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Campaign contributions and legislative behavior: Evidence from U.S. congress

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ABSTRACT

What is the relationship between campaign contributions and legislative behavior of elected representatives? In this paper, I find that more concentrated donations negatively correlate with three costly legislative endeavors of members of Congress: bill sponsorship, speechmaking on the floor and witness appearances before committees. For bill sponsorship, the negative correlation is stronger for topics related to redistribution, such as health and social welfare bills. To interpret these results, I argue that a more skewed structure of contributions makes members of Congress more dependent on their top donors and thus potentially more inclined to represent their interests. By reciprocating favors to donors, by seeking to secure their continued financial support, or simply by enjoying more leisure time as a result of feeling secure in their financial backing, federal legislators are less active in activities related to the Congressional agenda and public policy. Overall, I contend that campaign contributions distort the incentives of elected representatives to allocate legislative effort in Congress.

1. Introduction

Do campaign contributions influence the legislative behavior of members of Congress (MCs)? Historically, the large literature studying the effect of donations on the behavior of MCs has led to mixed results (e.g. [Ansolabehere et al., 2003](#)). Recent works employing novel causal inference techniques have found some positive answers to this important question, narrowing the focus to legislative votes related to specific industries or moments in the policy discussion ([Grier et al., 2023](#); [Powell and Grimmer, 2016](#); [Kaplan et al., 2019](#)).

Overall, contributions are thought to buy access to legislators and influence the allocation of their scarce time in office (e.g. [Hall and Wayman, 1990](#); [Kalla and Broockman, 2016](#)). Indeed, MCs devote an impressively high amount of time to fundraising activities, as abundant anecdotal evidence confirms.¹ Former representative Walt Minnick, a conservative Democrat from Idaho, declared in 2012 that in his two

years in office he used to spend “two or three hours a day trying to raise money” ([Glass, 2012](#)). Rick Nolan, former Democratic House member from Minnesota, sums it up emphatically: “The simple fact is our entire legislative schedule is set around fundraising” ([Langhorne, 2018](#)). Legislators also appear conscious that fundraising time poses a risk for the quality of representation of their constituency. Alan Simpson, former Republican Senator of Wyoming, openly stated: “When we were spending so much time raising money, we simply could not devote quality time to thoughtful decisions and debate. It lowered the substance of our work”.^{2,3}

In this work, I study the association between the *concentration* of campaign donations of MCs and their legislative behavior between 1980 and 2014. I adopt a very simple framework in which MCs represent two distinct groups: voters and donors.⁴ The former prefer the MC to be active in legislative activities like authoring bills, delivering speeches and supporting federal spending in their districts. The latter

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¹ To the best of my knowledge, the only empirical quantification of the time devoted to fundraising dates back to [Langbein \(1986\)](#), which uses a random sample of 92 House members from the 95th Congress to examine their activities, especially the amount of time dedicated to interest groups. She estimates that one hour of legislator’s time costed between 10,000 and 15,000 dollars at that time.

² The Boston Globe, March 10, 2006; quoted in [Daley and Snowberg \(2011, 324\)](#).

³ Senator Nancy Kassebaum (R-KS) delivered a similar comment: “Here we are forced to raise money all the time. I don’t worry about money influencing our votes. But I worry about the energy it takes. I just don’t know how people find time to think or reflect”. ([Garrett, 1997](#)).

⁴ As we are considering large donors on average, this dichotomy can be also thought as MCs representing their constituencies and special interests. See [Kaplan et al. \(2019\)](#) for a similar conceptualization of roll-call voting.

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prefer the status quo or small beneficial policy changes.⁵ As MCs require the support of both voters and donors, this framework defines a trade-off between the representation of the two groups, with time being a very scarce resource in office. Hence, the rationale for studying the concentration of donations at the individual legislator level is that a MC would be more easily influenced by her big donors when they represent a larger share of her total funds, compared to a scenario in which her largest contributions are less dominant in the distribution. In this case, she would be more willing to correspond to the requests of this group of donors whose money funds a big part of her campaign. By the same logic, the MC would spend more energy and resources to court big donors in order to make sure they will fund her re-election campaign. Another possibility that cannot be ruled out based on the available data is that MCs allocate their time in office to non-labor-related activities, feeling secure in their funding prospects. A more uneven distribution of donations provides them with the opportunity to enjoy increased leisure time, consequently leading to a reduced dedication to legislative activities. The distinction between these mechanisms falls beyond the scope of this study. Crucially, the observable consequence is for all these mechanisms a decrease in relevant legislative activities carried out to represent voters.

Within this framework, I show that on average elected representatives in Congress sponsor fewer bills when a higher share of their contributions comes from the top ten percentiles of their distribution of donations. This pattern is particularly strong for bills on so called social-safety net topics, namely health, social welfare and housing. Furthermore, the same MC-specific measure of concentration of political donations displays a strong negative correlation with other two legislative activities: speechmaking on the Congress floor, and appearances as witnesses before Congressional hearings. These results remain robust after controlling for a large set of variables related to the donations received and to MC characteristics, including electoral safety. Crucially, they hold with MC fixed effects.

