied when focusing on percent changes. We believe this makes intuitive sense: few states radically change their tax policies, instead "low-tax" states remain low-tax and "high-tax" remain high tax. For this reason we consider *percent changes*, i.e. a logarithmic specification.

significant effects. Furthermore, confidence intervals generally fall within the average 5-year changes, suggesting that we can rule out abnormally large changes of base rules.[12]

**Tax Incentives.** Lastly, while our results indicate that independent political contributions do not appear to affect the overall levels of tax rates or rules, it could still be possible that wealthy donors—particularly, corporations—receive preferential tax treatments via targeted handouts. Therefore, we look at how often states offer discretionary tax incentives to firms, and the size of these incentives. Once again, we employ an inverse hyperbolic sine specification to allow for zero values. The results are presented in the second panel of Figure 3. While the results are more noisy—subsidy giving can vary dramatically from year to year—we do not observe a statistically or economically significant increase in discretionary subsidies, irrespective of subsidy measure used. The results in Figure 3 measure the mean subsidy spending, total subsidy spending, and number of subsidy deals won. Appendix Figure C.2 shows similar results conditional on winning, thus focusing on the intensive margin. In addition, Appendix Figure C.2 shows results for total business tax expenditures.

**Robustness Checks**. Additional robustness checks are available in the appendix and provide further support to the robustness of our estimates: in all specifications we find statistically and economically insignificant effects of *Citizens United* ruling on tax policy outcomes.

Appendix D.1 excludes states that enacted a ban on both corporate and union independent contributions from the treatment group. One may worry that corporations and union expenditures may offset each. Therefore, by allowing independent expenditures by both corporations and unions we do not see any effect of pro-corporation tax policy because union contributions bolster candidates in opposition of the candidates that the corporations support. We show that our results are robust to restricting the treatment group to states with corporate bans only. If anything, restricting to treatment states that only had corporate bans results in a more precisely estimated null effect of independent expenditures on state tax policy.

Appendix D.2 shows estimates with a longer pre-2010 period. In these specifications we restrict the treatment group to states that enacted bans before 1990, allowing us to observe pre-trends for 20 years before *Citizens United* ruling and thus ensure that the treated

[12]Results for other tax base outcomes (minimum corporate tax rate, loss carryback and top income tax bracket) are available in Appendix Figure C.2 and are similar.

states are no longer experiencing changes due to the adoption of the bans. Doing so further decreases the treatment sample from 21 to 17 states, but yields similar conclusions.

Appendix D.3 shows estimates when controls are excluded, using only state and year fixed effects as controls. This ensures that our results are not biased by the inclusion of controls (Caetano et al., 2022).

## 2.3 Ban Enactments

We supplement our main analysis on the cancellation of the bans with an analysis of ban introductions. We treat this evidence as suggestive, as it is possible that a state government's propensity to enact a stricter campaign finance legislation is correlated with that government's preference for pro-business tax policy. Furthermore, the staggered adoption of bans makes the analysis sensitive to econometric issues highlighted earlier in Section 2.1.

Our event study specification is similar to the one above, but accounts for heterogeneity in the timing of ban introductions:

$$\log(Outcome_{st}) = \sum_{\substack{k=-10 \\ k\neq -1}}^{10} \beta_k \;\; 1_{t=k} + \delta \; X_{st} + \sigma_s + \eta_t + \varepsilon_{st}, \tag{2}$$

where $k$ identifies event time indicators, with $k = 0$ corresponding to the year when the ban is enacted, $k = -1$ for states that never introduced a ban.

When studying introductions we use a symmetric 10-year window around the year of enactment. For this specification, we do not restrict our sample to a balanced panel. Most tax adoptions occurred prior to the 1980s (Robinson and Tazhitdinova, 2022), around the same time as ban enactments.[13]

Since our tax data starts in 1950, we can only study ban introductions that occur after 1950. States that enacted bans by 1950 are included in the control group and in the analysis. Therefore, when studying ban enactments, our control group consists both of states that have already enacted a ban and those that have never enacted a ban. The results are robust to

[13]It is unlikely that tax adoptions were influenced by ban enactments, for this reason we only include non-zero values of tax rates and revenues in our specifications. Balanced panel results (that only include state-year observations for states that have adopted a given tax type by 1962) are similar but noisier due to a smaller sample size, and are available upon request.

limiting the control group to states that never enacted a ban.[14]

The results using specification (2) to study the introduction of bans are available in Figure 4 (specification with a full set of controls), as well as in Appendix Figure D.10 (no controls). While the results show wider confidence intervals, the overall conclusion stands: we do not observe statistically or economically significant increases or decreases of tax rates after the enactments of the independent contribution bans.

# 3 Conclusion

In this paper we explore the effect of corporate political contributions on U.S. state tax policy. Across specifications and outcomes, we are not able to detect a sizable change in tax rates, rules, incentives or revenues in response to changes of independent contribution rules by corporations.

Our results thus suggest that corporate political contributions are unlikely to drive tax policies outright. However, we cannot conclude that corporate political influence has no effect on state tax policy. While we do our best to consider various tax outcomes, we are not able to observe all tax-related changes that occur at all levels of government. Thus corporations may benefit through small discretionary reductions in taxes or other special tax provisions. Our results do suggest, however, that any such tax breaks are relatively small in magnitude, since we do not observe large reductions in tax revenue. Second, and more importantly, there are many ways for corporations to support their favored candidates and advocate for their favored policies, whether it be CEO and employee individual contributions, charitable contributions to politician's favored charities, or lobbying (see, for example, Fremeth et al., 2013; Bertrand et al., 2020; Kang, 2016). Therefore, an alternative explanation for our results is that tax policy did not change after *Citizens United* not because money has no effect but because the independent contribution bans did not limit such corporate influence in the first place.

[14]The revenue series start in 1977, so for those regressions we need to restrict to ban introductions that occur after 1977.

# References

**Abdul-Razzak, Nour, Carlo Prato, and Stephane Wolton**, "After Citizens United: How outside spending shapes American democracy," *Electoral Studies*, October 2020, *67*, 102190.

**Alesina, Alberto, Nouriel Roubini, and Gerald D. Cohen**, *Political Cycles and the Macroeconomy*, MIT Press, 1997.

**Alt, James E. and Robert C. Lowry**, "Divided government, fiscal institutions, and budget deficits: Evidence from the states," *American Political Science Review*, 1994, pp. 811–828.

**Aobdia, Daniel, Allison Koester, and Reining Petacchi**, "Political connections and government-awarded economic incentives: US state-level evidence," Mimeo 2019.

**Barnes, Robert and Dan Eggen**, "Supreme Court rejects limits on corporate spending on political campaigns," *The Washington Post*, 2010.

**Bassetti, Thomas, Filippo Pavesi, and Massimo Scotti**, "Super PACs and Political Polarization: If You Can't Convince Them, Displace Them," Mimeo 2020.

**Bernecker, Andreas**, "Divided we reform? Evidence from US welfare policies," *Journal of Public Economics*, October 2016, *142*, 24–38.

**Bertrand, Marianne, Matilde Bombardini, Raymond Fisman, and Francesco Trebbi**, "Tax-Exempt Lobbying: Corporate Philanthropy as a Tool for Political Influence," *American Economic Review*, July 2020, *110* (7), 2065–2102.

**Bronars, Stephen G. and John R Lott**, "Do Campaign Donations Alter How a Politician Votes? Or, Do Donors Support Candidates Who Value the Same Things That They Do?," *The Journal of Law and Economics*, 1997, *40* (2).

**Butcher, Jordan and Jeffrey Milyo**, "Do Campaign Finance Reforms Insulate Incumbents from Competition? New Evidence from State Legislative Elections," *Political Science & Politics*, 2020, *53* (3), 460–464.

**Caetano, Carolina, Brantly Callaway, Stroud Payne, and Hugo Sant'Anna Rodrigues**, "Difference in Differences with Time-Varying Covariates," arXiv Working Paper 2202.02903 February 2022.

**Callaway, Brantly, Andrew Goodman-Bacon, and Pedro H. C. Sant'Anna**, "Difference-in-Differences with a Continuous Treatment," arXiv Working Paper 2107.02637 July 2021.

**Cox, Christian**, "Campaign Finance in the Age of Super PACs," SSRN Working Paper 3794817 September 2021.

**de Chaisemartin, Clement and Xavier D'Haultfoeuille**, "Two-Way Fixed Effects Estimators with Heterogeneous Treatment Effects," *American Economic Review*, September 2020, *110* (9), 2964–2996.

