

Debt in Political Campaigns*

Alexei Ovtchinnikov and Philip Valta

July 2016

Abstract

Debt is a significant source of funding of political campaigns. In this paper, we explore the nature and the implications of debt financing of political campaigns. We show that indebted politicians raise more funds, especially from special interest groups in subsequent election cycles. Importantly, our evidence is consistent with the view that indebted politicians trade political favors in return for additional campaign funds from special interest groups. The results show that debt distorts political decision making by forcing indebted politicians to cater to contributors' demands.

* Ovtchinnikov is with HEC Paris, ovtchinnikov@hec.fr. Valta is with the University of Geneva and the Swiss Finance Institute, philip.valta@unige.ch. We thank seminar participants at Lancaster University and the University of Birmingham for helpful comments and suggestions.

Debt in political campaigns

The finance literature has devoted significant effort to understanding financing decisions of various economic agents. In corporate finance, since the pioneering work of Modigliani and Miller (1958) showing that corporate financing decisions are irrelevant in a frictionless world, researchers have focused on the role of financing frictions on capital structure choices of firms. Six decades of research shows that a firm's reliance on debt financing is a function of its marginal tax rate, the deadweight loss in default, the information environment, and incentive conflicts among its claimants (see, e.g., Graham (2008) and Frank and Goyal (2008) for excellent reviews). In other areas of financial economics, borrowing behavior has been the subject of intense analysis in the household finance literature, with focus on the mortgage (see, e.g., Campbell and Cocco (2003)), consumer and credit card lending (see, e.g., Vissing-Jorgensen (2012)), student loan (see, e.g., Looney and Yannelis (2015)) and payday lending markets (see, e.g., Morse (2011)). In corporate governance, a growing literature focuses on the importance of inside debt, defined as personal pensions and other forms of deferred compensation, in top executives' incentives and its role in reducing firm risk-shifting behavior (Bebchuk and Jackson (2005), Sundaram, and Yermack (2007), Edmans and Liu (2011), Wei and Yermack (2011)). And in the political economy literature, fiscal policy and government debt have been the subject of significant academic interest for several decades (see, e.g., Cukierman and Meltzer (1989), Persson and Svenson (1989), Alesina and Tabellini (1990), Arellano and Ramanarayanan (2012), Song, Storesletten, and Zilibotti (2012)).

While the importance of borrowing decisions for firms, consumers, governments, and even top executives has long been recognized, almost nothing is known about the patterns and consequences of borrowing decisions for political campaigns. This lack of evidence is surprising for two related reasons. First, political campaigns in the aggregate raise and spend considerable amounts of money. Over the 1983 – 2014 period that encompasses our study, political campaigns for the U.S. House of Representatives and the Senate have raised and spent a total of \$19.8 billion in 2014 dollars. Second, a significant portion of the above total is raised in the form of debt capital. At \$1.9 billion or 10.6 percent of the total, debt constitutes the second largest source of campaign funding, preceded only by collective individual contributions.

For politicians who rely at least partially on debt to fund their political campaigns, the implications of these decisions are nontrivial. On the one hand, by increasing the demand for future fundraising, debt in political campaigns carried over from prior campaigns has the

potential to alter incentives and distort future political decision making. The argument builds on the Stigler (1971) / Peltzman (1976) framework of the political process, in which (i) incumbent politicians desire to remain in office, (ii) reelections are costly so outside funds are needed, and (iii) special interest groups supply political support (votes and campaign funds) in exchange for favorable legislation. In this framework, an incumbent politician standing for reelection but also carrying debt from prior campaigns must pledge favorable legislation to special interest groups to secure funding for the current campaign and to service debt carried over from prior campaigns. This implies that an indebted politician is more likely to pledge favorable legislation for campaign funds from special interest groups even if doing so would deviate from the preferences of the politician's local constituents.

On the other hand, debt from prior campaigns may force an indebted politician to take policy positions closer to the preferences of local constituents. Because at least some campaign funds must be diverted to servicing prior debt, the pool of reelection funds is smaller, *ceteris paribus*. Since fewer funds are available for suppression of opposition (Peltzman (1976)) and other campaign maneuvers, an indebted politician has no choice but to align her policy position with local constituents' preferences to secure reelection votes. This is in spirit the free cash flow argument of Jensen (1986). Which effect dominates is ultimately an empirical question that has clear and important implications for our understanding of the political decision making process.

This paper takes a first step in exploring the nature and the implications of debt financing of political campaigns. Using a comprehensive sample of close to 22,000 political campaigns for the U.S. House of Representatives and the Senate over the period 1983 – 2014, we first show that debt is a major source of funding for political campaigns. Almost half of all campaigns (46.75 percent) rely on some form of debt, and, conditional on borrowing, campaigns borrow almost a third of total raised funds. The majority of campaign debt comes in the form of personal loans that candidates make to their own campaigns, with only eight percent of campaigns relying on outside loans. Conditional on borrowing from outside sources, campaigns borrow 10 percent of total funds. We also show that the majority of campaigns that borrow funds are still indebted at campaign end. However, once carried over into future campaigns, debt does not linger on campaign books. The average debt maturity is 2.72 years in our sample, far less than the average campaign life of seven years, so campaigns work actively to retire existing debt. The borrowing and repayment patterns are similar across Republican and Democratic campaigns and across the House and the Senate campaigns.

When we split the sample by the campaign status, the results show that incumbent campaigns are far less dependent on debt financing compared to challenger and open race campaigns. Compared to incumbent campaigns, challenger and open race campaigns are five times more likely to borrow funds from their own candidates and twice more likely to borrow from outside sources. Moreover, conditional on borrowing, challenger and open race campaigns are four times more reliant on own candidate debt financing in total fundraising and almost three times more reliant on outside debt financing compared to incumbent campaigns. As a result, the vast majority of debt is concentrated among challenger and open race campaigns. We also find that debt is concentrated mostly in losing campaigns. Nevertheless, one in five winning candidates arrives in office with outstanding debt and they are collectively responsible for 26.5 cents of every dollar of debt raised in all political campaigns.

The borrowing patterns for incumbents, challengers and open race candidates are broadly consistent with the theoretical arguments in Diamond (1991). The paper presents a life-cycle theory of borrowing for firms where new firms rely on private debt financing because the information asymmetry and moral hazard problems are too large. A single lender is attractive because of its ability to monitor the firm compared to many dispersed investors (see Diamond (1984)). As the firm earns reputation by repaying the debt to the single lender, it can obtain access to other sources of financing.

There are clear parallels between the newcomer firm and the newcomer politician settings. Just like newcomer firms, newcomer politicians do not have clearly established reputation, voting records, or policy positions. As a result, the information asymmetry and moral hazard problems are high, forcing new politicians to seek debt financing. Because political campaigns have no pledgeable assets, it stands to reason that borrowing would take place in the form of personal loans backed by the politician's personal assets.

Nested in the Stigler / Peltzman model of regulation, the Diamond (1991) theory would predict that indebted politicians invest in reputation building to secure future campaign funds. Because those funds come from special interest groups in return for favorable legislation, the Stigler / Peltzman / Diamond argument implies that indebted politicians build reputation by pledging favorable legislation and, in return, special interest groups supply campaign funds that can be used to defeat political opponents and to service the existing debt. Empirically, this argument implies that (i) politicians indebted from prior campaigns raise more funds in future campaigns in order to finance the campaigns and to service the existing debt, (ii) additional

campaign funds are supplied by special interest groups, and, most importantly, (iii) indebted politicians contemporaneously take policy positions that benefit those special interest groups that supply campaign funds.

Conversely, if debt from prior campaigns disciplines indebted politicians (Jensen (1986)) and forces them to align their policy positions with the preferences of their electorate, we are less likely to observe increased campaign funds from special interest groups, especially if the local electorate's preferences are orthogonal to those of the special interests. Moreover, we are less likely to observe indebted politicians taking policy positions benefiting special interests.

In the remainder of the paper, we empirically analyze these predictions and present evidence strongly consistent with the Stigler / Peltzman / Diamond hypothesis. Specifically, we show that indebted politicians raise 15.52 percent more funds in subsequent elections compared to politicians without debt. Additional funds come from individuals and from political action committees (PACs) that represent different special interest groups. Further decomposing PAC contributions, we show that additional funds for indebted politicians come from corporate, party, labor, trade, membership, and non-connected committees. Those extra funds come primarily from indebted politicians reaching out to a greater number of PACs, although we also find that labor and trade PACs give more large donations to indebted politicians. The results are especially significant for Democrats and for House candidates, especially for labor PAC contributions. In all regressions, we control for politician, time, state \times year, fixed effects as well as a number of politician \times year level control variables, so our results come from the within politician changes in fundraising over time and control for time-invariant politician characteristics that could be related to fundraising behavior.

Turning to analyzing indebted politicians' policy positions, we focus on votes on labor-related legislation because labor PACs are some of the most active groups contributing to indebted politicians and because it is often much more straightforward to identify labor-related legislation compared to other legislation that benefits different special interest groups. We collect voting scores on labor legislation from the American Federation of Labor and analyze whether indebted politicians, especially those who receive funds from labor PACs, are more likely to take pro-labor policy positions. We find strong evidence of this behavior, especially for the House candidates and for Democrats. Overall, our analysis lends strong support to the Stigler / Peltzman / Diamond view of the political process and the role of debt in altering incentives and distorting indebted politicians' decision making.

Our paper makes two important contributions to the literature. First, given that debt constitutes such an important source of funding for political campaigns, we document and describe debt financing patterns of political campaigns. We know of no other paper that investigates the role of debt in politics. Second, our paper establishes a link between debt financing of political campaigns and legislators' voting behavior and as such sheds new light on how debt relates to incentives in politics. Our paper connects to the growing literature that analyzes the interrelation between finance and politics. Much of this literature focuses on whether political connections (e.g. Fisman (2001); Faccio (2004); Goldman, Rocholl, and So (2009)) or campaign contributions (e.g. Cooper, Gulen, and Ovtchinnikov (2009); Akey (2013); Ovtchinnikov and Pantaleoni (2012)) matter for firm value, and through which channel connections are valuable for firms (e.g. Duchin and Sosyura (2011); Amore and Bennedsen (2012); Correia (2012); Akey (2014)). Some other recent papers show how political connections and networks matter for legislators' votes (e.g. Cohen, Diether, and Malloy (2013); Cohen and Malloy (2014)).