The interpretation of these findings is that a more skewed structure of political funds makes MCs more dependent on a relatively smaller number of donors, and thus less inclined to spend time and effort in legislative activities, including some that substantively affect the representation of their constituencies, such as committee appearances. This study thus uncovers a subtle mechanism of influence through which the concentration of campaign contributions distorts the incentives of elected representatives in Congress regarding their legislative behavior. It also provides evidence against another possible interpretation of the findings that view contributions as subsidies to aligned legislators specialized on specific issues. Finally, it acknowledges that the results are also compatible with the idea that legislators might simply enjoy more leisure time without necessarily reciprocating favors to donors.

The remainder of the paper proceeds as follows. Section 2 describes the data and the methodology. Section 3 presents the results. Section 4 discusses the findings and concludes.

2. Data and methodology

The empirical analysis combines data on campaign contributions of MCs with data on their legislative behavior in office. Data for political donations of MCs from 1979 to 2014 comes from Database on Ideology, Money in Politics, and Elections (DIME) v2.0 (Bonica, 2016).⁶ Data for bill sponsorship of MCs from 1981 to 2016 comes from the Policy

⁵ Paradigmatic cases are the National Rifle Association and the Pharmaceutical Research and Manufacturers of America, whose ultimate goal is substantially to impede any major policy change in legislation regarding gun control and drug pricing regulation, respectively.

⁶ Not all recipients are MCs when they receive their contributions, as they might win a seat for the first time in the upcoming race. In the interest of space, I hereafter use MC.

Agenda Database (Adler and Wilkerson, 2018). I complement this data with information about MCs from the Center of Effective Lawmaking. Finally, data on electoral results comes from MIT Election Data Lab and DIME. Additional analyses on speechmaking on the Congress floor and appearances as witness before Congressional committees make use of databases constructed respectively by Gentzkow et al. (2019) for the period 1980–2010, and Snyder and Strömberg (2010) for the period 1982–2004.⁷

The unit of observation is a MC in a two-year electoral cycle ($N = 7821$).⁸ I consider all reported contributions from private individuals, corporations or committees, including Political Action Committees (PACs) that directly finance MCs, thus excluding general contributions to political parties that are not attributable to specific MCs. Overall, the top hundred donors (out of more than 4 million unique contributors) donated more than 23.4 billion dollars, out of the total 36.7 billion for all contributions of this type in this period (63.7 percent).⁹ This concentration masks the aggregating role of national party PACs and of Actblue, a Democratic conduit for small donations that started to become a relevant political actor in 2012 election.¹⁰ The Online Appendix Section B.1 provides a list of the biggest donors in absolute terms in my dataset.

Then, I construct a variable that measures the concentration in the distribution of contributions for every unit of observation, called *ShareTop10*. It measures the share of contributions coming from the top ten percent of donors, within the distribution of each MC by electoral cycle. More precisely, I take the top ten percent of donors of each unit of observation and I calculate their share of funds with respect to the total raised by that MC in that electoral cycle. The rationale for the construction of this variable relates to the idea that a MC is more easily influenced when a higher share of her donations comes from her top contributors, relative to a more balanced distribution. Then, a MC with higher concentration of contributions would have a stronger incentive to represent the interests of her top donors, with respect to a MC with a more equal distribution of funds.

The variable *ShareTop10* accounts for the relative importance of the largest donors to each unit of observation, and not just for the overall concentration of the distribution across the entire spectrum of her donations, such as an Herfindahl–Hirschman Index (HHI) of concentration.¹¹ Theoretically, I employ this variable to focus attention on the right tail of the distribution of donations rather than solely on the overall imbalance of the distribution, in a similar manner to how scholars of income inequality use comparable measures instead of the Gini index, which accounts for the entire income distribution. Effectively, these top share measures are arguably better suited, with respect to encompassing indexes of concentration such as Gini and Herfindahl, to capturing the disproportionate influence of top donors, just as they capture the disproportionate economic power of top income earners. Nonetheless, I include HHI as a control in further specifications, in

⁷ The use of these different datasets without a common identifier often required manual imputation to homogenize MC names or district codes used to merge them.

⁸ I exclude MCs that do not serve for the entire period of their elected office, as their legislative production might be affected by the different length of service. I also exclude a few cases of self-funded MCs, as well as observations for which there is no information at all about campaign contributions (mostly incumbents “recycling” contributions from the previous electoral campaign).

⁹ These amounts are adjusted for inflation, with 2000 as base year.

¹⁰ In general, all PACs can in turn receive contributions from individuals and interest groups. National party PACs as well as conduits allegedly represent general interests, hardly compatible with the idea of *ShareTop10*. The same is true for large unions that do not represent only one specific category of workers. For this reason, Table A6 shows that the main results holds when I calculate the *ShareTop10* variable excluding these donors.