**Editorial**, "The Court's Blow to Democracy," *The New York Times*, 2010.

**Follow The Money**, "10 years after Citizens United: State races transformed by explosive growth in independent spending," January 2020.

**Fouirnaies, Alexander and Anthony Fowler**, "Do campaign contributions buy favorable policies? Evidence from the insurance industry," *Political Science Research and Methods*, 2021, pp. 1–15.

**Fremeth, Adam, Brian Kelleher Richter, and Brandon Schaufele**, "Campaign Contributions over CEOs' Careers," *American Economic Journal: Applied Economics*, July 2013, *5* (3), 170–88.

**Gilens, Martin, Shawn Patterson, and Pavielle Haines**, "Campaign Finance Regulations and Public Policy," *American Political Science Review*, 2021, pp. 1–8. Publisher: Cambridge University Press.

**Goodman-Bacon, Andrew**, "Difference-in-differences with variation in treatment timing," *Journal of Econometrics*, December 2021, *225* (2), 254–277.

**Hall, Andrew B.**, "Systemic Effects of Campaign Spending: Evidence from Corporate Contribution Bans in US State Legislatures*," *Political Science Research and Methods*, May 2016, *4* (2), 343–359. Publisher: Cambridge University Press.

**Harvey, Anna and Taylor Mattia**, "Does money have a conservative bias? Estimating the causal impact of Citizens United on state legislative preferences," *Public Choice*, October 2019.

**Kang, Karam**, "Policy Influence and Private Returns from Lobbying in the Energy Sector," *The Review of Economic Studies*, 01 2016, *83* (1), 269–305.

**Klumpp, Tilman, Hugo M. Mialon, and Michael A. Williams**, "The Business of American Democracy: Citizens United, Independent Spending, and Elections," *The Journal of Law and Economics*, February 2016, *59* (1), 1–43. Publisher: The University of Chicago Press.

**NCSL**, "State Limits on Contributions to Candidates," Technical Report, National Conference of State Legislatures 2021.

**Nelson, Michael A.**, "Electoral Cycles and the Politics of State Tax Policy," *Public Finance Review*, November 2000, *28* (6), 540–560.

**OpenSecrets**, "Top Issues," January 2022.

**Petrova, Maria, Andrei Simonov, and James M. Snyder**, "The Effects of Citizens United on U.S. State and Federal Elections," Mimeo 2019.

**Raskin, Jamie**, "Raskin Cosponsors Bipartisan Constitutional Amendment to Overturn Citizens United," *Jamie Raskin Press Release*, 2021.

**Robinson, Sarah and Alisa Tazhitdinova**, "What Drives Tax Policy? Political, Institutional and Economic Determinants of State Tax Policy in the Past 70 Years," SSRN Working Paper 4035979 February 2022.

**Roscoe, Douglas D. and Shannon Jenkins**, "A Meta-Analysis of Campaign Contributions' Impact on Roll Call Voting," *Social Science Quarterly*, 2005, *86* (1), 52–68.

**Serrato, Juan Carlos Suarez and Owen Zidar**, "The structure of state corporate taxation and its impact on state tax revenues and economic activity," *Journal of Public Economics*, November 2018, *167*, 158–176.

**Slattery, Cailin**, "Bidding for firms: Subsidy competition in the U.S.," Mimeo 2020.

_ , "The Political Economy of Subsidy-Giving," Mimeo 2022.

**Spencer, Douglas M. and Abby K. Wood**, "Citizens United, States Divided: An Empirical Analysis of Independent Political Spending," *Indiana Law Journal*, 2014, *89*, 315.

**Stratmann, Thomas**, "Can Special Interests Buy Congressional Votes? Evidence from Financial Services Legislation," *The Journal of Law and Economics*, October 2002, *45* (2), 345–373. Publisher: The University of Chicago Press.

**Sun, Liyang and Sarah Abraham**, "Estimating dynamic treatment effects in event studies with heterogeneous treatment effects," *Journal of Econometrics*, December 2021, *225* (2), 175–199.

**Tazhitdinova, Alisa and Gonzalo Vazquez-Bare**, "Difference-in-Differences with Unequal Baseline Treatment Status," Mimeo 2022.

**Weschle, Simon**, "Campaign finance legislation and the supply-side of the revolving door," *Political Science Research and Methods*, April 2021, *9* (2), 365–379.