Our paper also relates to the research in corporate finance that investigates how debt distorts corporate choices (e.g. Myers (1977); Jensen and Meckling (1976), Jensen (1986)). Finally, our research relates to work in political science examining the role of money in politics (see Ansolabhere, de Figueiredo, and Snyder (2003) and Stratmann (2005) for a review)).

The paper proceeds as follows. Section I provides an overview of the institutional details and the rules that govern debt financing in political campaigns. Section II describes the data and presents the descriptive statistics. Section III presents the main results. Section IV concludes.

I. Institutional details

Debt is a major source of campaign financing. Figure 1 shows that candidate and outside loans to political campaigns total \$1.9 billion in 2014 dollars over the period 1983 – 2014 preceded only by individual contributions that total \$11.2 billion. Debt as a source of funding exceeds corporate contributions, trade, membership, and organization in health field (T/M/H) contributions, labor contributions, candidate contributions, and non-connected organizations' contributions. Debt also exceeds the amount of independent expenditures (for and against candidates) and all communication cost expenditures. Clearly, debt is a major source of campaign financing, so it is important to understand the consequences of debt issuance on future

campaign fundraising and legislators' decision making while in office. To do so, we first describe the campaign finance regulations that govern the issuance and repayment of debt made by political candidates.

< Insert Figure 1 about here >

The relevant campaign finance rules are summarized in the Code of Federal Regulations, Title 11, Subchapter A, Part 116, "Debts Owed by Candidates and Political Committees". Political candidates are allowed to make unlimited political contributions and/or loans to personal political campaigns. Campaigns are also allowed to borrow funds from outside organizations subject to contribution limits set by the Federal Election Commission.

The loans must be repaid in accordance with the procedure as described in the above regulation. Outside debt may be repaid from contributions to the candidate or the candidate's authorized committee before, on, or after the election date provided that contributions are clearly made for the purpose of loan repayment. There is no cap on the maximum amount of outside debt that can be repaid, even after the election date. The rules are somewhat different as regards loans made by political candidates to personal political campaigns. Similar to outside loans, candidate loans of \$250,000 or less may be repaid from contributions to the candidate or the candidate's authorized committee before, on, or after the election date provided that contributions are clearly made for the purpose of loan repayment. For candidate loans in excess of \$250,000, however, the candidate authorized committee may repay the entire loan amount by contributions made to the candidate or the candidate's authorized committee only before or on the election date. The authorized committee may repay up to \$250,000 by contributions received after the election date. For the remaining balance, the authorized campaign may use the cash on hand at the election date to pay off the candidate loan. The payment must be made within 20 days of the election, during which time the difference between the personal loan in excess of \$250,000 and the cash on hand used to pay off the personal loan must be reported as the contribution by the candidate. Any balance remaining after all payments are made is either lost by the candidate if she loses the election or is carried over into future election cycles.

Table 1 summarizes these regulations with two simple examples. We consider a typical House of Representatives campaign, which relies on \$53,889 in total debt on average and a typical Senate campaign, which relies on \$365,573 in total debt on average. Because the average

amount of debt in a typical House campaign is below the \$250,000 threshold, authorized House campaigns may raise money before, on, or after elections to pay off the debt. Winning candidates may carry any unpaid debt from a given election cycle into future election cycles.

< Insert Table 1 about here >

In contrast, the average Senate campaign relies on more than \$250,000 in debt, so the entire \$365,573 of average borrowing may be repaid in full only from contributions received before or on the date of the election. After the election, the \$115,573 in excess of \$250,000 may be paid off with remaining cash on hand or, for winning candidates, carried over into future election cycles. If a Senate campaign has \$65,514 of cash on hand at the end of the campaign (this is the amount of cash on hand at campaign end for a Senate campaign in the 75th percentile of the distribution), it may use up to that amount to pay off the debt within 20 days of the election. Winning candidates may carry over the remaining \$50,059 into future election cycles. Losing candidates, however, forego the collection of the remaining funds. The write off is treated as a candidate contribution to the campaign.

II. Data

A. Data sources

Our sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014. Although campaign financing data goes back to 1979, no data on candidate and outside loans to political campaigns is available prior to 1983. The sample is an intersection of several campaign files maintained by the Federal Election Commission (FEC). For each political campaign, we first obtain data from the FEC Summary Files on total campaign fundraising and expenditures. We use the FEC Post-Election Cycle Summary Files for the period 1983 – 2006 and the Current All Candidates Summary Files for the period 2006 – 2014 to obtain data on total campaign receipts, transfers to and from authorized committees, total campaign disbursements, beginning and ending campaign cash, total individual contributions, total candidate and other loans and loan repayments, and total debts owed by the campaign at campaign end. We also record candidate name, status (incumbent, challenger, or open race candidate), sought-after public office, the state and district for which the candidate is running, the

candidate's party affiliation, and the election outcome. The sample consists of 21,946 House and Senate campaigns with non-missing data on total campaign fundraising and expenditures.

Next, we merge the summary data with the sample of political contributions made by Political Action Committees (PACs) over our sample period. The PAC contributions data is from the FEC Contributions to Candidates from Committees Detailed Files and contains 4,292,583 contributions made by all FEC-registered PACs to the above 21,946 campaigns. We follow the FEC methodology and categorize all PACs into eight distinct groups based on the sources of their political contributions: (1) corporations, (2) party committees, (3) labor organizations, (4) trade associations, (5) membership organizations, (6) non-connected organizations, (7) super-PACs, and (8) other, which includes cooperatives and corporations without capital stock.¹ The data on PAC sponsors is from the FEC Committee Master Files and includes identifying information for 51,946 unique PACs and their sponsoring organizations. For each contribution source, we further group all political contributions into one of five contribution types: (1) hard money contributions (FEC transaction type codes "24K" and "24Z"), (2) independent expenditures for a candidate (code "24E"), (3) independent expenditure against a candidate (code "24A"), (4) communication cost for a candidate (code "24F"), and (5) communication cost against a candidate (code "24N"), thereby creating 40 separate contribution source/type pairs. Each pair details the total amount of political contributions received by a given campaign from a given source and of a given type.

In the final step, we obtain for all winning campaigns data on the politician's committee assignments and party rankings on each serving committee in the upcoming Congressional session. This data is from Charles Stewart's Congressional Data Page.² Our final sample consists of 21,946 House and Senate campaigns with sufficient election outcome data for 6,708 winning and 9,231 losing campaigns.

B. Descriptive statistics

¹ FEC explicitly identifies corporations (FEC interest group category "C"), labor organizations (category "L"), trade associations (category "T"), membership organizations (category "M"), cooperatives (category "V"), and corporations without capital stock (category "W") in the Committee Master Files. We identify party committees and super-PACs from the FEC committee type codes (we use codes "Y" and "X" to identify party committees and code "O" to identify super-PACs). We categorize all remaining PACs as non-connected organizations.

² We thank Charles Stewart III for generously providing this data on his website http://web.mit.edu/17.251/www/data_page.html.

Figure 1 describes the sources of campaign financing during the 1983 – 2014 period covered by our study. Corroborating a well-documented fact in the campaign financing literature (see e.g. Theilmann and Wilhite (1989), Ansolabehere, de Figueiredo, and Snyder (2003), Cooper, Gulen, and Ovtchinnikov (2010)), individual contributions represent by far the largest source of funding for political campaigns. Individuals collectively contributed \$11.2 billion to political campaigns over our sample period. Remarkably, at \$1.9 billion or 10.6 percent of total campaign financing, debt represents the second largest source of funds, significantly exceeding corporate contributions (\$1.2 billion), trade, membership, and health organizations (T/M/H) contributions (\$910 million), independent expenditures (\$703 million) and labor contributions (\$700 million). Despite its clear importance in political campaigns, the academic literature has been surprisingly silent on the role of debt in politicians’ future fundraising and political behavior.

< Insert Figure 1 about here >

Table 2 breaks campaign finance totals down to the campaign level. The results show that an average campaign borrows \$87,137 in 2014 dollars over our sample period. Campaigns raise more from personal and outside loans than from corporations (\$52,940 on average), T/M/H organizations (\$41,487), independent expenditures (\$32,016), and labor organizations (\$31,876). Remarkably, almost half of all political campaigns (46.75 percent) in our sample rely on some form of debt financing, and, conditional on borrowing funds, campaigns borrow almost one out of every three dollars of total money raised (31.79 percent). Most of campaign debt comes in the form of candidate loans to their own campaigns, although one in twelve campaigns (8.24 percent) borrows from outside sources, such as banks. Outside borrowing contributes 10.57 percent of total campaign receipts.

The majority of political campaigns with borrowed funds do not repay debt at the end of the campaign, but carry it over into future election cycles. Three quarters of political campaigns that borrow funds have debt outstanding at campaign end. What is even more surprising is that almost one in five campaigns (18.29 percent) has enough cash on hand to retire the existing debt at campaign end but choose not to do it. Importantly, once carried over, campaigns do not let debt linger on but actively work on its retirement. The average debt maturity is less than three years in our sample (2.72 years), which, when compared to the average campaign life (unreported

6.98 years), shows that campaigns rely significantly on future campaign funds to pay off prior campaign debt.

< Insert Table 2 about here >

There appear few meaningful differences in the use of debt across Republican and Democrat campaigns in columns 2 and 3 as well as across the House and the Senate campaigns in columns 4 and 5. We do find that Democrats and House candidates are less likely to rely on candidate loans and, conditional on borrowing, borrow less in nominal dollars and as a percentage of total raised funds. Despite being statistically significant, however, the results appear economically trivial. We also find that candidates from both parties and both chambers are equally likely to carry over existing debt into future campaigns, although both Democrats and House candidates are less likely to retire existing debt if they have enough cash on hand. Consistent with this, House candidates have debt with significantly longer average maturity. However, the differences are economically small.