¹¹ Indeed, the correlation between these two measures is quite low (0.51), indicating their intrinsic distinction.

addition to the total amount and the total amount squared, showing that this does not change the main results.¹² Finally, I recognize that the threshold of ten percent could be seen as arbitrary. Section A7 in the Appendix shows that all the main results hold with an alternative variable calculated using the top five percent of donors instead of the top ten.

The contributors that belong to the top ten percentiles of a MC are not necessarily large donors compared to the average contributor in the sample. Thus, I construct another list of the relatively biggest donors related to *ShareTop10*, namely the ones that figure in the top ten percentiles of the distribution of contributions for the highest number of observations (Online Appendix Section B.2). The top three donors in this list are: *Realtors PAC* of the National Association of Realtors, that figure in the top ten percentile of donations to 5104 observations, and then *Automobile and Truck Dealers PAC* (3446) and *American Medical PAC* (3398).¹³ Interestingly, individuals still represent the majority of overall donors in the high tail of MCs' distributions, even if their share is on average more than three times smaller than contributions from committees.¹⁴ Thus, the variable *ShareTop10* is an umbrella measure of concentration of contributions from all types of donors, not only reflecting the preferences of interest groups such as business and trade associations. Nonetheless, this variable is not substantially affected by the rise in small donations, as this phenomenon gained relevance only around 2012 (Bouton et al., 2022).

The mean of the variable *ShareTop10* amounts to 0.47, meaning that the top ten percent of donations of each MC by electoral cycle on average contributes for almost half of the total amount received.¹⁵ This measure is characterized by very high variation, from a minimum of 0.12 (almost perfect equality of contributions) to a maximum of 1 (perfect inequality). In line with evidence on increasing concentration of contributions (Bonica et al., 2013; Cagé, 2024), I find that MCs have increasingly skewed distribution of campaign funds over the period of this study. Fig. 1 displays this rising trend over time by dividing the sample in three periods of equal length.

The main question here is whether the variable of concentration of contributions correlates with the following legislative outcomes of interest: bill sponsorship, speechmaking on the Chamber floors and witness appearances before committees. To the best of my knowledge, this study represents the first attempt to examine empirically the association between the distribution of campaign contributions of MCs and these legislative activities.

The model estimates the following panel specification:

$$Y_{jt} = \alpha_{jt} + \beta_t + \gamma_t \text{ShareTop10}_{jt-1} + \eta_t M_{jt-1} + \epsilon_{jt},$$

where Y_{jt} is the legislative outcome of interest by MC j at time t , α_{jt} is a set of time-varying controls for MC j , β_t represents election cycle fixed effects, ShareTop10_{jt-1} is the variable of concentration of contributions for MC j at time $t-1$, and M_{jt-1} is a vector of controls for donations received by MC j at time $t-1$ that include the total amount of contributions, the total amount squared, and additional variables in robustness checks. MC controls include gender, ideology, seniority, member of Democratic party, member of majority party, percentage

of vote in last election, committee chair, committee rank, speaker, leader of majority party, leader of minority party. Robust standard errors are clustered at the MC level. The main specification adopts state fixed effects. Alternatively, I use MC fixed effects.¹⁶ Table A1 displays summary statistics for the main dependent and independent variables. Table A2 shows that the correlation between *ShareTop10* and all other MC covariates is very close to zero, thus excluding that MCs with highly concentrated donor base look different along other dimensions potentially related to their valence, such as seniority, past political experience, being chair of a Committee, and vote percentage.¹⁷

3. Empirical analysis

3.1. Bill sponsorship

Bill sponsorship is the main activity of federal legislators that relates to the Congressional agenda. As a classic study suggests, bill sponsorship entails three types of costs—resource, opportunity and political costs—which need to be offset, in the individual decision making process of the single MC, by the expected benefits (Schiller, 1995). Crucially, one potential benefit of this legislative endeavor is the possibility to shape the debate in Congress and in public opinion.

Previous studies have shown a negative correlation between the aggregate level of income inequality and the amount of debate in Congress over social welfare legislation (Epp, 2018). Moreover, the sources of funding of MCs have been found relevant for explaining their legislative behavior once in office. Indeed, Epp (2018) shows that MCs that receive a higher proportion of contributions by small donors, namely individuals that donate less than 200\$, proposed more bills and on a more variegated set of topics, between 2010 and 2014. The analysis in this work extends considerably the period of analysis, bringing it to almost four decades and it crucially focuses on (relatively) large donors, arguably the most important group for policy influence. Given existing evidence, I expect that MCs that rely more on big donations would be less active in sponsorship of legislation, and that this association would be greater for topics related to social safety-net. The intuition is that the concentration of a MC's campaign funds, regardless of where they come from absolute top donors or not, could potentially limit her legislative activities, by changing the incentives around legislative effort.