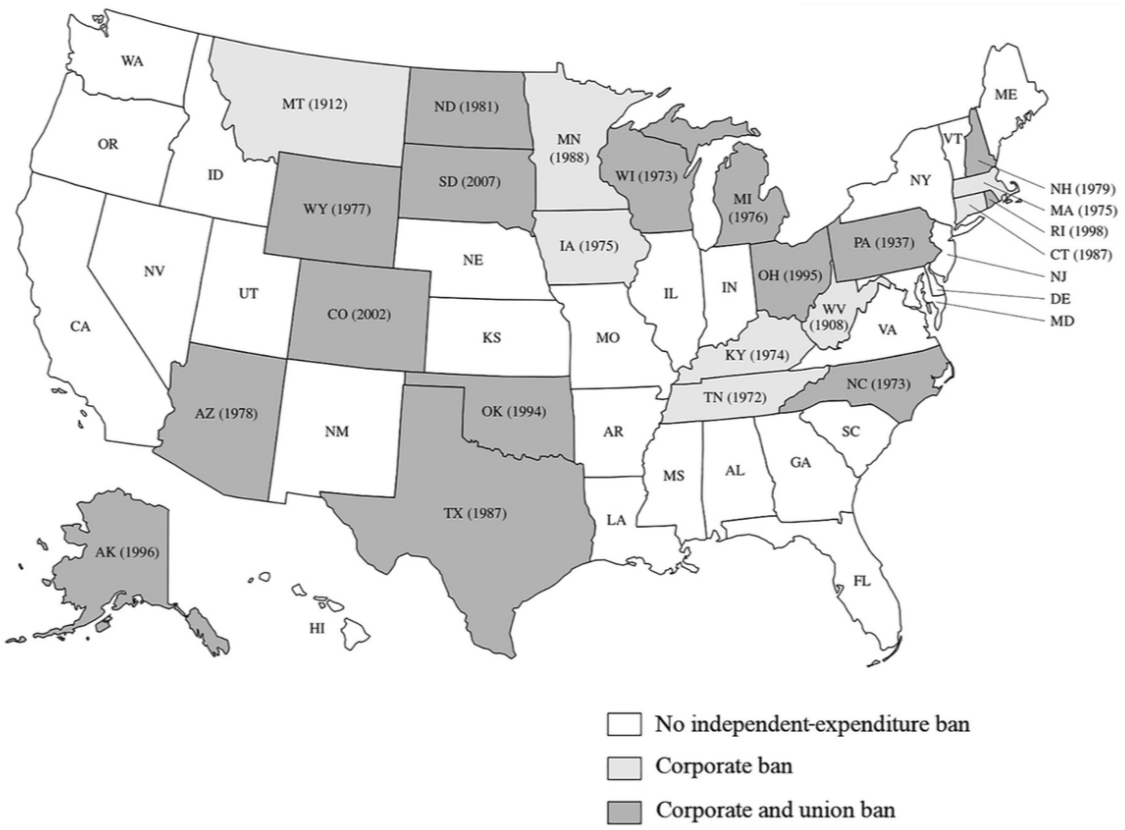
# 4 Tables and Figures

Table 1: Descriptive Statistics: 2000-2009

| | Treatment Group | | | | Control Group | | | |
|---|---|---|---|---|---|---|---|---|
| Outcome | Mean | Mean $\lvert\Delta \log\rvert$ | Mean $\lvert\Delta_5 \log\rvert$ | % Years Changes | Mean | Mean $\lvert\Delta \log\rvert$ | Mean $\lvert\Delta_5 \log\rvert$ | % Years Changes |
| *Tax Rates:* | | | | | | | | |
| Top Corporate Income Tax | 8.03 | 0.10 | 0.18 | 0.10 | 7.13 | 0.14 | 0.13 | 0.04 |
| Top Personal Income Tax | 6.51 | 0.12 | 0.10 | 0.23 | 6.69 | 0.07 | 0.13 | 0.12 |
| Sales Tax | 5.59 | 0.11 | 0.13 | 0.06 | 5.28 | 0.13 | 0.13 | 0.09 |
| *Tax Revenue per Capita:* | | | | | | | | |
| Corporate Income Tax | 240 | 0.19 | 0.40 | 1.00 | 160 | 0.22 | 0.35 | 1.00 |
| Individual Income Tax | 1,010 | 0.07 | 0.15 | 1.00 | 1,120 | 0.07 | 0.13 | 1.00 |
| Sales Tax Revenue | 960 | 0.04 | 0.09 | 1.00 | 1,010 | 0.04 | 0.09 | 1.00 |
| | Mean | Mean $\lvert\Delta \sinh\rvert$ | Mean $\lvert\Delta_5 \sinh\rvert$ | % Years Changes | Mean | Mean $\lvert\Delta \sinh\rvert$ | Mean $\lvert\Delta_5 \sinh\rvert$ | % Years Changes |
| *Tax Base:* | | | | | | | | |
| Investment Tax Credit | 0.02 | 0.04 | 0.04 | 0.04 | 0.02 | 0.04 | 0.04 | 0.02 |
| Loss Carry Forward | 14.58 | 0.57 | 0.64 | 0.03 | 15.87 | 0.67 | 0.43 | 0.03 |
| Sales Apportionment Weight | 54.23 | 0.36 | 0.23 | 0.08 | 53.14 | 0.13 | 0.51 | 0.07 |
| *Tax Incentives:* | | | | | | | | |
| Mean Subsidy Spending | 35.34 | 4.03 | 3.12 | 0.41 | 61.50 | 3.15 | 4.10 | 0.45 |
| Total Subsidy Spending | 59.16 | 4.12 | 3.42 | 0.41 | 70.65 | 3.35 | 4.17 | 0.45 |
| Number of Subsidy Deals | 0.57 | 0.95 | 0.97 | 0.34 | 0.38 | 0.88 | 0.92 | 0.34 |

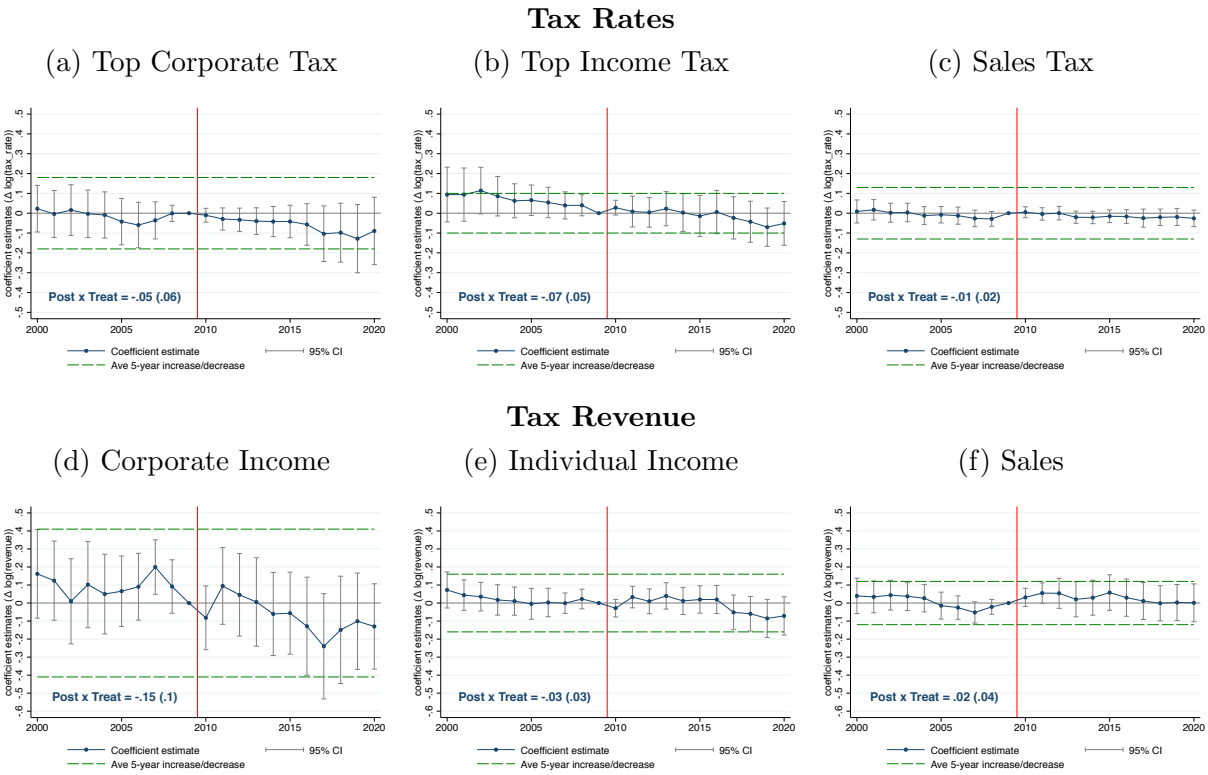
*Notes*: This table presents descriptive statistics for the 9 outcome variables in the pre-period (2000-2009). We display statistics separately for treatment and control groups. The first column of this table lists outcome variables' averages during 2000-2009. The second and third columns summarize the average magnitude of log-changes (or sinh-changes) of the outcome variables: either over 2 consecutive years or over 5 consecutive years. Tax incentives measured in million $. Years when no changes occur are not included when calculating $\Delta \log$ and $\Delta_5 \log$. Finally, the last column shows the percent of years when the outcome variable has changed. Loss carryforwards are top-coded at 100.

Figure 1: Independent Contribution Ban Enactments




*Notes*: The map shows which states enacted a ban on independent corporate contributions only, enacted a ban both on independent corporate and independent union contributions, or never enacted a ban. The years identify when the bans were enacted. All bans were effectively cancelled by the January 21, 2010 Supreme Court ruling in *Citizens United v. Federal Election Commission* (558 U.S. 50 [2010]). Reproduced from Klumpp et al. (2016).

Figure 2: The Effect of *Citizens United v FEC* on State Tax Rates and Revenues

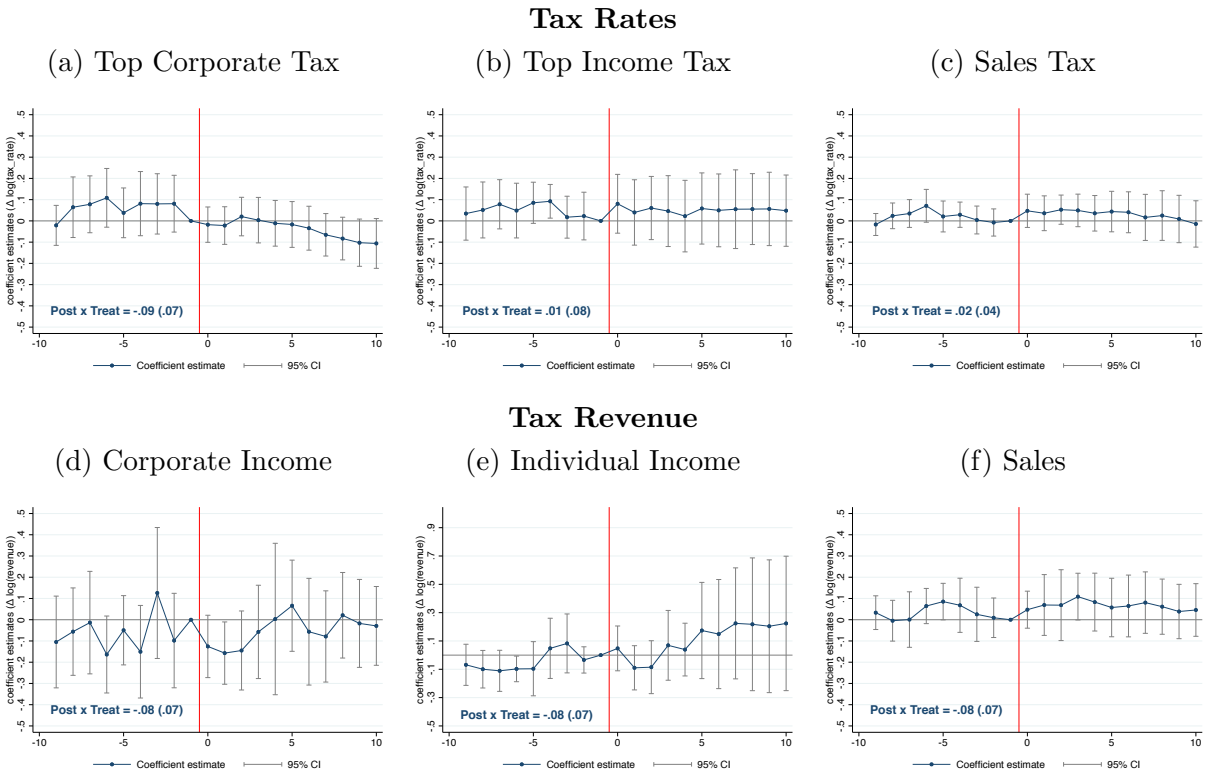



*Notes*: This figure shows the results of estimating Equation (1). The outcome variable is the logarithm of the outcome in percentage points (tax rates) or in 2020$ (revenue). Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009.