In contrast, we find significant differences in the use of debt by incumbent politicians' campaigns compared to challenger and open race candidates' campaigns. In columns 6-8, incumbents as a group are significantly less dependent on debt financing compared to challengers and open race candidates. Incumbents collectively raised a mere \$118 million in debt financing over our sample period, compared to \$897 million each for challengers and open race candidates. This is not a result of fewer incumbents in our sample. Rather, incumbents on average raise significantly less debt (\$17,615 for incumbents compared to \$86,812 and \$182,335 for challengers and open race candidates, respectively). Compared to incumbent campaigns, challenger and open race campaigns are five times more likely to borrow funds from their own candidates and twice more likely to borrow from outside sources. Moreover, relative to incumbent campaigns, indebted challenger and open race campaigns are four times more reliant on own candidate debt financing and almost three times more reliant on outside debt for campaign funds. These differences are substantial and show that debt in political campaigns is concentrated in the group of newcomer politicians.

Finally, the results in Table 2 show that incumbents differ from other candidates in their treatment of existing debt. Incumbents are much more likely to carry existing debt into future campaigns even if they have enough cash on hand to retire it. As a result, the average debt

maturity in incumbent political campaigns is two to three times longer than the average debt maturity in challenger and open race campaigns.

Table 3 digs deeper and presents the results separately for winning and losing campaigns. Most challengers and open race candidates lose Congressional elections, so debt may have little impact on future fundraising and political behavior if it is concentrated among losing campaigns. Panel A presents the results for winning campaigns; panel B presents the results for losing campaigns.

< Insert Table 3 about here >

The results show that debt is present in both types of campaigns, although it is more concentrated in losing campaigns. For every dollar of debt in political campaigns, 26.5 cents (or \$377 million in total) is raised by winning campaigns and 73.5 cents (or \$1.048 billion in total) is raised by losing campaigns. One interpretation of this result is that despite higher concentration among losers, winning politicians do bring substantial amounts of debt into public office. Compared to losing campaigns, winning campaigns are less likely to raise debt, either from own candidates or outside sources, and, conditional on borrowing funds, winning campaigns borrow less in nominal dollars and as a percentage of total raised. Winning campaigns are less likely to pay off debt at campaign end even if they have enough cash on hand to do it, which results in average debt maturities that are significantly longer compared to those of losing campaigns.

The results for winning and losing campaigns are similar across political parties and across Congressional chambers. The only exception is for the Senate campaigns, where we do not find significant differences in the amounts borrowed by winning and losing candidates and little differences in average debt maturities. The fact that nominal borrowing amounts are similar for Senate campaigns but are much smaller as a percentage of total funds raised implies that Senate winning campaigns are significantly more expensive to run compared to losing campaigns.

The results for incumbent, challenger and open race campaigns show that challengers and open race campaigns account for the majority of debt in both winning and losing campaigns. Note that challenger and open race campaigns that go on to win elections raise substantially more nominal debt but less as a percentage of total raised funds compared to challenger losing campaigns. This implies that winning challenger and open race campaigns are significantly more

expensive compared to the respective losing campaigns. This pattern is exactly the opposite to that of incumbent campaigns. Incumbent losing campaigns raise more nominal debt but it represents the same proportion of total raised funds compared to winning campaigns. This evidence implies that losing incumbent campaigns are significantly more expensive compared to winning campaigns.

An interesting feature of the data is that incumbent winning campaigns are able to raise more funds from outside sources compared to incumbent losing campaigns. This suggests that outside debt providers are able to successfully predict which incumbents will win reelection and lend money to those campaigns. The fact that the same does not hold true for challenger and open race campaigns suggests that those contests are more unpredictable.

In addition to studying the concentration of debt among incumbents, challengers, and open race candidates in winning and losing elections, we also analyze debt concentration in more and less expensive campaigns. Intuitively, more expensive campaigns should rely more heavily on debt, so we sort all campaigns into quintiles based on total funds raised and report debt characteristics separately for each quintile in Table 4. The results show that, at \$1.3 billion or 69.5 percent of the total, the most expensive campaigns indeed account for the bulk of the debt issues. However, we find that with the exception of the least expensive campaigns, campaigns are significantly *less* likely to rely on debt and, conditional on borrowing, borrow significantly *less* as a percentage of total raised funds as they become more expensive. So, contrary to our intuition, debt is actually more widespread and is a more important source of funding in less expensive campaigns. We also find that campaigns are more likely to carry over existing debt into future campaigns as they become more expensive, irrespective of whether they have enough cash on hand to retire it at campaign end. This evidence indicates that more expensive campaigns are more dependent on future fundraising to retire existing debt.

< Insert Table 4 and Table 5 about here >

In the final cross-sectional test in this section, we focus on the subsample of indebted campaigns and compare characteristics of campaigns receiving more or less than \$250,000 in candidate loans. We show in section 1 that loans in excess of \$250,000 are especially costly, so politicians willing to lend large sums to their own campaigns may do so to signal their private information about the probability of winning. Indeed, the results in Table 5 show a

disproportionally higher concentration of open race candidates among the set of politicians who lend their campaigns in excess of \$250,000 compared to other indebted politicians. We find that 45 percent of all politicians who lend their campaigns in excess of \$250,000 are open race candidates, compared to only 29.4 percent for politicians with small loans. Candidate signaling is especially valuable in open races that face the highest uncertainty, so the disproportionate clustering of open race candidates with large personal loans to their campaigns is consistent with the signaling hypothesis. Also consistent with the signaling hypothesis, candidates with large personal loans rely significantly more on debt issues in their campaign fundraising.³

Turning to time-series evidence, Figure 2 analyzes intertemporal patterns in debt financing of political campaigns. Panel A shows that debt financing has grown significantly over our sample period from a total of \$43 million in the 1983-1984 election cycle to a peak of \$234 million in the 2009-2010 cycle before declining to \$204 million in the 2011-2012 cycle and \$105 million in the 2013-2014 cycle. Panel B, which tracks the average amount of debt per political campaign, closely mirrors the results in panel A. In panel C, there is a slight decline in the propensity of political campaigns to use debt, either from candidates or outside sources, but the changes appear economically trivial. However, the results in panel F show that, conditional on borrowing, campaigns have actually increased the proportion of total funds raised through debt, and the increase is particularly pronounced for outside loans. In 1984, indebted campaigns borrowed on average 26 percent of total funds from candidates and nine percent from outside sources. Those percentages increased to 37 and 18 percent, respectively, by the end of our sample period. Indebted campaigns are significantly more indebted today compared to the early 1980s. The results in panels D and E also show that campaigns today are much more likely to carry over existing debt into future campaigns even if they have enough cash on hand to pay it off at campaign end, which results in longer average debt maturities in recent political campaigns.

< Insert Figure 2 about here >

Overall, the results in this section show that debt is a major source of financing of political campaigns and its importance has grown over time. In the next section, we analyze the role of debt in politicians' future fundraising and political behavior in office.

³ See Ross (1977) for a signaling theory of debt. In that model, a higher level of debt credibly signals high future profitability regarding the firm.

III. Results

A. Differences in fund raising between politicians with and without debt

In this section we investigate how the presence of debt financing in a political campaign relates to future campaign fund raising. Specifically, we ask whether politicians with debt from previous campaigns raise more money or money from different sources in subsequent elections. If indebted politicians want to repay the debt, we expect that they raise more funds from *other* sources in the future. To investigate this hypothesis, we first compare average campaign totals for politicians with no debt in prior campaigns (Panel A of Table 6) to totals for indebted politicians (Panel B).

We observe that the average indebted politician generates more total receipts, receives more PAC contributions, has less cash, and retires more debt in subsequent campaigns. This univariate comparison suggests that there are significant differences in future campaign financing between politicians with and without debt outstanding. To investigate the relation more formally, we estimate the following model:

$$\log(Total^m)_{jt,m=\{\text{Beginning cash, Total receipts, Individual contributions, PAC contributions, Debt issues, Debt retirement, Total disbursements, Ending cash}\}} = \alpha_j + \alpha_t + \beta(Debtholder)_{jt-1} + \gamma X_{jt} + \varepsilon_{jt}, \quad (1)$$

The dependent variable is the logarithm of the money raised by a politician from different sources. $Debtholder_{jt-1}$ is an indicator variable set to one for politicians with positive debt outstanding from the prior campaign and zero otherwise. α_j and α_t are politician and year fixed effects, respectively. X_{jt} is a vector of control variables that includes (i) the percentage of votes received in the general election in the prior campaign, (ii) the current politician rank in the Congressional chamber, (iii) a vector of indicator variables for each Congressional committee that a politician sits on, and (iv) state×year fixed effects. The coefficient of interest is β . It captures, in percentages, the difference in funds raised between politicians with and without debt from the previous campaign. We cluster the standard errors at the politician level.

< Insert Table 6 about here >

Panel C of Table 6 shows the coefficient on $Debtholder_{jt-1}$ for the different subsamples. In column one, for instance, the coefficient on $Debtholder_{jt-1}$ is negative for all rows, suggesting

that politicians with debt from the previous campaign have lower levels of cash at the beginning of the campaign compared to politicians without debt. Importantly, focusing on row one, the coefficient on $Debtholder_{jt-1}$ is significantly positive for total receipts, individual contributions, and PAC contributions. In other words, politicians with debt from the previous campaign raise more receipts overall (column 2), more money from individuals (column 3), and more money from PACs (column 4). The economic magnitudes of these estimates are large. Indebted politicians raise 16.32% more from individuals in subsequent elections, 17.58% more from PACs, and 15.52% more overall funds compared to politicians without debt. Indebted politicians also issue significantly less debt (column 5) and retire significantly more debt in subsequent campaigns (column 6). Overall, this pattern is in consistency with the hypothesis that indebted politicians have to raise money from other sources to repay the debt.

Rows 2 and 3 show the split between House and Senate candidates, and rows 4 and 5 the split between Democrats and Republicans. The results across these subsamples largely mirror the results of the full sample: indebted politicians substitute away from debt to other sources of campaign financing such as individual or PAC contributions. Note that there are only few observations for the Senate, so that the statistical power of the estimates in the third row is reduced.

It is important to stress that these regressions include year and politician fixed effects, control variables, and state \times year fixed effects. With this setting, we focus on within politician changes in fundraising over time and control for time-invariant politician characteristics that could be related to fundraising behavior. The year fixed effects absorb shocks affecting all politicians equally. The setting also allows controlling for economic conditions in a given state and year that could be correlated with both the politicians indebtedness and the amount of money they can raise in a political campaign. Clearly, the estimated models do not allow making causal claims or statements, but the reported conditional correlations are suggestive of the presence of debt having an important role in politician's future fundraising behavior.