In the baseline regression, I use the variable that defines “important” bills, manually coded by the Policy Agenda Project. This classification excludes, from the total number of bills sponsored, ceremonial ones that do not represent meaningful legislative change. Then, I consider the subset—less than ten percent of the total—of these proposals that have been reported by at least one committee, an indication that the proposal has been taken into legislative consideration. On average, MCs sponsor around eighteen bills for each two-year period in Congress, of which sixteen are deemed as important in this classification, and just two get reported by one or more committee. Overall, these different variables aim at ruling out the possibility of

¹² The *ShareTop10* coefficient actually gets larger. See Table A3.

¹³ These PACs are not in the very first position for their donations in absolute terms—they were respectively in the 7th, 22nd and 14th positions. This pattern potentially unveils a strategic targeting of MCs with large enough donations to figure in the high tail of their distribution. The identification of this mechanism remains beyond the scope of this study.

¹⁴ In the universe of contributions that figure in the top ten percentiles of MCs' funding, there are 734,554 donations from individuals and 571,205 donations from committees. An individual donation accounts on average for 0.04 percent of all contributions of one MC, while a donation from a committee accounts on average for 1.3 percent.

¹⁵ For each unit of observation, the average number of donors is 844, but there are more than seven hundred observations with less than 100 donors.

¹⁶ On one hand, the specification without fixed effects exploits both the variation within and between MCs, thus not giving disproportionate weight to MCs that remain in office for long periods. On the other hand, the inclusion of fixed effects absorbs unobservable variation at the level of the MC, such as personal characteristics related to the ability of collecting money, and it has often been recommended in this type of studies (e.g. Ansolabehere et al., 2003).

¹⁷ Restricting the attention to the observations with the top ten highest values of *ShareTop10*, the only significant difference from the entire sample is a higher likelihood of being a woman MC (62% percent higher than average) and a ranking member of a Committee (36% percent higher than average).

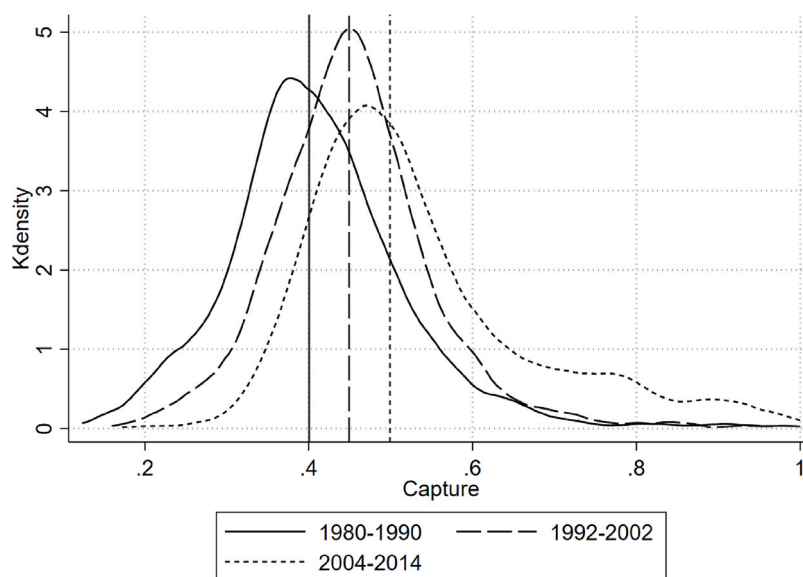


Fig. 1. Distribution of ShareTop10 variable.

Note. The figure displays the distribution of the *ShareTop10* variable in the three periods indicated in the legend, as well as vertical lines representing median values.

“show-horse” behavior, namely that MCs might get publicity through the sponsorship of many unimportant bills, actually doing very little legislating work (Payne, 1980). Then, the Policy Agenda Project classifies each proposal into 21 major categories.¹⁸ Following Epp and Borghetto (2018), I merge the categories of proposals in four macro categories: Economy, Social Order, Social Safety Net and a residual category.¹⁹

Table 1 shows the results for three subsets of legislative proposals: ‘important’ bills, bills that have been reported by committees, and ‘important’ bills that have been reported by committees.²⁰ In the first three columns, I use cycle and state fixed effects; in the last three columns, I use cycle and MC fixed effect. First of all, the share of contributions from donors in the top ten percent of the distribution of MCs’ donations exhibits a negative and strongly significant correlation on the number of sponsored bills across the board. To quantify the size of the coefficient, one standard deviation increase in the *ShareTop10* variable in the first column is correlated with a reduction of 0.89 important bills, which corresponds to 5.6 percent of the sample mean. The magnitudes are slightly bigger for the two other dependent variables, indicating that the negative correlation increases for relevant legislation. Crucially, the size and the significance of the coefficients are virtually unchanged with MC fixed effects.