Figure 3: The Effect of *Citizens United v FEC* on State Tax Base Rules and Incentives


*Notes*: This figure shows the results of estimating Equation (1). The outcome variable is the inverse hyperbolic sine of the outcome, which are the tax base rules of interest (investment tax credits, years of loss carryforward, sales apportionment) and discretionary subsidy statistics (mean subsidy spending, total subsidy spending, number of subsidies). Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009. Loss carryforwards are top-coded at 100.

Figure 4: The Effect of Ban Enactments on State Tax Rates and Revenues




*Notes*: This figure shows the results of estimating Equation (2). The outcome variable is the logarithm of tax rates in percentage points or tax revenue in 2020$. Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are larger.

# APPENDIX FOR ONLINE PUBLICATION

**"Corporate Political Spending and State Tax Policy: Evidence from *Citizens United*" by Cailin Slattery, Alisa Tazhitdinova and Sarah Robinson**

## A The Regulation of Independent Spending

In Section 1.1 we discuss the regulation of independent spending in the US. Here we provide further details and descriptive statistics.

Concern about corporate influence in politics is not new. The first legislation to prohibit corporations from making campaign contributions directly to political candidates was the Tillman Act, which was passed by Congress in 1907. This was part of a movement to limit corporate interests over state legislatures, an effort to prevent corruption by large corporate contributors. The Taft-Hartley Act followed in 1947, further limiting corporate involvement by prohibiting independent expenditures in federal elections by both corporations and unions. However, due to a lack of campaign finance disclosure requirements, these regulations were relatively ineffective.

The decades following the Tillman Act (1907) saw a series of ad-hoc campaign finance laws, introducing disclosure requirements and prohibiting union and public utility contributions. Many regulations were relatively ineffective, as there was no system in place to enforce the limits, and Congress didn't start to collect campaign finance disclosures until 1967.

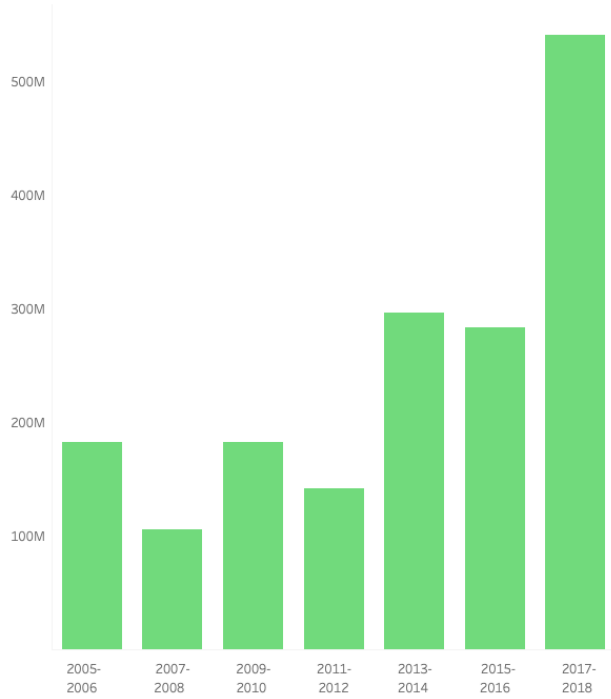
Two Supreme Court cases followed the creation of the Federal Election Commission (FEC) to create further barriers for corporations and PACs. *Austin v. Michigan Chamber of Commerce* (1990) made it more difficult for corporations to be politically involved, ruling corporations must keep a separate account from which they can make political contributions. *Nixon v. Shrink Missouri Government PAC* (2000) upheld the federal law on campaign contributions, ruling that states can limit the amount of money that any one individual or group can contribute to a state campaign. As of 2021 twenty-two states still prohibit corporations from directly contributing to candidates.

On the other hand, independent spending by individuals has been unlimited throughout the U.S. since Supreme Court decision *Buckley v. Valeo* (424 U.S. 1) in 1976. The *Buckley v. Valeo* decision made a clear distinction between direct contributions, which can be restricted

in order to preserve the "integrity of our system of representative democracy" and used as the "primary weapons against the reality or appearance of improper influence stemming from the dependence of candidates on large campaign contributions", and independent contributions which must remain unlimited because the "absence of prearrangement or coordination of the expenditure with the candidate or his agent alleviates the danger that expenditures will be given as a quid pro quo for improper commitments from the candidates."

A detailed discussion of relevant legal changes is available in Spencer and Wood (2014).

Figure A.1: Independent Spending in State Elections 2005-2018




*Notes*: This figure shows total independent spending in state elections for cycles between 2005 and 2018. Independent spending increased after 2010 when *Citizens United* suddenly allowed unlimited independent political contributions from corporations and unions in the 23 states where such spending was previously banned. Note that spending levels for state elections are generally higher in non-presidential election years.
Source: Follow The Money (2020)

# B Control Variables

Table B.1: Explanatory Variables from Robinson and Tazhitdinova (2022)

| Type ($N$ of var) | Variables included |
|---|---|
| Federal rates (10) | rates and changes from previous year of top federal income tax rate, top federal corporate rate, and federal cigarette, gasoline, and spirit taxes |
| Recessions and mandates (7) | indicators: federal recession and one year lag, state recession and one year lag, 3 indicators for federal mandates: welfare-program-related, minimum wage change, and other |
| State legislatures (5) | number of seats in the lower chamber, number of seats in the upper chamber, average legislative session duration in calendar days, average salary (in 2019/20), average per diem expenses (in 2019/20) |
| Balanced budget rules (3) | indicators: whether budget deficits are allowed, whether capital expenditures are part of the budget, whether rainy day fund exists |
| Term limit and voter initiative (6) | indicators: whether there is governorship term limit, whether there is legislature term limit, whether this is a year in governor's last term, whether such a governor is Republican or a Democrat, whether voter initiatives are allowed |
| Political factors (30) | number of times governor party switched, number of times majority in house, in senate or both switched, share of Republicans/Democrats in the senate/house; indicators: majority-Republican legislature, majority-Democratic legislature, governor Republican, governor Democratic, Southern Democratic governor, Southern Democratic legislature majority, divided government (party of house, senate and governor is not the same), first term after governor party change, first term after senate party change, first term after house party change, federal government shutdown that year, state government shutdown that year, Democratic president, state's preferred presidential candidate lost, legislature majority matches the party of the winning presidential candidate in the state, indicators for each year in the presidential election cycle, indicators for each year in the gubernatorial election cycle, interaction term of divided government and deficit not allowed |
| Demographics (22) | population, population density, labor force participation rate, employment to population ratio, unemployment rate, poverty rate, percent of black residents, percent of non-white and non-black residents, percent of children (0-17 years old), percent senior residents (65+ years old), median household income; as well as changes in these variables |

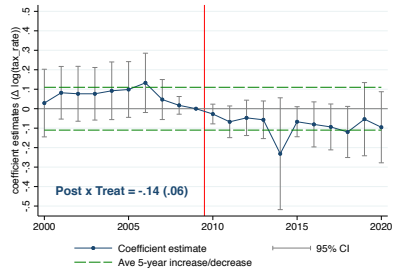
*Notes*: This table summarizes control variables used in specifications (1) and (2).