B. Fundraising from PACs

The results in Table 6 suggest that politicians with debt raise more funds from PACs in subsequent elections (column 4 of Table 6). In Table 7 we refine the analysis to better understand where these PAC contributions come from. Specifically, we split PAC contributions by source (corporate, party, labor, trade, membership, non-connected, super PACs, and other) and

by type (hard money, independent expenditures, and communication costs). We then run additional tests to show that debt financing is significantly related to future funds coming from specific PACs.

In Table 7, we first split all PAC contributions by source or type and report the average amounts raised in each subsample for politicians with no debt from prior campaigns (Panel A) and for indebted politicians (Panel B). On average, indebted politicians have significantly higher contributions from party, labor, trade, and non-connected PACs compared to politicians with no debt. Indebted politicians do not, however, have higher average contributions from corporate, membership, or super PACs. When it comes to the types of PAC contributions, we observe that, on average, indebted politicians receive higher contributions for independent expenditures and for communication costs, both for the candidate.

< Insert Table 7 about here >

To investigate the relation between PAC contributions and the presence of debt more formally, we estimate the same specification (1) but replace the dependent variable with the logarithm of money raised from PACs split by source or type. Panel C presents the coefficients of the $Debtholder_{jt-1}$ dummy. In the first row, the coefficient on $Debtholder_{jt-1}$ is positive and statistically significant for corporate, party, labor, trade, membership, non-connected, and other PACs. In other words, indebted politicians receive significantly more contributions from those PACs compared to politicians with no debt from prior campaigns. The results are also economically significant. For instance, the coefficient on $Debtholder_{jt-1}$ is 0.1431 in column 1 for corporate PACs, implying that politicians with debt receive 14.31% more from corporate PACs compared to politicians without debt. Similarly, indebted politicians raise 15.33% more money from labor PACs compared to politicians without debt (column 3). Interestingly, the split between Democrats and Republicans (rows 4 and 5) shows that the difference in corporate, party, and labor PAC contributions is statistically significant for Democrats only, and not for Republicans. This result is expected for labor PACs, since Democrats are known to more strongly support labor unions. But it seems that the difference in fundraising between politicians with and without debt is also larger for Democrats than Republicans when it comes to corporate and party PACs.

For the type of PAC contributions, we observe that the coefficient on $Debtholder_{jt-1}$ is positive and statistically significant for hard money contributions and for communication costs for the candidate. That is, politicians with debt from prior campaigns raise more in the form of hard money contributions and communication costs compared to politicians without debt.

C. *Do the funds come from more PACs or from larger PAC contributions?*

In Table 8, we investigate further where this additional money for politicians with debt comes from: does it come from a greater number of PACs and/or from larger donors? To this end, we slightly adapt the empirical model. Specifically, the dependent variable in Panel A of Table 8 is for every politician the number of PACs by type or source (e.g. the number of corporate PACs that contribute to the campaign of a specific candidate) divided by the total number of PACs of a given type or source (e.g. total number of corporate PACs). This ratio essentially measures the percentage of PACs of a given source or type that contributes to a specific candidate. We take the logarithm of this ratio. This specification allows estimating whether debt from prior campaigns is related to a larger *number* of PACs of a given source or type. Panel A of Table 8 presents the coefficient estimates of $Debtholder_{jt-1}$.

< Insert Tables 8 about here >

Row 1 of Panel A reveals that the coefficient on $Debtholder_{jt-1}$ is positive and statistically significant for all PACs except for super PACs. For instance, the coefficient on $Debtholder_{jt-1}$ is 0.0943 for corporate PACs and statistically significant at the 1% level. The coefficient implies that the proportion of corporate PACs donating to indebted politicians increases by 9.43% relative to politicians without debt. Interestingly, the positive coefficients mostly come from House candidates (we have little statistical power for the Senate) and from Democrats (row 4). For Republicans, the coefficient on $Debtholder_{jt-1}$ is only positive and marginally significant for membership and other PACs, while it is negative and significant for super PACs. It also turns out that most of these additional funds come in the form of hard money contributions (see the column labeled “Hard money”). Overall, the results in Panel A suggest that indebted politicians are successful in significantly increasing the number of PAC contributors compared to politicians without debt.

In a next step, we investigate whether indebted politicians also receive larger PAC contributions. In particular, we define a large PAC contribution when it exceeds the 75th percentile of the yearly distribution of contributions of a given source or type. For each source and type of PAC contributions, we count the number of large PAC contributions and scale it by the total number of PACs of a given type or source. We regress this variable on the $Debtholder_{j,t-1}$ dummy, control variables, and fixed effects. Panel B of Table 8 reports the results.

Interestingly, politicians with debt from prior campaigns receive significantly more large contributions from labor and trade PACs compared to politicians without debt (columns 3 and 4). On the other hand, indebted politicians get significantly fewer large contributions from non-connected and other PACs, despite the fact that they receive money from an overall larger number of non-connected and other PACs (Panel A of Table 8).

We also estimate results separately for the House and the Senate, and for Democrats and Republicans, respectively. Some interesting patterns emerge. For instance, the positive and significant coefficient on $Debtholder_{j,t-1}$ for labor contributions is concentrated among Democrats. This is consistent with the notion that Labor unions are much more likely to support democrats, and is coherent with the hypothesis that indebted politicians target specific funding sources in subsequent elections to repay their debt.

To summarize, we find that politicians with debt raise more funds in subsequent elections from more PACs, and that this mostly comes from a larger number of PACs. These results suggest that politicians with debt intensify efforts that allow them to raise money from a wider set of PACs so that they can pay off their debt.

D. Voting behavior of indebted politicians

In this section we go one step further and investigate whether and how the presence of debt distorts politicians' voting behavior. If there is a debt overhang problem, do politicians with debt shift their policy decisions to line up with big money donors' policy positions or do they remain loyal to their local constituents? A priori it can go either way. On one hand, borrowing money that needs to be repaid later increases the demand for future campaign contributions, so it is possible that politicians will be more likely to cater to big money donors. On the other hand, the ability to repay the loan is directly tied to the probability of winning, so politicians who borrow money have to cater to local constituents to guarantee the latter votes.

We collect data on political voting on labor issues from the American Federation of Labor for the years 2000 to 2014. For important bills related to labor issues, the American Federation of Labor collects how every politician votes and whether the vote was in line with the views of the American Federation of Labor. The result is a score between 0% and 100% for every politician-year that tells us how well aligned a politician is with the views of the Federation of Labor. We regress these voting scores on the $Debtholder_{jt-1}$ dummy, the proportion of PAC contributions coming from labor, the interaction between these two variables, control variables, and fixed effects. Table 9 presents the estimation results.

< Insert Table 9 about here >

In Panel A, we simply regress the voting scores on the proportion of contributions coming from labor organizations. The coefficient for the full sample is positive and marginally significant. This result suggests that a politician is voting more pro-labor if he/she receives donations from labor organizations. This result is expected and is in line with existing research that studies the relation between donations and voting behavior (see Stratmann (2005)). In Panel B, we add the $Debtholder_{jt-1}$ dummy and the interaction between the proportion of contributions coming from labor organizations and the $Debtholder_{jt-1}$ dummy. Interestingly, the coefficient on $Debtholder_{jt-1}$ is close to zero and not statistically significant for the full sample. However, the coefficient on the interaction is positive and statistically significant with a value of 0.0061. This result holds for the full sample, for House members, for Democrats and Republicans. These results suggest that indebted politicians are more likely to vote pro-labor if they receive labor contributions. We interpret these results to be in consistency with the hypothesis that indebted politicians are more likely to cater to contributors' demand to establish their reputation which is necessary to secure future contributions to pay off the debt.

IV. Conclusions

This paper is the first empirical paper to explore the nature and implications of debt financing of U.S. political campaigns. We show that debt is an important source of financing of political campaigns and significantly distorts the decision making of indebted politicians. We show that indebted politicians build reputation by catering favorable policy positions to special

interest groups that then, in turn, provide campaign funds for reelection and to service the existing debt. The results have far reaching policy implications regarding the financing of political campaigns.

References

- Akey, P., 2014. Valuing changes in political networks: Evidence from campaign contributions to close congressional elections. *Review of Financial Studies* 28, 3188-3223.
- Alesina, A. and Tabellini, G., 1990. A positive theory of fiscal deficits and government debt. *Review of Economic Studies* 57, 403-414.
- Amore, M., and Bennedsen, M., 2013. Political district size and family-related firm performance. *Journal of Financial Economics* 110, 387-402.
- Ansolabehere, S., de Figueiredo, J., and Snyder, J., 2003. Why is there so little money in politics? *Journal of Economic Perspectives* 17, 105-130.
- Arellano, C. and Ramanarayanan, A., 2012. Default and the maturity structure in sovereign bonds. *Journal of Political Economy* 120, 187-232.
- Bebchuk, L. and Jackson, R., 2005. Executive pensions. *Journal of Corporate Law* 30, 823-855.
- Campbell, J. and Cocco, J., 2003. Household risk management and optimal mortgage choice. *Quarterly Journal of Economics* 118, 1449-1494.
- Cohen, L., Malloy, C., and Diether, K., 2013. Legislating stock prices. *Journal of Financial Economics* 110, 574-595.
- Cohen, L., and Malloy, C., 2014. Friends in high places. *American Economic Journal: Economic Policy* 6, 63-91.
- Cooper, M., Gulen, H., and Ovtchinnikov, A., 2010. Corporate political contributions and stock returns. *Journal of Finance* 65, 687-724.
- Correia, M., 2014. Political connections, SEC enforcement and accounting quality. *Journal of Accounting and Economics* 57, 241-262.
- Cukierman, A. and Meltzer, A. H., 1989. A political theory of government debt and deficits in a Neo-Ricardian framework. *American Economic Review* 79, 713-732.
- Diamond, D., 1991. Monitoring and reputation: The choice between bank loans and directly placed debt. *Journal of Political Economy* 99, 689-721.
- Diamond, D., 1984. Financial intermediation and delegated monitoring. *Review of Economic Studies* 51, 393-414.
- Duchin, R., and Sosyura, D., 2012. The politics of government investment. *Journal of Financial Economics* 106, 24-48.
- Edmans, A. and Liu, Q., 2011. Inside debt. *Review of Finance* 15, 75-102.