Regarding the other control variables, being chair of a committee and being a member of the majority party in the chamber display the biggest positive coefficients. Seniority, as expected, displays a large positive correlation with the number of sponsored legislative proposals, but the significance largely disappears with MC fixed effect. In line with previous work (Anzia and Berry, 2011; Volden et al., 2013), I find that female MCs on average sponsor significantly more bills, but this remains true only for important bills. Table A3 in the Appendix displays several robustness checks regarding additional MC controls as well as an alternative classification of bill advancement from the

Center of Effective Lawmaking.²¹ Section A2 in the Appendix explains in details these additional empirical exercises, as well as including an analysis of the heterogeneity of the main results.

At the level of macro categories, the correlation with the *ShareTop10* variable is negative and significant for all three groups of topics: social order, economics and social safety-net topics, with increasing magnitude and level of significance. Fig. 2 displays these results by comparing the coefficients of *ShareTop10* in regressions with the three macro categories of bills as normalized dependent variables, for each specification (important, reported, and important reported bills).²² Using the same calculation as before, one standard deviation in the *ShareTop10* variable correlates with a 3.1 percent reduction of important bills related to social order topics, 5.2 percent reduction for economic topics and 7 percent for social safety net topics. For the twenty-one categories from the Policy Agenda database, the negative correlation is biggest for the legislative categories of housing (11.2 percent) and health (10.3 percent).²³

For social safety net topics, *ShareTop10* remains significant in regressions with dependent variable the number of reported legislative proposals and the number of important reported bills (Fig. 2). Instead, it is not significant at all for the other two macro categories; for social order, the coefficient is even positive, albeit not significant. Within the broad macro category of social safety-net, the variable of concentration of contributions is significant also at the level of reported and important reported legislation for the categories of health and social welfare (Table A10). Importantly, the same findings reported in Fig. 2 holds for both Chambers, meaning that the concentration of contributions correlates with a reduction of non-ceremonial legislation regarding social safety net topics separately in the House and in the Senate (Figure A2 and Figure A3).

²¹ The results are virtually unchanged employing district instead of state fixed effects, as well as not controlling for party in the specification with MC fixed effects or including the squared values of the variables measuring seniority and electoral safety (result not reported).

²² Figure A1 in the Online Appendix is the corresponding graph for regressions with MC fixed effects. The corresponding regressions as for Table 1 is Table A7 in the Online Appendix.

²³ Overall, the coefficient is significant at five percent level for important legislative proposals related to the following topics: health, agriculture, labor, environment, energy, social welfare, housing, domestic commerce, technology, international affairs and public lands (Table A8 and Table A9).

¹⁸ According to this classification, every bill pertains to only one category. This method thus contains a certain degree of arbitrariness.

¹⁹ The Online Appendix Section B contains the details of this classification.

²⁰ The number of proposals that have been reported by a committee is generally very small at the level of the MC, especially when we look at different bill categories. For this reason, in all robustness checks I use the number of ‘important’ legislative proposal as the dependent variable for the baseline specification.

Table 1
Bill Sponsorship.

	Important	Reported	Imp. Reported	Important	Reported	Imp. Reported
ShareTop10	-6.88*** (1.26)	-1.21*** (0.28)	-0.91*** (0.26)	-7.64*** (1.29)	-1.26*** (0.31)	-0.97*** (0.30)
Majority Party	3.49*** (0.36)	1.57*** (0.08)	1.54*** (0.07)	3.58*** (0.40)	1.54*** (0.09)	1.53*** (0.09)
Democratic	-1.76 (1.56)	-0.72*** (0.26)	-0.62*** (0.24)	-2.42 (4.39)	-1.93 (1.30)	-1.96 (1.27)
Ideology	-3.29* (1.92)	-0.92*** (0.31)	-0.72** (0.28)	-5.14 (3.57)	-0.78 (0.57)	-0.74 (0.55)
Female	2.30*** (0.80)	-0.01 (0.12)	0.03 (0.10)	/	/	/
Percentage votes	-2.14* (1.28)	-0.91*** (0.27)	-0.68*** (0.25)	0.31 (1.27)	-0.26 (0.29)	-0.14 (0.28)
Total Contributions	0.00*** (0.00)	0.00 (0.00)	0.00* (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)
Total Contributions ²	-0.00*** (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
Speaker	-8.40*** (1.60)	-1.51*** (0.46)	-1.41*** (0.45)	-6.99*** (1.34)	-1.13** (0.44)	-1.03** (0.45)
Majority Leader	-0.84 (0.77)	0.10 (0.27)	0.01 (0.25)	-0.20 (0.81)	0.31 (0.29)	0.21 (0.27)
Minority Leader	-2.52** (1.11)	-0.38*** (0.14)	-0.37*** (0.12)	-2.41** (1.23)	-0.13 (0.20)	-0.13 (0.18)
Committee Chair	7.56*** (0.97)	4.64*** (0.39)	4.43*** (0.35)	6.88*** (0.95)	4.12*** (0.37)	3.95*** (0.34)
Committee Rank	0.22 (0.70)	-0.49*** (0.15)	-0.49*** (0.14)	-0.32 (0.77)	-0.92*** (0.20)	-0.87*** (0.20)
Seniority	0.68*** (0.07)	0.13*** (0.01)	0.13*** (0.01)	0.74 (0.46)	0.08 (0.05)	0.09** (0.04)
State Fixed Effects	✓	✓	✓			
MC Fixed Effects				✓	✓	✓
Cycle Fixed Effects	✓	✓	✓	✓	✓	✓
Observations	7821	7821	7821	7821	7821	7821
R ²	0.16	0.31	0.33	0.17	0.31	0.33
Mean Dep. Var.	16.01	2.14	1.85	16.01	2.14	1.85