# C Other Tax-Related Outcomes

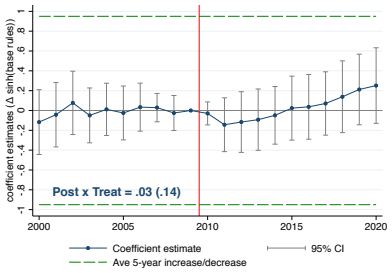
Figure C.2: The Effect of *Citizens United v FEC* on State Tax Base Rules and Incentives

**Tax Base Rules**

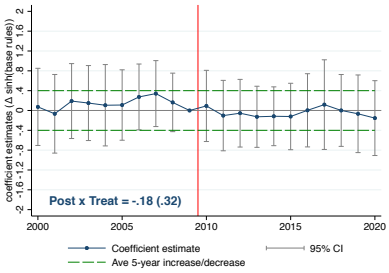
(a) Min Corporate Income Tax




(b) Loss Carryback

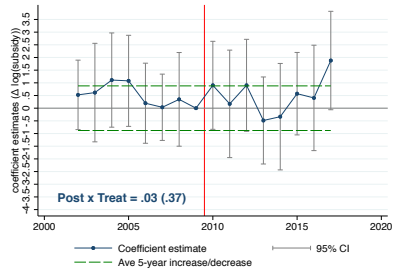



(c) Top Tax Bracket

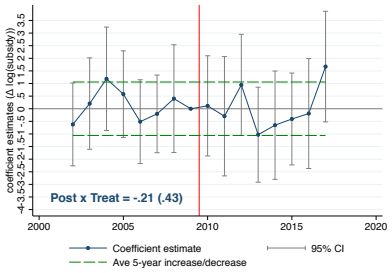



**Tax Incentives**

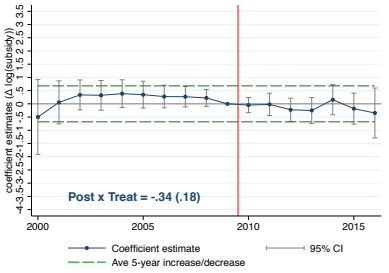
(d) Mean Subsidy Spending (Conditional on Winning)




(e) Total Subsidy Spending (Conditional on Winning)

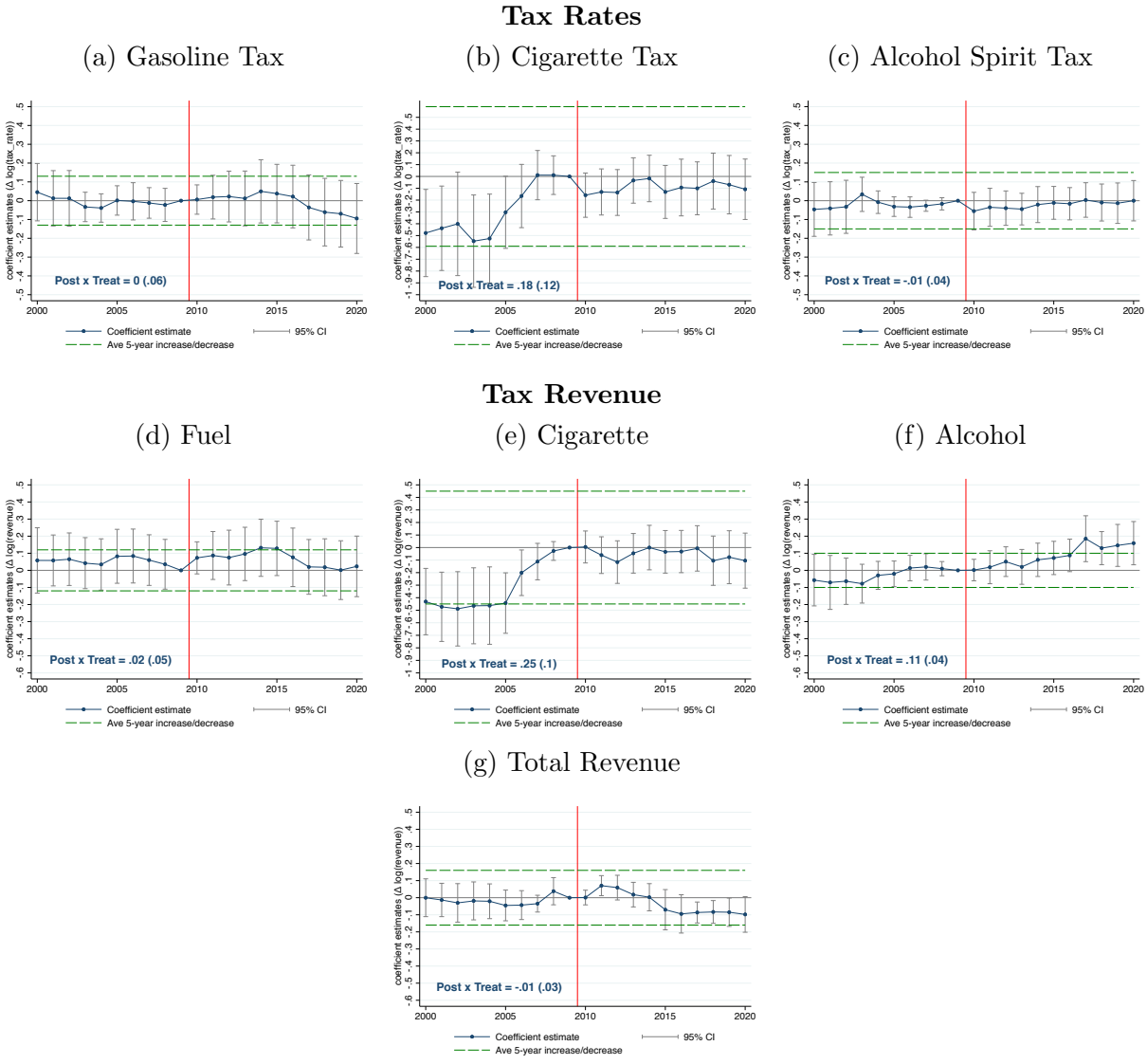



(f) Total Business Tax Expenditures




*Notes*: This figure shows the results of estimating Equation (1). The outcome variable is the inverse hyperbolic sine of the outcome. Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009.

Figure C.3: The Effect of *Citizens United v FEC* on State Tax Rates and Revenues



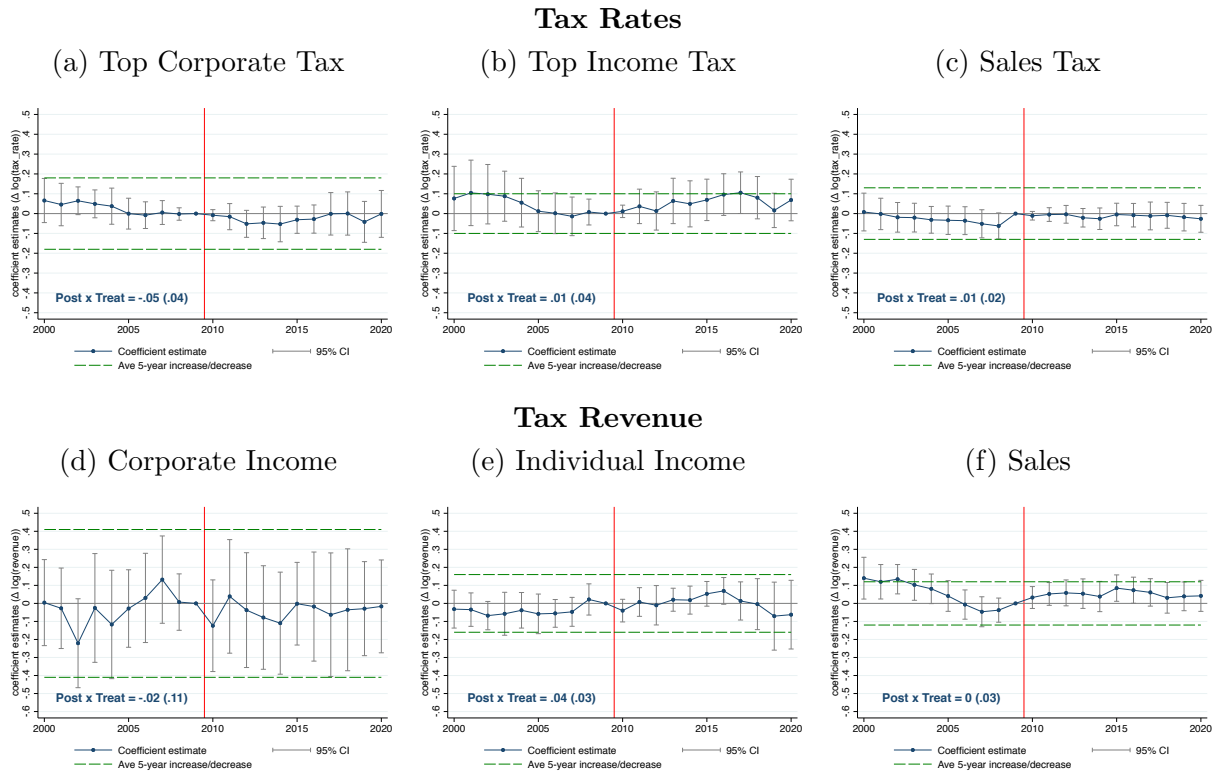

*Notes*: This figure shows the results of estimating Equation (1). The outcome variable is the logarithm of the outcome in percentage points (tax rates) or in 2020$ (revenue). Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009.

