Potential Causal Identification Strategy:

Campaign donations are widely considered interested money. The funds that individual legislators receive from donors can be seen as a quid pro quo expectation on delivering votes in favor of donor interest. This is more likely for very partisan donors.

For less partisan donors, their interests as a donor may cut across party/ideological lines on specific legislative topics, or their strategies are inherently different, perhaps focusing on buying influence or access to key members with high amounts of political capital, perhaps in the form of a relevant committee assignment. Alternatively, they could be hedging their best by donating to both sides of the aisle.

We believe that an individual legislator’s vote against the party line in legislation topics relevant to donor interest will have a negative effect on future political donations for the candidate. This effect will be stronger for donors with more partisan voting, with less partisan donors perhaps following a more relaxed ideological strategy of political spending. This would mean they are less responsive to voting patterns and will donate to legislators based on other variables like their committee assignments or overall level of political capital. As well, if their interests cut across party lines in certain legislative topics, our model will capture this as we will break down our metric of interest (percent of votes along party lines) by legislative topic.

Because we are working with panel data, the assumptions we require to identify causal effect can be relaxed. Unit-fixed affects including any and all unmeasured characteristics of individual legislators that do not change over time—such as race, religion, gender—have dropped out of our model. Similarly, time-fixed effects such as economic shocks or changes in national campaign finance laws will also be captured by the error term.

Potential confounders that would vary over time period and legislator would be changes in committee assignments within legislation topics important to the donor (particularly important for less partisan donors) and legislator-level political scandal that would affect fundraising. These variables, however, can be observed. The first is a rather easy addition to our model in terms of data availability [where can we get this data: current\_legislators.csv for much of the observations but we’re missing those that retired or lost races from 2018 to 2020] and the second can be recovered through knowledge of American politics.

Other time and unit varying confounders such as change in ideology or change in voting behavior are assumed to be captured within our parameter of interest which is the percentage of votes of a legislator that follow party lines, broken down by legislative topic. In fact, this is exactly what we want to capture: what is the price in dollars of donor reprisal for a legislator voting against their party position. This assumes that donors—particularly more partisan ones—donate to the party with shared interest through individual legislators. When a legislator deviates from the broader party position the funds will be reduced or canceled.

This also assumes that donor funds will be most stable for party leaders who lead and communicate party positions within the chamber—that is, unless the party leadership changes its position on an old issue (seldom, political positions are generally stable on key issues), or a new issue arises that positions the party against its former donor.[[1]](#footnote-1) This however would be captured within our model as we can see the change in party composition of donation recipients over time—more simply, if a party stakes out a position on a new issue in contrast to donor interest, we would observe a shift in the partisan metric of donor funds. For example, the shift in the democratic party’s position on increasing the minimum wage over the last 8 years (substantial increase) would possibly affect their relationships with donors employing many workers earning low wages. A shift in donor funds towards the opposing party would indicate donor response and no change would indicate that shift in policy had not been internalized by the donor.

In the DAG file, we can see the unobserved confounders at the unit and time level drop out of the model, while observed confounders at the unit and time level like committee assignments/ gaining a position in the party leadership or political scandal must be included in the model in order to make reasonable claims on causal effect. While past treatments do influence future outcomes (and is in fact the main effect we want to measure), we would have to compensate by lagging our treatment variables (t-1) and give up claims on recovering causal effect in the first time period 2012 (unless we recover data from 2010, which is possible.).

Assumptions to defend:

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1. **No unobserved time and unit varying confounder:** In the DAG file, we can see the unobserved confounders at the unit and time level drop out of the model, while observed confounders at the unit and time level like committee assignments/ gaining a position in the party leadership or political scandal must be included in the model in order to make reasonable claims on causal effect. This is possible with available data and background research on major political scandals in the last 10 years.
2. **Past outcomes do not influence current ones:** the level of money a candidate receive in one year would arguably only decrease or increase based on the performance of the legislator (voting) or unobserved or observed confounders mentioned. The only way that this could be true is if legislators do not spend all of their money from their campaign and carry it over to the next. However, our data is structured that the donation data is not taken from the legislator, but rather from the donor, meaning that it includes only the funds disbursed each year.
3. ***Past outcomes do not include current treatment:*** *This might bust the current structure. We reasonably expect previous outcomes to effect the current treatment, otherwise donations wouldn’t have an effect at all on the voting behavior of the legislator. This is where we would need an IV on the X variable to be sure that we are only capturing the effect of voting behavior unrelated to donor funds.* 
   1. *What is a reasonably good predictor of voting along the party lines that is unrelated to campaign donations?*
4. **Past treatments do not affect current outcome**: While past treatments do influence future outcomes (and is in fact the main effect we want to measure), we would have to compensate by lagging our treatment variables (t-1) and give up claims on recovering causal effect in the first time period 2012 (unless we recover data from 2010, which is possible.).

Model:



Where X is a matrix of percentages of votes along party lines for various legislative topic areas, and we expect that the higher the percentage the less donors will change their donations, given that the party itself if not sanction through shifting donations to the other party.

We suggest running a ***lasso regression model on our data***, which will help us simplify our model and identify which legislative topics are most important to each donor. With this model we can show which types of bills the donor cares about most, and in which policy domains they expect the legislator to follow party lines.

If the party line vote percentage is a poor predictor we know that our parameter does not capture a powerful predictor of donor behavior and that it is less likely that donors expect legislators to follow the party line.

Because our first test donor is Walt Disney, a relatively less partisan donor, we may also want to additionally use a party distribution of funds outcome variable to measure whether the donor was responsive to legislators by shifting funds to one party or another. In this sense we have two outcome variables of interest—the change in funds for the individual legislator and the change in funds to the party as a whole. They can reveal behavioral expectations of donors on a particular legislator and donor expectation of the party position respectively.

1. more likely in fields of technology, data protection, issues that involve new administrative tasks related to changing economies or technological advances, evolving foreign policy issues as well—although we except large corporations to be mostly responsive to foreign policy as it relates to trade, intellectual property, or other topics that affect international business [↑](#footnote-ref-1)