Standard errors clustered at the MC level in parenthesis.

* p<0.10.

** p<0.05.

*** p<0.01.

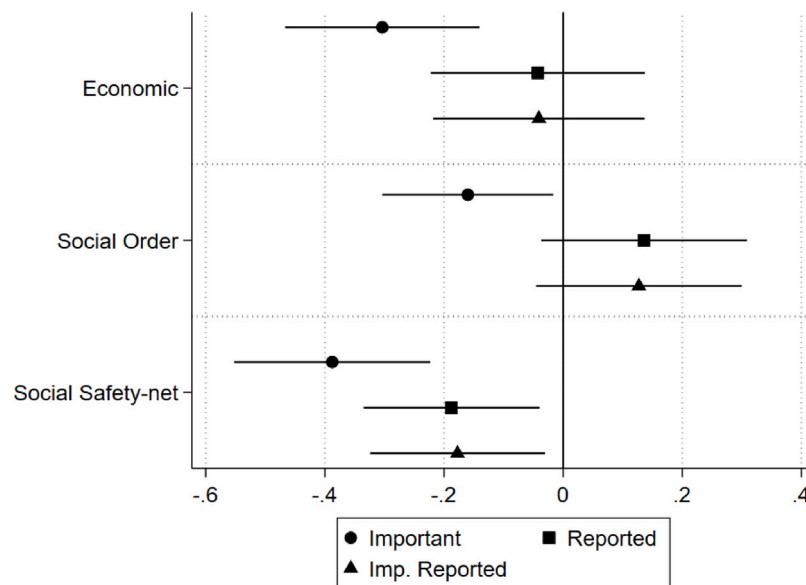


Fig. 2. Coefficient of ShareTop10: Macro Categories of Bills.

Note. The figure displays the coefficients of *ShareTop10* variable with 90 percent level confidence intervals, for regressions with the dependent variables displayed in the graph, normalized by subtracting the mean and dividing by the standard deviation. Round markers indicate important bills, squared markers bills reported by committees, triangle markers important bills reported by committees. All regressions include the full list of controls.

3.2. Speechmaking on the congress floor

Here, I analyze the relationship between *ShareTop10* and the capacity of MCs to deliver speeches on the Congress floors. Witko et al. (2021) link different types of campaign donations to this legislative activity, finding that labor donations increase attention to lower classes priorities, corporate donations to upper class ones. My question here is more general: does the distribution of political donations influence the decision to deliver a speech in the first place? The rationale of this analysis rests on the intuition that meaningful speechmaking is a costly individual activity and it is, as bill sponsorship, a versatile and multidimensional endeavor. The opportunities for a legislator to speak in Congress are limited and many elements factor in the decision whether to do it or not. Journalists scrutinize the content of speeches and opponents are ready to capitalize on any misstep. Furthermore, a small but not negligible fraction of public opinion watches the live coverage of Congress on C-Span (Gennaro and Ash, 2023).

From the dataset collected by Gentzkow et al. (2019), containing all text spoken on the Congress floor,²⁴ I construct variables that count the number of speeches by each MC in each session between 1980 and 2010. A great fraction of these oral interventions is actually very short, with the median number of words in each legislature between 29 and 72, interestingly decreasing over time. Then, I build variables that count the number of speeches with an above-median number of words, and the number of speeches in the first quartile, i.e. the 25 percent longest speeches in each legislature (always longer than 150 words and increasing over time). At least in terms of their length, these are surely meaningful speeches. In order to avoid giving too much weight on one specific day of legislative activity with a high number of speeches, I build a variable that counts the number of days in which a MC takes the floor. Finally, I combine the two ideas, constructing the last two variables that count the number of days in which a MC delivers at least one speech longer than the median word count and at least one speech in the first quartile of longest speeches.²⁵ This variable is then intended to represent the overall effort of a MC in oral addresses on the floor for a two-year period.