# D Robustness Checks

We consider three sets of robustness checks. Appendix D.1 limits the treatment group to states that banned corporate independent contributions only. Appendix D.2 extends the pre-period to 1991 and limits the treatment group to states that introduced bans prior to 1990. Finally, Appendix D.3 estimates specifications (1) and (2) without controls, that is only including year and state fixed effects.

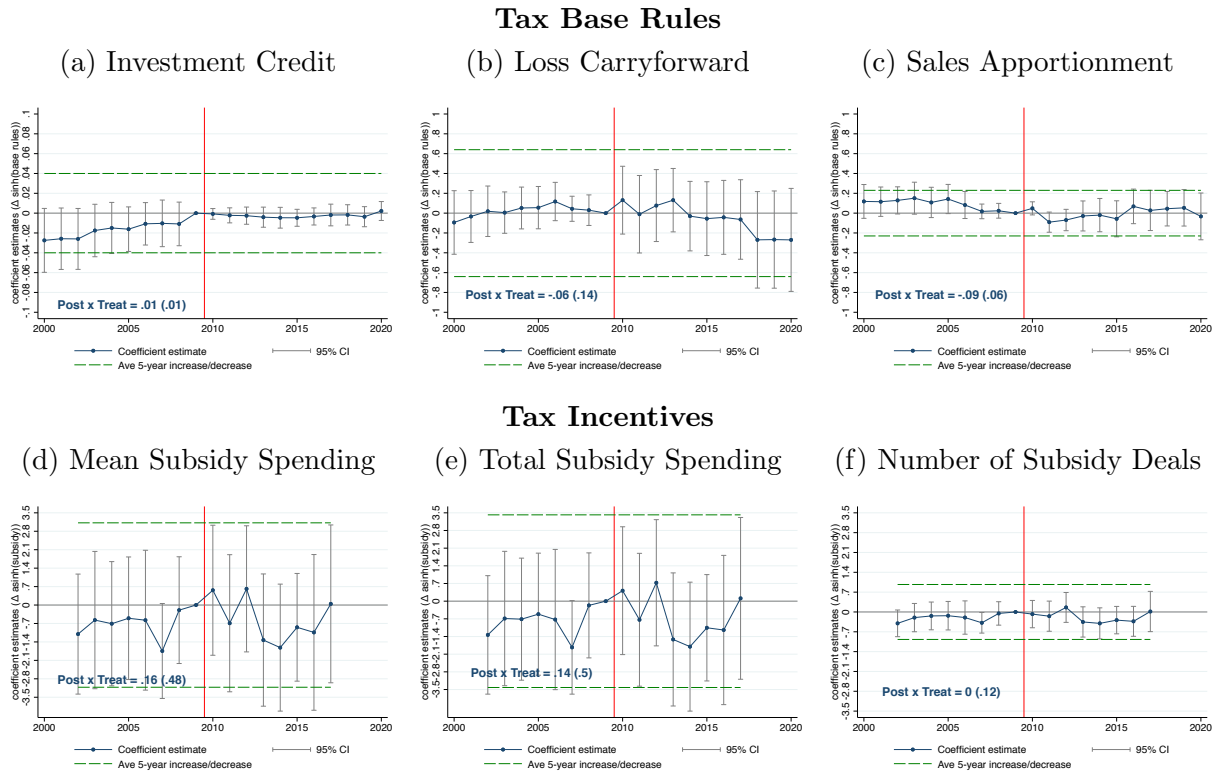
## D.1 Robustness: Corporate Only Bans

Figure D.4: The Effect of *Citizens United v FEC* on State Tax Rates and Revenues




*Notes*: This figure shows the results of estimating Equation (1). The treatment group includes states that banned corporate independent contributions only. The outcome variable is the logarithm of the outcome in percentage points (tax rates) or in 2020$ (revenue). Standard errors are clustered at the state level and 95% confidence intervals are reported. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009.

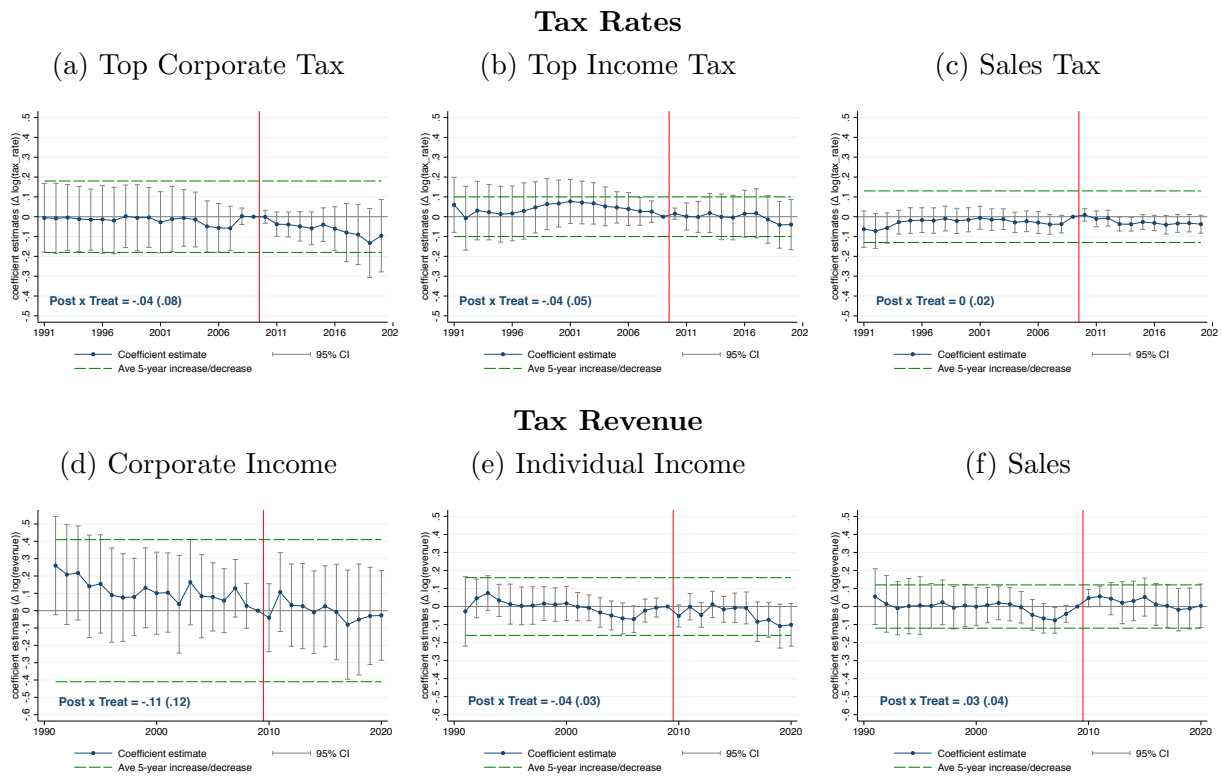
Figure D.5: The Effect of *Citizens United v FEC* on State Tax Base Rules and Incentives




*Notes*: This figure shows the results of estimating Equation (1). The treatment group includes states that banned corporate independent contributions only. The outcome variable is the inverse hyperbolic sine of the outcome. Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009. Loss carryforwards are top-coded at 100.