- Faccio, M., 2004. Politically connected firms. *American Economic Review* 96, 369-386.
- Fisman, R., 2001. Estimating the value of political connections. *American Economic Review* 91, 1095-1105.
- Frank, M. Z., Goyal, V. K., 2008. Trade-off and pecking order theories of debt. In: Eckbo, B. E. (Ed.), *Handbook of Corporate Finance: Empirical Corporate Finance*. North Holland, Amsterdam.
- Goldman, E., Rocholl, J., and So, J., 2009. Do politically connected boards add firm value? *Review of Financial Studies* 22, 2331-2360.
- Graham, J. R., 2008. Taxes and corporate finance. In: Eckbo, B. E. (Ed.), *Handbook of Corporate Finance: Empirical Corporate Finance*. North Holland, Amsterdam.
- Jensen, M., and Meckling, W., 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics* 3, 305-360.
- Jensen, M., 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review P&P* 76, 323-329.
- Looney A. and Yannelis, C., 2015. A crisis in student loans? How changes in the characteristics of borrowers and in the institutions they attended contributed to rising loan defaults. *Brookings Papers on Economics Activity* Fall 2015, 1-68.
- Morse, A., 2011. Payday lenders: Heroes or villains? *Journal of Financial Economics* 102, 28-44.
- Myers, S., 1977. Determinants of corporate borrowing. *Journal of Financial Economics* 5, 147-175.
- Ovtchinnikov, A., and Pantaleoni, E., 2012. Individual political contributions and firm performance. *Journal of Financial Economics* 105, 367-392.
- Peltzman, S., 1976. Toward a more general theory of regulation. *Journal of Law and Economics* 19, 211-240.
- Persson, T. and Svensson, L.E.O., 1989. Why a stubborn conservative would run a deficit: Policy with time-inconsistent preferences. *Quarterly Journal of Economics* 104, 325-345.
- Song, A., Storesletten, K., and Zilibotti, F., 2012. Rotten parents and disciplined children: A politic-economic theory of public expenditure and debt. *Econometrica* 80, 2785-2803.
- Stigler, G. J., 1971. The theory of economic regulation. *Bell Journal of Economics and Management Science* 2, 3-21.

Stratmann, T., 2005. Some talk: Money in politics. A (partial) review of the literature. *Public Choice* 124, 135-156.

Sundaram, R. and Yermack, D., 2007. Pay me later: inside debt and its role in managerial compensation. *Journal of Finance* 62, 1551-1588.

Vissing-Jorgensen, A., 2012. Consumer credit: Learning your customer's default risk from what (s)he buys, *Working paper*.

Wei, C. and Yermack, D., 2011. Investor reactions to CEOs' inside debt incentives. *Review of Financial Studies* 24, 3813-3840.

Figure 1
Sources of campaign financing, 1983 – 2014

This figure shows the aggregate amounts of campaign financing by source. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014. All numbers are in million USD.

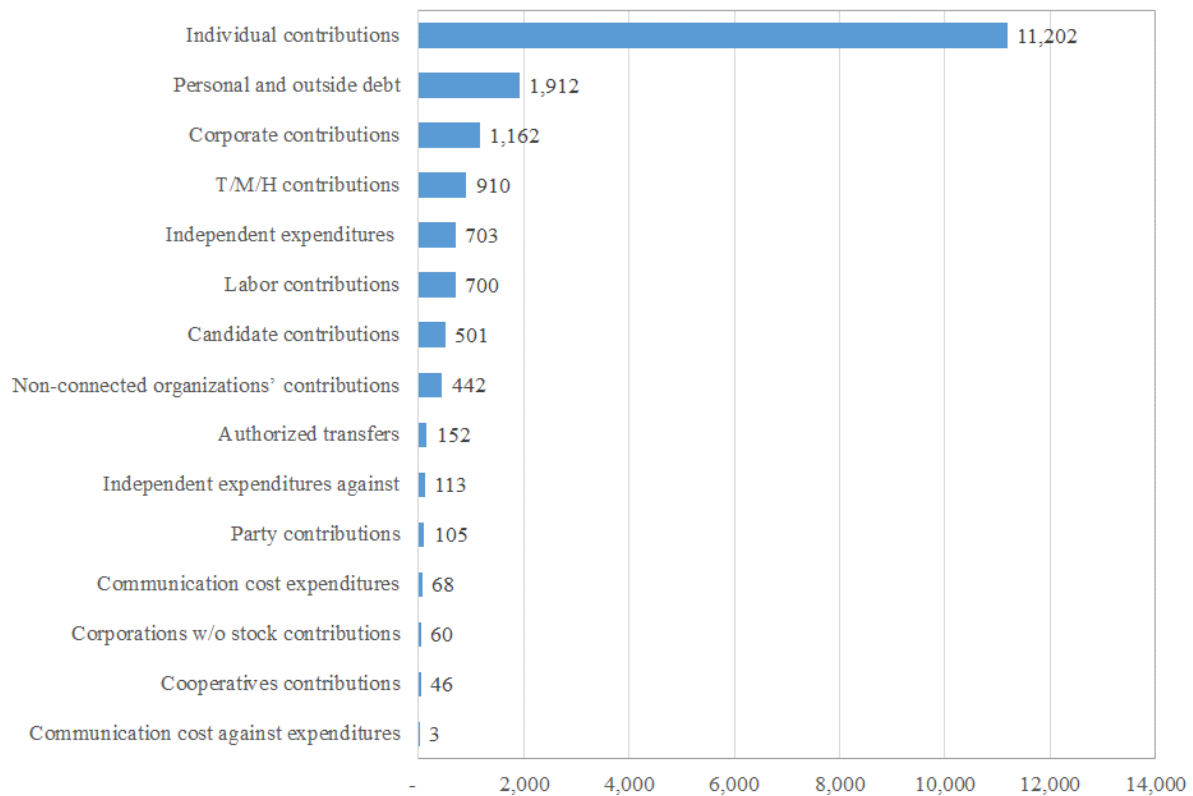
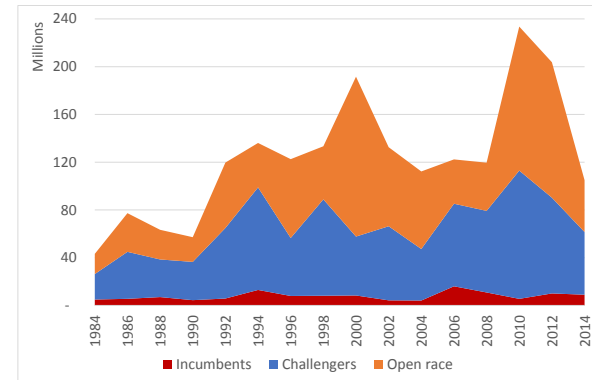
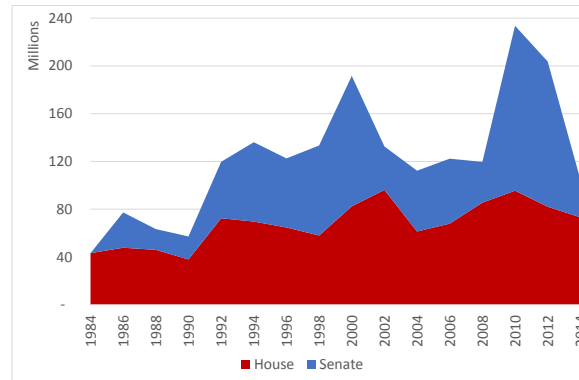
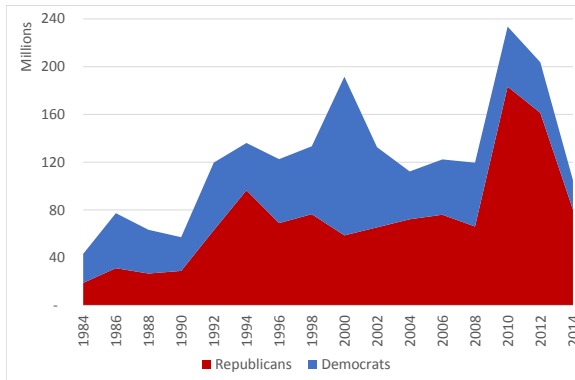
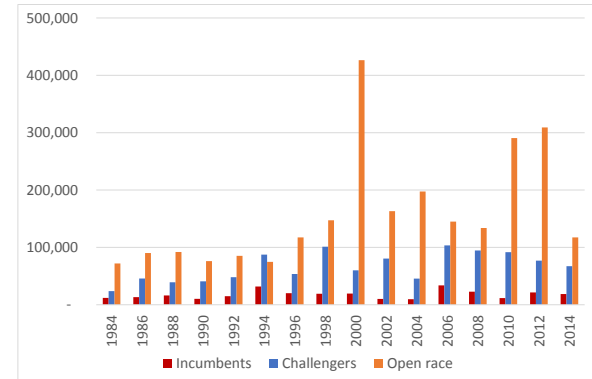
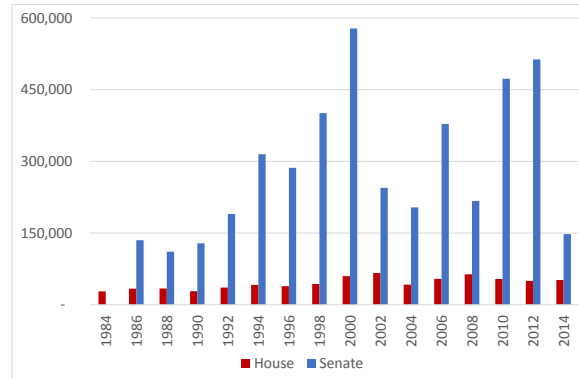
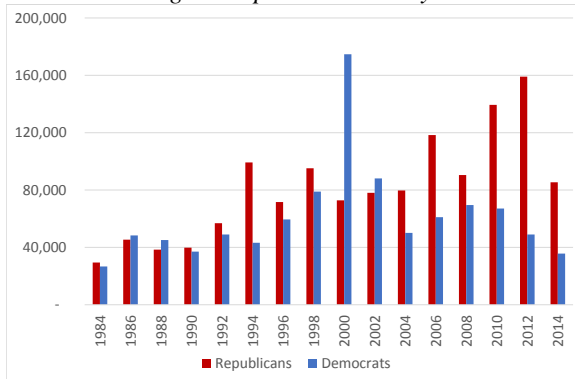