Fig. 3 shows the coefficients of the *ShareTop10* variable, in regressions with dependent variable the measures of speechmaking above described, normalized for easing the comparison. The number of speeches negatively correlates with *ShareTop10* and the significance of the coefficients increases with the stringency of the variable. While insignificant for the simple number of speeches, the *ShareTop10* variable reaches conventional level of statistical significance for the number of speeches in the first quartile of length (p-value < 0.05), and for all the variables that count the number of days (p-value < 0.01).²⁶ The magnitude of the coefficient is sizable: one standard deviation increase in the share of funding coming from the top ten percentiles of donations correlates with a 5 percent decrease in “speech effort”. Regarding the heterogeneity of this result, the result is clearly concentrated in Democratic politicians, for whom the coefficient is larger and more precisely estimated than Republican MCs (results not shown).

3.3. Appearances before congressional hearings

Finally, I explore whether the concentration of contributions influences another activity of MCs, namely appearances as witnesses before Congressional hearings. This is a very costly activity that members of

²⁴ More precisely, the bound version of these files cuts the very short sentences that could not be considered in any way speeches. This dataset does not include speeches delivered in Committee hearings (see Park, 2023).

²⁵ The correlation between these measures is very high. They correlate one with the other, in the order they have been presented, as it follows: $R=0.975, 0.857, 0.884, 0.996, 0.956$.

²⁶ Table A13 and Table A14 are the corresponding regression tables.

the House carry out to represent the interests of their constituencies. As explained in Snyder and Strömberg (2010, 390), “to build the case that a project deserves funding, a representative may have to gather data and hire experts to discuss impacts on their district, their state, and the nation”. This requires time and effort. On average, MCs do it 3.5 times per Congress making it the less frequent legislative endeavor of the three considered in this work. From their article, I take the variables that respectively count the number of appearances as witnesses before all Congressional committees and the number of appearances before the Ways and Means and the Appropriations committees, arguably the most important ones for the purpose of fund allocation. Snyder and Strömberg (2010) show that media coverage of MCs’ behavior, measured by combining the market share with the readership concentration of newspapers and exploiting the geographical congruence between newspaper markets and congressional districts, displays a large and significant positive coefficient on the number of appearances, for both variables.

Table 2 shows the results for regressions that adopts the main specification with additional district controls from Snyder and Strömberg (2010) replication data, and notably their measure of congruence.²⁷ In column 1, I run an adapted version of the main specification with district fixed effects. In columns 2 and 3, I use a Poisson and a negative binomial specification, the latter being the one preferred by the authors for their analysis of the media effect. The rest of the table replicates the same estimation with dependent variable the number of appearances before the Ways and Means or the Appropriations committee.²⁸ The coefficient of the variable of *ShareTop10* is negative and significant across the board, showing that the concentration of contributions negatively correlates with this very costly activity of MCs, even when I include the media congruence variable. Moreover, the magnitude is not negligible, even if three to five times smaller than the one of local media for all appearances. One standard deviation increase in the concentration of contributions correlates with a reduction of appearances as witness before committees by 2.7 percent in the preferred specification. This finding is valid only for Republican House members, as trimmed samples with democratic legislators never display any significant coefficient (results not shown).

These findings demonstrate that a high level of concentration of donations shifts the trade-off of MCs on their legislative behavior, reducing the effort employed in endeavors that directly benefit their constituencies, such as committee appearances, and not only those related to the Congressional agenda, such as sponsorship and speechmaking activities.

4. Discussion

First, I consider reverse causality, namely whether MCs strategically use legislative activities to attract future contributions. For example, Rocca and Gordon (2010) find that MCs that sponsor more bills on labor and gun control legislation received more donations from PACs advocating for these issues. Table A15 performs placebo tests to examine whether the legislative outcomes of interests influence the concentration of contributions in the following legislature. The variable *ShareTop10* is not significantly correlated with any of the dependent variables in the main analysis, in any specification.²⁹

²⁷ For consistency with the rest of the empirical analysis, I control for the percentage of vote in the previous election cycle as a proxy for electoral safety of MCs. Snyder and Strömberg (2010) use instead three dummies for open seat, close and uncontested races. If I instead employ those controls, results are virtually unchanged.

²⁸ The decision to use state instead of district fixed effects in some specifications is due to the computational requirements for convergence.

²⁹ Tellingly, the legislative outcomes of interest do not display any predictive power on the amount of contributions received either. Moreover, the main findings on bills and speeches hold employing the cycle-to-cycle change in legislative production of each MC (results not shown).