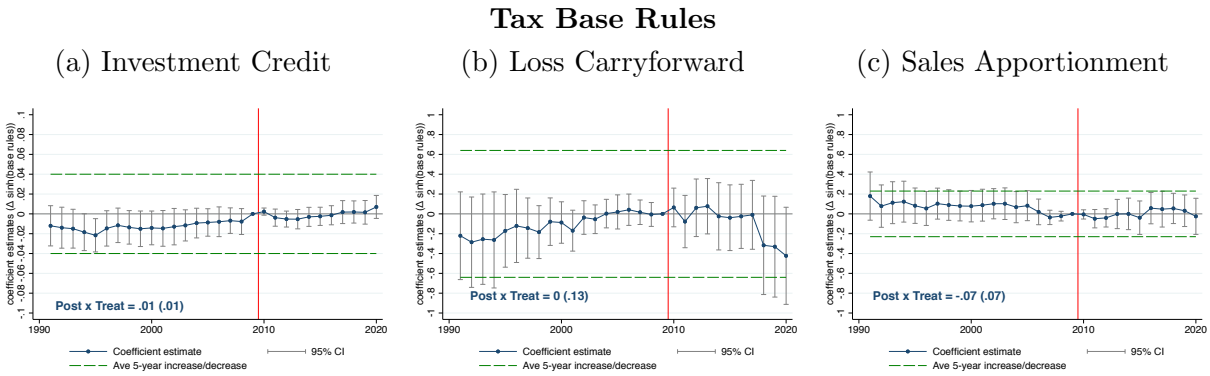
## D.2 Robustness: Longer time series

Figure D.6: The Effect of *Citizens United v FEC* on State Tax Rates and Revenues




*Notes*: This figure shows the results of estimating Equation (1). The treatment group only includes states that banned contributions by corporations and/or unions before 1990. The outcome variable is the logarithm of the outcome in percentage points (tax rates) or in 2020$ (revenue). Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009.

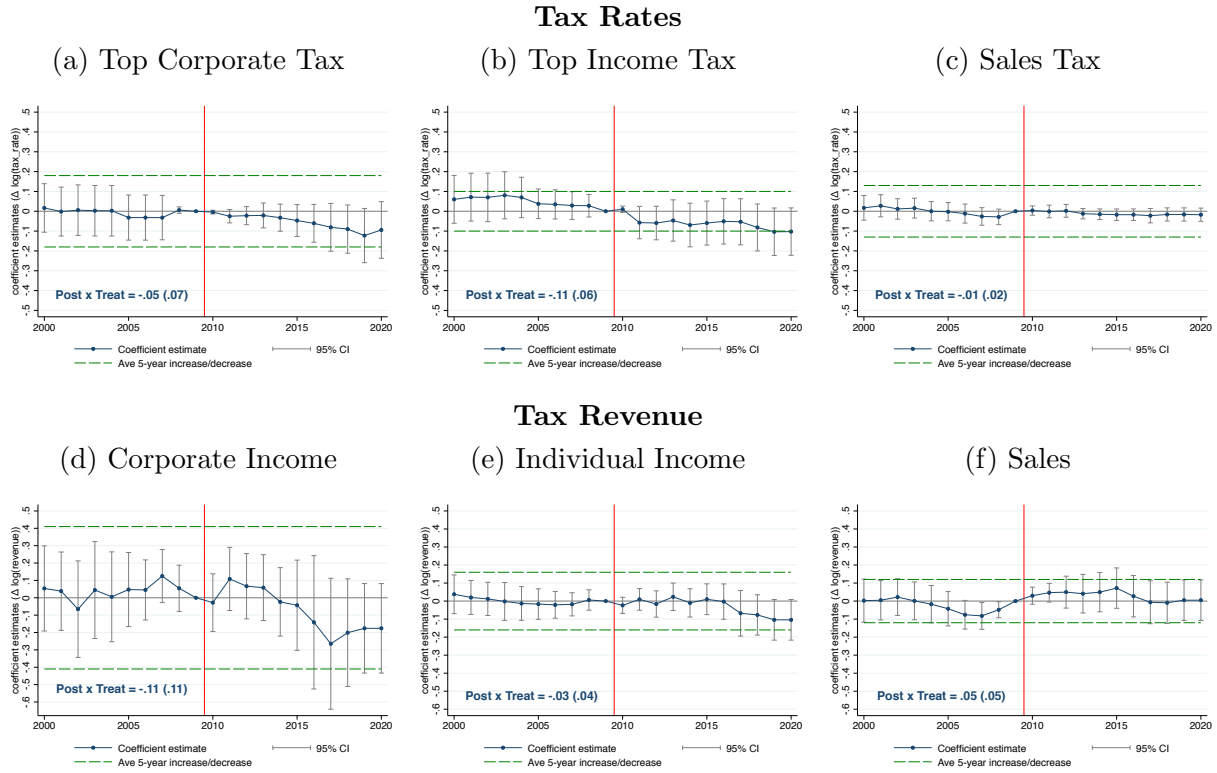
Figure D.7: The Effect of *Citizens United v FEC* on State Tax Base Rules




*Notes*: This figure shows the results of estimating Equation (1). State tax incentive outcomes are not included because we only have incentives data from 2002-2017. The treatment group only includes states that banned contributions by corporations and/or unions before 1990. The outcome variable is the inverse hyperbolic sine of the outcome. Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009. Loss carryforwards are top-coded at 100.

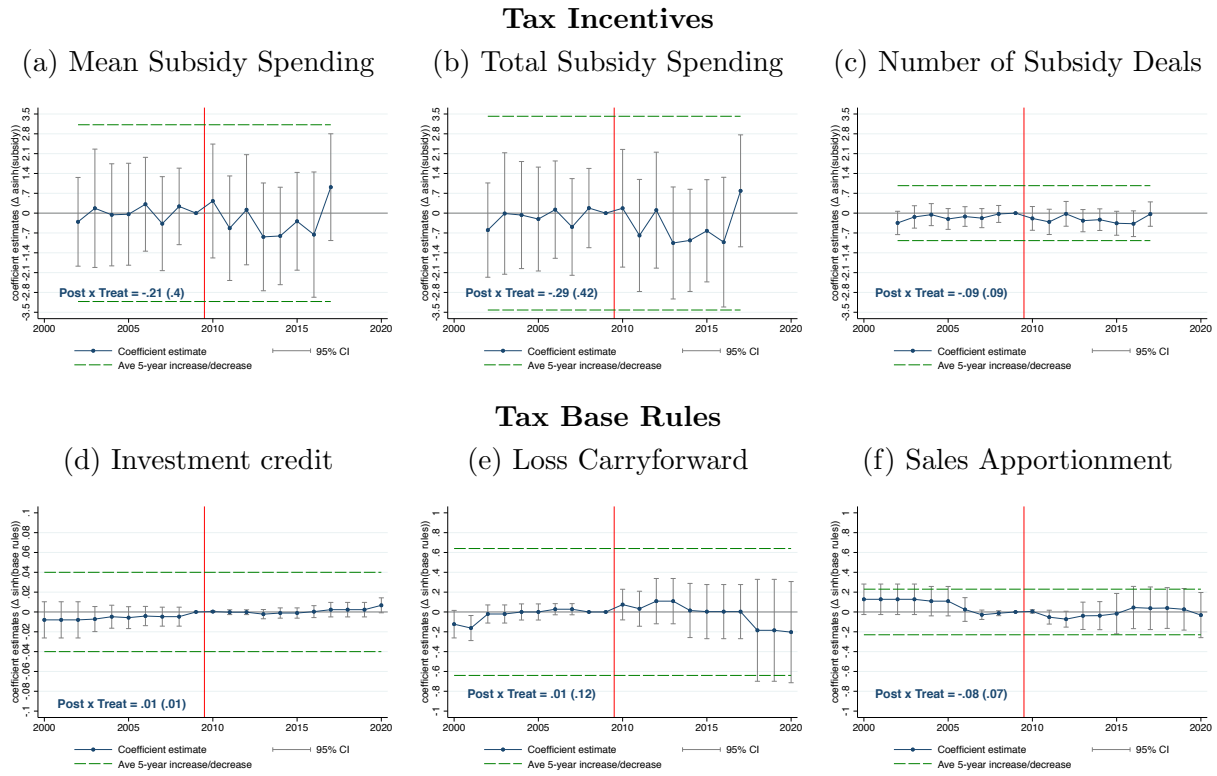
## D.3 Robustness: No controls

Figure D.8: The Effect of *Citizens United v FEC* on State Tax Rates and Revenues