Figure 2
Debt in political campaigns – descriptive statistics, 1983 – 2014

Panel A: Total debt



Panel B: Average debt per candidate/cycle



Panel C: % candidates with personal (solid) and other (dashed) debt issues

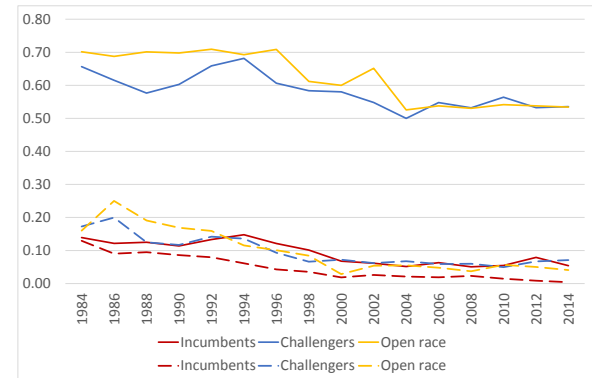
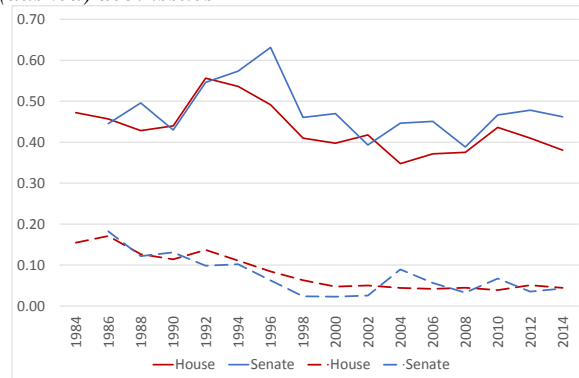
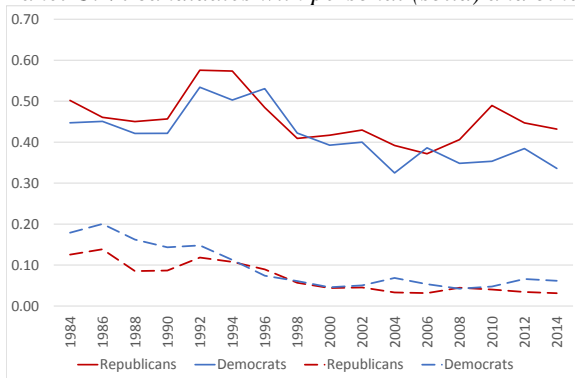
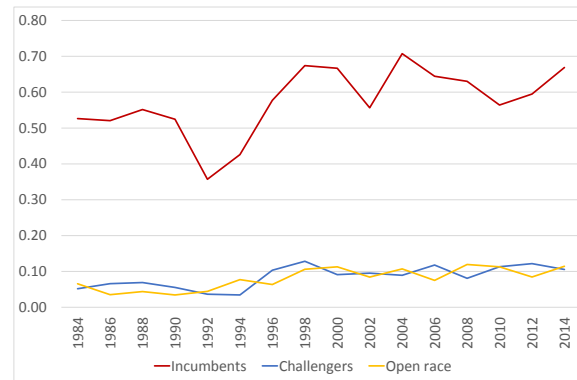
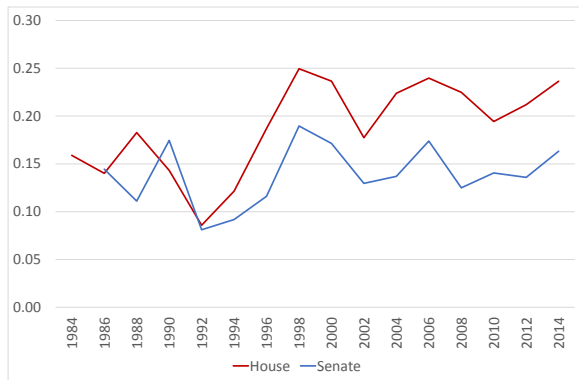
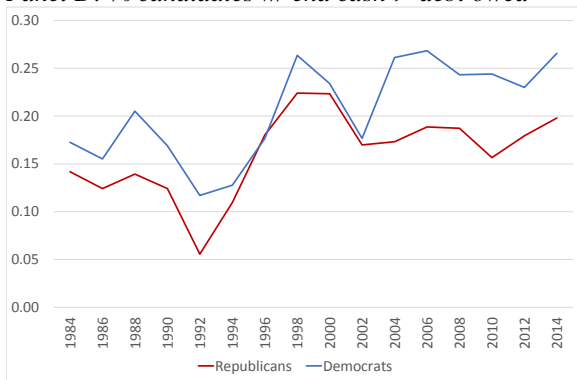
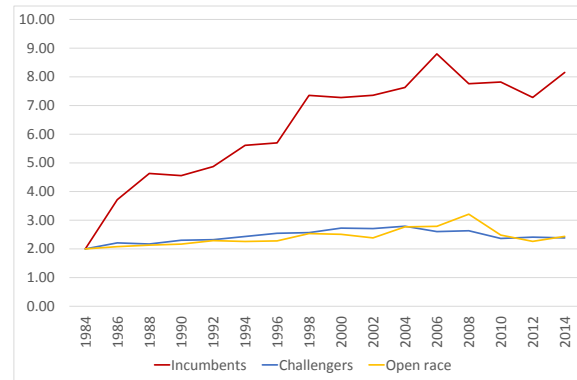
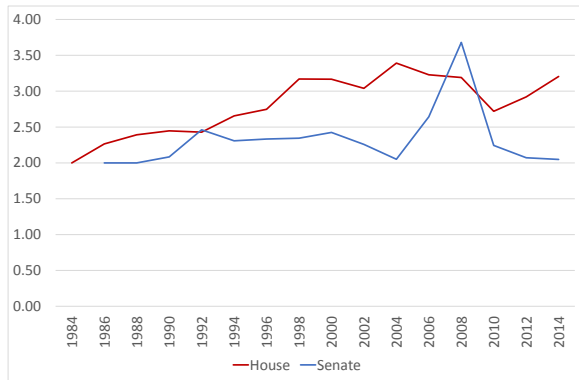
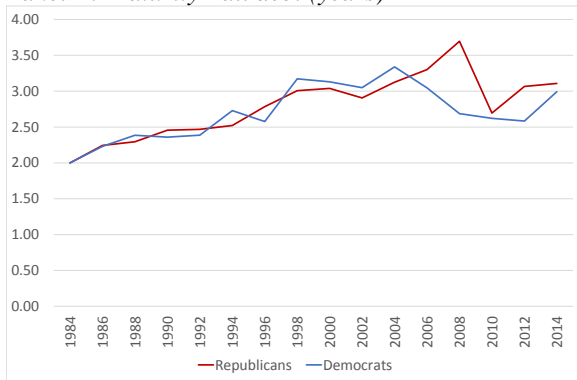


Figure 2 – continued

Panel D: % candidates w/ end cash > debt owed



Panel E: Maturity - all debt (years)



Panel F: Personal (solid) and other (dashed) debt / total receipts

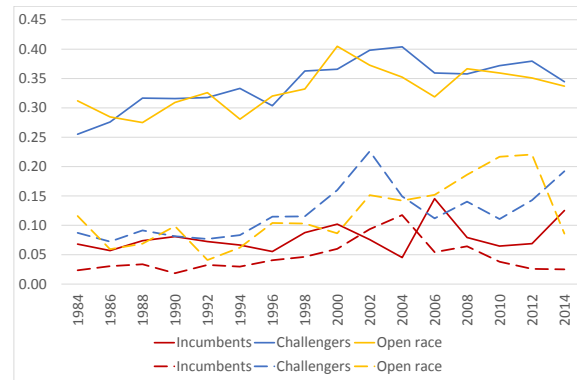
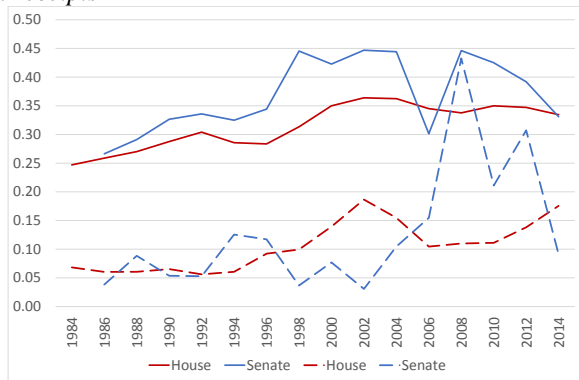
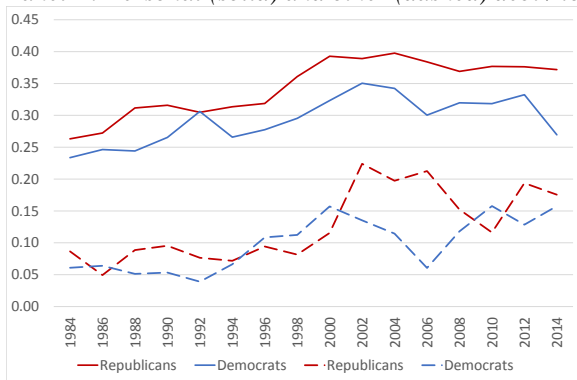


Table 1

Campaign finance law provisions regarding candidate loans made to personal political campaigns: Example

This table presents an example of how loans made by political candidates to personal political campaigns can be repaid. Candidate loans of \$250,000 or less may be repaid from contributions to the candidate or the candidate's authorized committee before, on, or after the election date provided that contributions are clearly made for the purpose of loan repayment. For candidate loans in excess of \$250,000, however, the candidate authorized committee may repay the entire loan amount by contributions made to the candidate or the candidate's authorized committee only before or on the election date. The authorized committee may repay up to \$250,000 by contributions received after the election date. For the remaining balance, the authorized campaign may use the cash on hand at the election date to pay off the candidate loan.