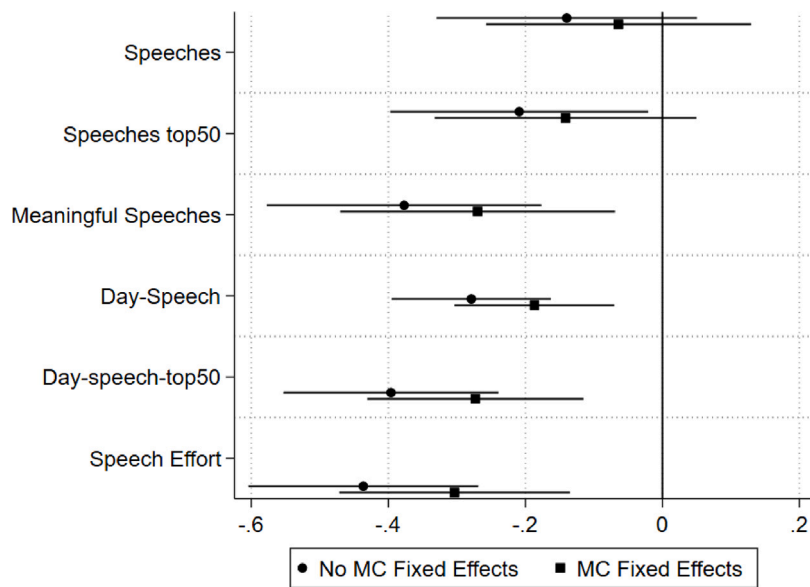


Fig. 3. Speechmaking: coefficient of *ShareTop10* variable for different dependent variables.

Note. The figure displays the coefficients of *ShareTop10* variable with 90 percent level confidence intervals, for regressions with the dependent variable displayed in the graph, normalized by subtracting the mean and dividing by the standard deviation. Round markers indicate regressions without MC fixed effects, squared markers regressions with fixed effects. All regressions include the full list of controls.

Table 2
Witness Appearances before Congressional Hearings.

	(OLS)	(Poisson)	(NegBin)	(OLS)	(Poisson)	(NegBin)
ShareTop10	-0.10* (0.06)	-0.03* (0.02)	-0.03** (0.02)	-0.06* (0.04)	-0.05** (0.02)	-0.05** (0.02)
Congruence	0.54** (0.23)	0.13*** (0.05)	0.09*** (0.03)	0.25* (0.13)	0.08* (0.05)	0.07* (0.04)
All Committees	✓	✓	✓			
W&M and Appr. Committees				✓	✓	✓
MC and district Controls	✓	✓	✓	✓	✓	✓
Cycle Fixed Effects	✓	✓	✓	✓	✓	✓
State Fixed Effects			✓		✓	✓
District Fixed Effects	✓	✓		✓		
Observations	3960	3960	3960	3960	3960	3960
Mean Dep. Var.	3.52	3.52	3.52	1.54	1.54	1.54

The variables *ShareTop10* and *Congruence* are normalized by subtracting the mean and dividing by the standard deviation. Standard errors clustered at the MC level in parenthesis.

* p<0.10.
** p<0.05.
*** p<0.01.

Other possible interpretations regard legislative specialization and more leisure-related activities. The former refers to MCs focusing their legislative efforts on a narrow set of topics and receiving contributions from special interests that pertain to the same issues. Those donations would then not be attempts to unduly influence the responsibilities of MCs, but legislative subsidies to likeminded politicians (Hall and Deardoff, 2006). In the context of this work, this argument would entail a negative relationship between the concentration of contributions and the number of different issues covered in legislative work. To test this possibility, I adopt the same specification to estimate the correlation between *ShareTop10* and the number of different categories of important bill sponsored, or the Shannon entropy index, as proxies for legislative specialization (or the opposite). This empirical exercise, described in the interest of space in Section A8, does not support this alternative explanation of the main results.

The latter interpretation suggests that MCs may disengage from their legislative responsibilities when they have an unbalanced distribution of contributions that fosters a sense of confidence in their financial prospects. In this sense, the negative correlation between the top ten

concentration measure and legislative activities could be explained by MCs spending more time on leisure activities outside of Congress.³⁰ Additional data on the daily time allocation of MCs would be necessary to rigorously evaluate this mechanism, which cannot be dismissed at present.

The identification of the effect of campaign contributions on the behavior of elected representatives in Congress has proven to be a daunting task. This work does not prove the quid pro quo between donors and MCs. Existing studies credibly hypothesize that most of the favors to donors are buried in obscure microlegislation that remain outside the scrutiny of the public –and often, of the researcher (McKay, 2020). Though, this study shows for the first time a robust negative correlation between important legislative outcomes and the concentration of donations, for a period spanning decades of data. It also provides a general argument based on the concentration of contributions to each MC that sheds light on the association between donations and

³⁰ For a related argument on managerial effort, see Antón et al. (2023).

legislative activities. By reciprocating favors to donors, by seeking to secure their continued financial support, or simply by enjoying more leisure time as a result of feeling secure in their financial backing, MCs are less active in legislative activities related to the Congressional agenda and public policy. While further research is required to gain a deeper understanding of the specifics of this mechanism of influence, I believe these results show that the system of political donations distorts the incentives of MCs regarding their legislative effort.

Declaration of competing interest

I declare that I have no conflict of interest.

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Appendix A. Supplementary data

Supplementary material related to this article can be found online at <https://doi.org/10.1016/j.jpubeco.2025.105319>.

Data availability

The data and code will be shared on Harvard Dataverse.

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