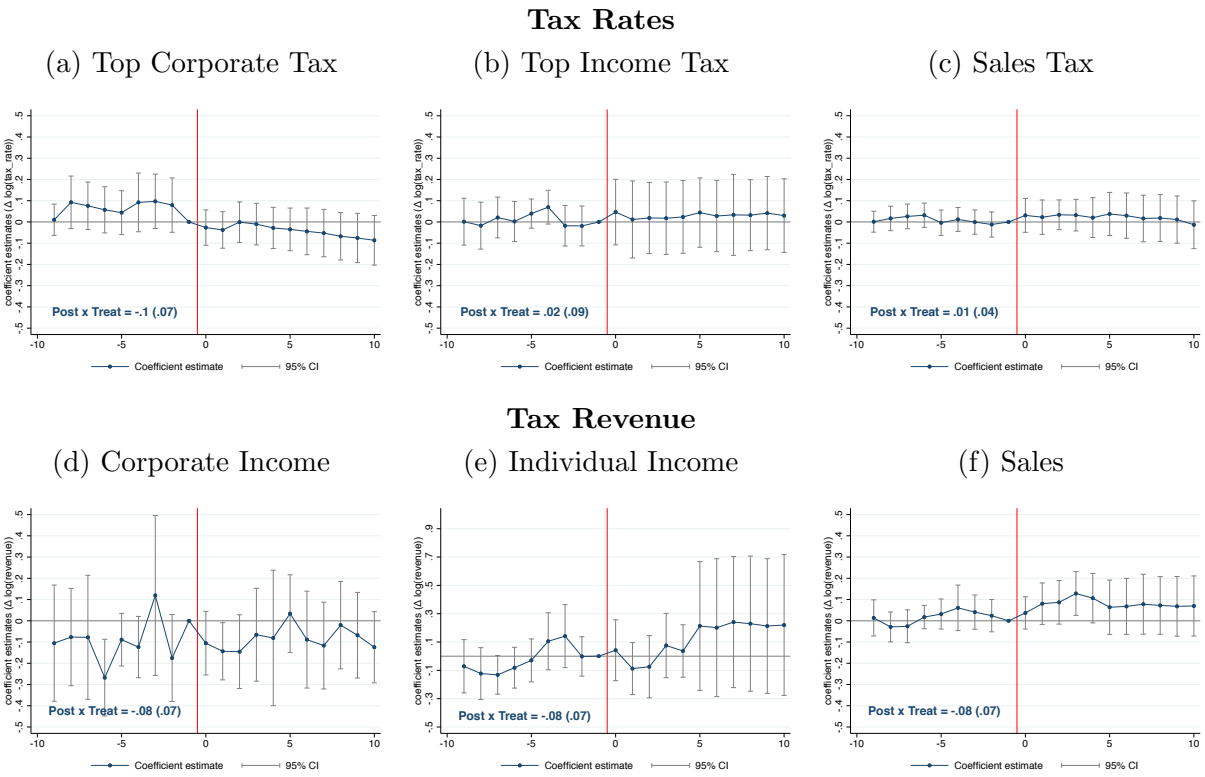

*Notes*: This figure shows the results of estimating (1). No controls are included, except for year and state fixed effects. The outcome variable is the logarithm of the outcome in percentage points (tax rates) or in 2020$ (revenue). Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009.

Figure D.9: The Effect of *Citizens United v FEC* on State Tax Base Rules and Incentives




*Notes*: This figure shows the results of estimating Equation (1). No controls are included, except for year and state fixed effects. The outcome variable is the inverse hyperbolic sine of the outcome. Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are slightly larger. The horizontal lines mark the (plus/minus) average changes of the outcome variables over 5 consecutive years (zeros excluded) during 2000-2009. Loss carryforwards are top-coded at 100.

Figure D.10: The Effect of Ban Enactments on State Tax Policy



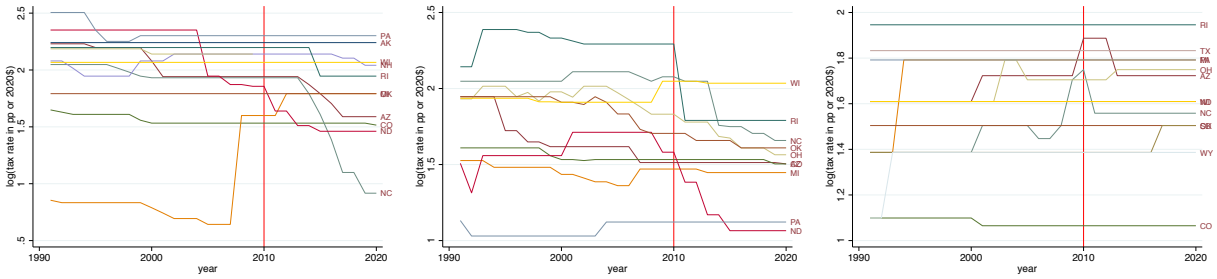

*Notes*: This figure shows the results of estimating (2). No controls are included, except for year and state fixed effects. The outcome variable is the logarithm of tax rates in percentage points or tax revenue in 2020$. Standard errors are clustered at the state level and 95% confidence intervals are reported. Wild bootstrap confidence intervals are larger.

# E Descriptive Figures

Figure E.11: Cancellation of Independent Contribution Bans

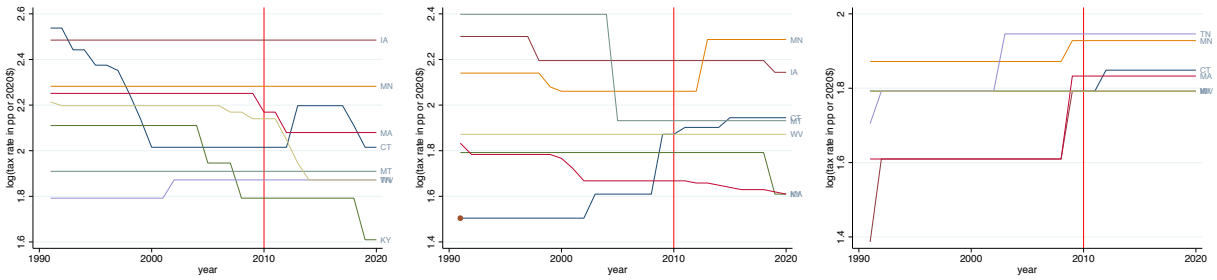
**States that Banned Both Corporate and Union Contributions**

(a) Top Corporate Tax (b) Top Income Tax (c) Sales Tax




**States that Banned Only Corporate Contributions**

(d) Top Corporate Tax (e) Top Income Tax (f) Sales Tax

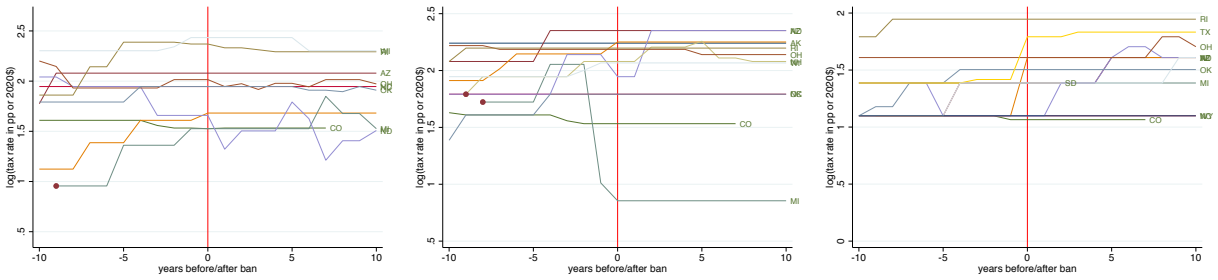



*Notes*: These figures show actual tax rates in treated states.

Figure E.12: Introduction of Independent Contribution Bans

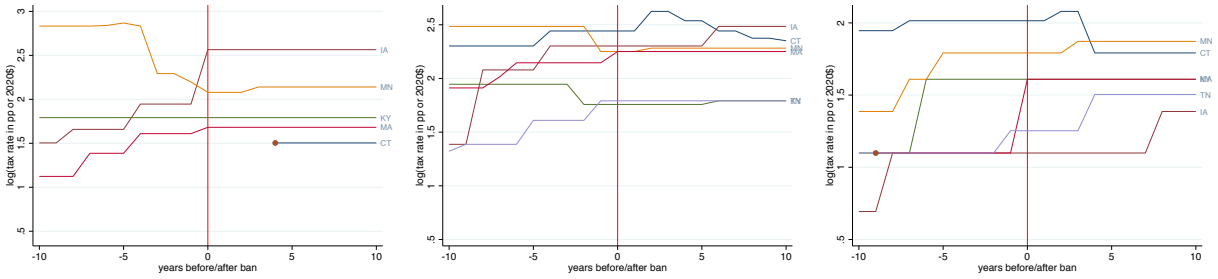
**States that Banned Both Corporate and Union Contributions**

(a) Top Income Tax (b) Top Corporate Tax (c) Sales Tax




**States that Banned Only Corporate Contributions**

(d) Top Income Tax (e) Top Corporate Tax (f) Sales Tax




*Notes*: These figures show actual tax rates in treated states.