	Amount borrowed < \$250,000		Amount borrowed > \$250,000	
	Before or on election	After election	Before or on election	After election
Personal loan (\$)	53,889	53,889	365,573	365,573
Amount in excess of \$250,000 (\$)	0	0	115,573	115,573
Maximum loan repayment with designated contributions (\$)	53,889	53,889	365,573	250,000
Cash on hand at election end (\$)				65,514
Maximum loan repayment with cash on hand (w/n 20 days of election) (\$)				65,514
Minimum debt carried over into future elections (\$)				50,059

Table 2
Debt descriptive statistics, 1983 – 2014

This table shows descriptive statistics for debt financing used in political campaigns. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Variable	All	Candidate party		Candidate chamber		Candidate status		
		Rep	Dem	House	Senate	Incumbents	Challengers	Open race
Total debt (\$ billion)	1.912	1.128	0.785	1.056	0.856	0.118	0.897	0.897
Average debt per candidate/cycle (\$)	87,137	98,617	74,655 ^b	53,889	365,573 ^a	17,615	86,812 ^a	182,335 ^a
Candidates w/ debt issues (%)	46.75	48.19	44.97	46.30	49.97	12.52	60.84 ^a	64.92 ^a
Candidates w/ personal debt issues (%)	43.99	45.93	41.72 ^b	43.55	47.27 ^c	9.31	58.23 ^a	62.69 ^a
Candidates w/ outside debt issues (%)	8.24	6.97	9.46	8.27	7.36	4.70	9.76 ^a	9.95 ^b
Candidates w/ debt outstanding at campaign end (%)	40.72	41.90	38.94	40.34	43.44	6.78	53.35 ^a	56.22 ^a
Conditional on debt > 0								
Candidates w/ end debt > 0 (%)	75.73	75.77	75.65	75.65	76.28	74.03	76.94	74.50
Candidates w/ end cash > debt owed (%)	18.29	16.08	20.74 ^a	18.87	14.00 ^a	57.78	8.58 ^a	7.85 ^a
Maturity - all debt (years)	2.72	2.78	2.65	2.77	2.33 ^a	6.36	2.42 ^a	2.36 ^a
Maturity - personal debt (years)	2.64	2.72	2.56	2.70	2.25 ^a	6.22	2.37 ^a	2.32 ^a
Maturity - other debt (years)	2.56	2.55	2.61	2.61	2.17 ^b	4.03	2.29 ^a	2.52 ^a
Debt / total receipts (%)	31.79	34.39	29.01 ^a	31.16	36.89 ^a	7.67	34.36 ^a	33.49 ^a
Candidate debt / total receipts (%)	32.02	34.51	29.28 ^a	31.42	37.32 ^a	7.87	34.12 ^a	33.17 ^a
Outside debt / total receipts (%)	10.57	12.32	9.80	10.28	12.81	4.37	12.02 ^a	11.65 ^a
N	21,946	11,431	10,515	19,605	2,341	6,689	10,335	4,922

Table 3
Debt descriptive statistics by candidate status, 1983 – 2014

This table shows descriptive statistics for debt financing used in political campaigns separately for winning (Panel A) and losing campaigns (Panel B). The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Variable	Candidate party			Candidate chamber		Candidate status		
	All	Rep	Dem	House	Senate	Incumbents	Challengers	Open race
<i>Panel A: Winning campaigns</i>								
Total debt (\$ billion)	0.377	0.157	0.220	0.184	0.193	0.093	0.107	0.177
Average debt per candidate/cycle (\$)	56,198	49,386	62,365	29,411	418,354	16,354	284,384	270,916
Candidates w/ debt issues (%)	21.10	21.39	20.57	22.29	16.52	14.52	60.74	59.79
Candidates w/ personal debt issues (%)	17.51	17.88	16.71	18.16	14.20	10.56	57.37	57.15
Candidates w/ outside debt issues (%)	6.68	5.37	7.29	7.06	3.10	5.30	17.24	13.35
Candidates w/ debt outstanding at campaign end (%)	15.47	14.87	15.50	16.23	12.91	8.58	50.44	49.83
Conditional on debt > 0								
Candidates w/ end debt > 0 (%)	80.66	80.72	82.48	79.91	91.95	71.98	95.02	91.11
Candidates w/ end cash > debt owed (%)	50.14	46.50	53.17	50.49	44.32	62.28	19.27	18.54
Maturity - all debt (years)	4.43	4.37	4.61	4.51	3.37	5.94	2.59	2.41
Maturity - personal debt (years)	4.32	4.30	4.51	4.40	3.20	5.88	2.45	2.41
Maturity - other debt (years)	3.51	3.19	3.12	3.53	2.00	3.90	3.11	2.11
Debt / total receipts (%)	10.76	12.39	8.97	10.37	14.77	7.99	15.59	13.71
Candidate debt / total receipts (%)	11.74	13.48	9.63	11.29	16.15	8.41	15.53	13.71
Outside debt / total receipts (%)	4.09	5.66	2.69	4.05	4.65	4.54	3.65	2.23
N	6,708	3,187	3,521	6,246	462	5,678	377	653
<i>Panel B: Losing campaigns</i>								
Total debt (\$ billion)	1.048	0.625	0.423	0.590	0.458	0.016	0.579	0.453
Average debt per candidate/cycle (\$)	113,544 ^a	133,037 ^a	93,306	71,014 ^a	497,280	46,819 ^a	90,708 ^a	181,101
Candidates w/ debt issues (%)	62.99 ^a	63.94 ^a	62.18 ^a	63.08 ^a	61.44 ^a	27.70 ^a	63.19	68.01 ^b
Candidates w/ personal debt issues (%)	60.38 ^a	61.62 ^a	59.32 ^a	60.55 ^a	58.31 ^a	23.69 ^a	60.56	65.51 ^b
Candidates w/ outside debt issues (%)	10.14 ^c	8.82 ^b	11.39 ^c	10.13 ^c	9.53 ^b	8.82	10.09 ^c	10.40
Candidates w/ debt outstanding at campaign end (%)	55.40 ^a	56.15 ^a	54.70 ^a	55.56 ^a	53.31 ^a	18.73 ^b	55.49	59.32 ^b
Conditional on debt > 0								
Candidates w/ end debt > 0 (%)	78.87	78.31	79.31	78.70	80.46 ^a	85.25 ^b	79.98 ^a	74.17 ^a
Candidates w/ end cash > debt owed (%)	9.21 ^a	8.92 ^a	9.53 ^a	8.94 ^a	12.13 ^a	27.73 ^a	8.99 ^a	6.83 ^a
Maturity - all debt (years)	2.43 ^a	2.50 ^a	2.37 ^a	2.45 ^a	2.13	7.68	2.37	2.36
Maturity - personal debt (years)	2.39 ^a	2.47 ^a	2.32 ^a	2.42 ^a	2.11	6.70	2.34	2.35
Maturity - other debt (years)	2.29 ^b	2.61	2.25 ^a	2.31 ^b	2.17	4.13	2.19	2.31
Debt / total receipts (%)	31.17 ^a	32.62 ^a	29.63 ^a	30.97 ^a	31.86 ^a	7.19	31.23 ^a	31.84 ^a
Candidate debt / total receipts (%)	30.88 ^a	32.59 ^a	29.47 ^a	30.69 ^a	31.84 ^a	7.81	31.01 ^a	31.55 ^a
Outside debt / total receipts (%)	9.61 ^a	10.47 ^a	9.41 ^a	9.47 ^a	10.20 ^c	1.67 ^b	9.88 ^a	9.27 ^a
N	9,231	4,702	4,529	8,310	921	348	6,382	2,501

Table 4
Debt descriptive statistics by candidate total receipts ranking, 1983 – 2014

This table shows descriptive statistics for debt financing used in political campaigns. We sort all campaigns into quintiles based on total funds raised and report debt characteristics separately for each quintile. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Variable	Candidate total receipts quintile ranking				
	Low	2	3	4	High
Total debt (\$ billion)	0.013	0.083	0.223	0.265	1.329
Average debt per candidate/cycle (\$)	2,918	18,909 ^a	50,692 ^a	60,432 ^a	302,741 ^a
Candidates w/ debt issues (%)	42.83	64.70 ^a	56.40 ^a	35.11 ^a	37.74
Candidates w/ personal debt issues (%)	39.98	62.11 ^a	54.20 ^a	32.27 ^a	33.84
Candidates w/ outside debt issues (%)	6.67	10.38 ^b	8.69	7.03	9.04
Candidates w/ debt outstanding at campaign end (%)	36.68	56.99 ^a	50.08 ^a	29.62 ^a	32.10
Conditional on debt > 0					
Candidates w/ end debt > 0 (%)	60.92	73.57 ^a	79.48 ^a	82.03	85.78 ^c
Candidates w/ end cash > debt owed (%)	7.93	5.45 ^b	12.57 ^a	32.44 ^a	30.36
Maturity - all debt (years)	2.47	2.39	2.62 ^c	3.21 ^a	3.23
Maturity - personal debt (years)	2.48	2.34	2.58 ^b	3.06 ^a	3.04
Maturity - other debt (years)	2.21	2.26	2.75 ^c	2.80	3.60
Debt / total receipts (%)	47.27	36.05 ^a	28.84 ^a	22.12 ^a	21.76
Candidate debt / total receipts (%)	46.97	35.81 ^a	28.92 ^a	22.96 ^a	22.93
Outside debt / total receipts (%)	23.20	11.88 ^a	7.82 ^b	5.45	5.29
N	4,389	4,389	4,390	4,389	4,389

Table 5**Characteristics of politicians who lend to their own campaigns, 1983 – 2014**

This table shows descriptive statistics for characteristics of campaigns receiving more or less than \$250,000 in candidate loans. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Variable	Candidates w/ personal debt issues < \$250,000 (%)	Candidates w/ personal debt issues > \$250,000 (%)
Total debt (\$ billion)	0.533	1.379
Average debt per candidate/cycle (\$)	56,981	1,508,341 ^a
Winning candidates (%)	12.76	15.70
Democrats (%)	47.70	42.73
House candidates (%)	90.54	69.40 ^a
Incumbents (%)	8.35	6.50
Challengers (%)	62.25	48.88 ^a
Open race candidates (%)	29.40	45.02 ^a
Maturity - all debt (years)	2.44	2.47
Maturity - personal debt (years)	2.38	2.33
Maturity - other debt (years)	2.35	3.12
Debt / total receipts (%)	29.37	57.67 ^a
Candidate debt / total receipts (%)	29.55	57.15 ^a
Outside debt / total receipts (%)	10.73	6.61 ^b
N	9,381	914

Table 6
Campaign fundraising for indebted and other politicians, 1986 – 2014

Panels A and B present the averages of annual average campaign totals for politicians with no debt in prior campaign (Panel A) and indebted politicians (Panel B). The estimated model in Panel C is

$$\log(Total^m)_{jt,m} = \{\text{Beginning cash, Total receipts, Individual contributions, PAC contributions, Debt issues, Debt retirement, Total disbursements, Ending cash}\} \\ = \alpha_j + \alpha_t + \beta(Debtholder)_{jt-1} + \gamma X_{jt} + \varepsilon_{jt},$$

where α_j and α_t are politician and year fixed effects, $Debtholder_{jt-1}$ is an indicator variable set to one for politicians with positive debt outstanding from the prior campaign and zero otherwise, and X_{jt} is a vector of control variables that includes (i) the percentage of votes received in the general election in the prior campaign, (ii) the current politician rank in the Congressional chamber, (iii) a vector of indicator variables for each Congressional committee that a politician sits on, and (iv) state-year interaction fixed effects. Panel C reports β coefficients. SE's are adjusted for heteroskedasticity and clustered by politician. ^{a, b, c} designate significance at 1%, 5%, and 10% levels, respectively. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Politicians	Beginning cash (\$)	Total receipts (\$)	Individual contributions (\$)	PAC contributions (\$)	Debt Issues (\$)	Debt retirement (\$)	Total disbursements (\$)	Ending cash (\$)	N
<i>Panel A: Politicians with no debt from prior campaign</i>									
All	270,339	1,257,824	494,317	593,855	7,675	2,463	918,351	300,623	4,346
House	243,242	1,069,203	398,990	528,229	7,484	2,464	772,912	282,522	4,145
Senate	1,004,328	6,086,005	2,849,447	2,061,504	59,943	10,232	4,686,619	834,035	201
Democrats	271,876	1,206,183	462,332	591,080	10,186	2,431	883,094	300,144	2,306
Republicans	266,346	1,298,090	528,803	590,237	4,960	2,370	937,806	302,074	2,040
<i>Panel B: Indebted politicians</i>									
All	77,342 ^a	1,610,603 ^b	631,179	708,842 ^b	7,978	31,924 ^a	1,144,549	121,452 ^a	1,134
House	30,942 ^a	1,318,641 ^b	488,761	614,443 ^b	7,180	30,364 ^a	896,250	95,910 ^a	1,051
Senate	727,272	9,127,343 ^a	4,768,927 ^a	2,951,898 ^b	86,229	94,759 ^c	7,196,726 ^b	773,208	83
Democrats	70,918 ^a	1,575,586 ^c	585,643	710,218 ^c	9,627	28,261 ^a	1,150,850	106,740 ^a	608
Republicans	86,430 ^a	1,642,995 ^b	688,599 ^c	687,617	5,151	39,123 ^a	1,165,379	135,118 ^a	526
<i>Panel C: Regression results</i>									
All	-1.8687 ^a (0.0812)	0.1552 ^a (0.0363)	0.1632 ^a (0.0396)	0.1758 ^a (0.0472)	-1.0785 ^a (0.1684)	3.7809 ^a (0.2282)	0.1221 ^a (0.0275)	-0.2201 ^b (0.0862)	5,480
House	-1.9189 ^a (0.0826)	0.1440 ^a (0.0304)	0.1485 ^a (0.0368)	0.1821 ^a (0.0442)	-1.0704 ^a (0.1710)	3.9235 ^a (0.2350)	0.1331 ^a (0.0279)	-0.2448 ^a (0.0880)	5,196
Senate	-0.7468 ^b (0.3322)	0.6192 (0.4022)	0.3742 (0.4063)	0.4194 (0.3818)	-0.9943 (0.8401)	0.0499 (0.7412)	-0.0828 (0.1243)	0.4331 (0.4001)	284
Democrats	-2.0340 ^a (0.0949)	0.2161 ^a (0.0495)	0.2217 ^a (0.0560)	0.1960 ^a (0.0551)	-1.3187 ^a (0.2365)	3.6549 ^a (0.3286)	0.1671 ^a (0.0399)	-0.0162 (0.1137)	2,914
Republicans	-1.7618 ^a (0.1448)	0.0748 ^c (0.0407)	0.0684 (0.0531)	0.0397 (0.0879)	-0.8993 ^a (0.2419)	3.6742 ^a (0.3587)	0.1036 ^b (0.0409)	-0.4972 ^a (0.1401)	2,566

Table 7
Fundraising from PACs for indebted and other politicians, 1986 – 2014

Panels A and B present the averages of total funds raised from PACs for politicians with no debt in prior campaign (Panel A) and indebted politicians (Panel B). The estimated model in Panel C is

$$\log(Total^m)_{jt,m=\{\text{Corporate, Party, Labor, Trade, Members, Non-connected, Super PACs, Other, Hard money, Independent exp. for, Independent exp. against, Comm. cost for, Comm. cost against}\}} = \alpha_j + \alpha_t + \beta(Debtholder)_{jt-1} + \gamma X_{jt} + \varepsilon_{jt},$$

where α_j and α_t are politician and year fixed effects, $Debtholder_{jt-1}$ is an indicator variable set to one for politicians with positive debt outstanding from the prior campaign and zero otherwise, and X_{jt} is a vector of control variables that includes (i) the percentage of votes received in the general election in the prior campaign, (ii) the current politician rank in the Congressional chamber, (iii) a vector of indicator variables for each Congressional committee that a politician sits on, and (iv) state-year interaction fixed effects. Panel C reports β coefficients. SE's are adjusted for heteroskedasticity and clustered by politician. ^{a, b, c} designate significance at 1%, 5%, and 10% levels, respectively. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Politicians	Sources of PAC contributions								Types of PAC contributions				
	Corporate	Party	Labor	Trade	Members	Non-connected	Super PACs	Other	Hard money	Independent exp. for	Independent exp. against	Comm. cost for	Comm. cost against
<i>Panel A: Politicians with no debt from prior campaign</i>													
All	212,511	15,031	88,015	145,578	39,793	30,771	22,865	17,439	531,258	27,721	11,926	4,461	55
House	187,255	13,097	84,994	133,802	34,502	25,227	10,490	16,009	480,105	16,497	9,948	3,590	39
Senate	752,731	100,139	146,304	432,554	156,929	169,225	325,416	50,030	1,630,988	319,248	94,155	30,158	1,474
Democrats	174,007	16,700	151,971	125,284	40,626	25,512	27,257	17,200	529,184	24,903	13,164	5,472	163
Republicans	251,768	12,758	20,529	166,481	38,555	35,485	19,902	17,528	525,366	30,055	9,275	3,456	18
<i>Panel B: Indebted politicians</i>													
All	200,985	38,338 ^c	111,526 ^a	164,064 ^b	50,998	58,077 ^b	43,940	18,361	591,352	57,460 ^a	29,060	9,105 ^a	71
House	177,199	29,029 ^c	108,334 ^a	147,656 ^c	42,507	45,120 ^b	21,868	16,509	540,751 ^c	39,463 ^a	19,126	6,725 ^a	38
Senate	759,110	297,341	181,797	402,747	206,206	273,195 ^c	575,832	51,929	1,698,535	679,659 ^a	416,820	98,450 ^a	3,850
Democrats	154,708	30,823	201,576 ^a	138,702 ^b	49,814	50,847 ^c	84,051	17,815	587,624	57,196 ^a	30,044	11,272 ^a	415
Republicans	259,711	42,373 ^b	19,874	187,143	51,777	64,737 ^b	24,504	18,797	593,394	61,554 ^a	27,801	6,916 ^a	28
<i>Panel C: Regression results</i>													
All	0.1431 ^a (0.0342)	0.2442 ^b (0.1085)	0.1533 ^a (0.0485)	0.1588 ^a (0.0449)	0.1802 ^a (0.0493)	0.2527 ^a (0.0609)	-0.5616 (0.8581)	0.1613 ^a (0.0393)	0.1406 ^a (0.0328)	0.0470 (0.1423)	-0.1263 (0.1727)	0.2087 ^b (0.0971)	-0.1389 (0.0904)
House	0.1420 ^a (0.0337)	0.2696 ^b (0.1091)	0.1683 ^a (0.0492)	0.1748 ^a (0.0451)	0.1836 ^a (0.0495)	0.2727 ^a (0.0621)	-0.5616 (0.8580)	0.1644 ^a (0.0408)	0.1384 ^a (0.0324)	0.1101 (0.1424)	-0.1264 (0.1729)	0.2310 ^b (0.0988)	-0.0673 (0.0582)
Senate	0.7214 ^c (0.4381)	0.2584 (0.8311)	0.4826 (0.3905)	0.1298 (0.2408)	0.2882 (0.2891)	0.0423 (0.2494)	0.0000 (0.0001)	0.0471 (0.1504)	0.3983 (0.2617)	-0.4128 (0.8374)	0.0001 (0.0002)	0.3063 (0.5233)	-1.1766 (1.5480)
Democrats	0.1628 ^a (0.0491)	0.4207 ^a (0.1432)	0.2022 ^a (0.0482)	0.1475 ^a (0.0549)	0.1771 ^b (0.0699)	0.2816 ^a (0.0869)	0.7792 (1.4633)	0.2365 ^a (0.0552)	0.1782 ^a (0.0423)	-0.0773 (0.1755)	-0.3523 ^b (0.1759)	0.2502 ^b (0.1176)	-0.1464 (0.1398)
Republicans	0.0692 (0.0534)	0.1679 (0.1814)	0.1348 (0.1021)	0.1492 ^c (0.0821)	0.1018 (0.0759)	0.2865 ^a (0.0946)	1.5004 (1.0225)	0.0377 (0.0645)	0.0362 (0.0501)	0.6804 ^b (0.2817)	0.1851 (0.1279)	0.3274 ^b (0.1588)	0.0281 (0.0718)

Table 8
Where do additional PAC contributions come from, 1986 – 2014?

The estimated model in Panel A is

$$\log\left(\frac{N_i^{\text{Contributing PACs}}}{N^{\text{PACs}}}\right)_{jt} = \alpha_j + \alpha_t + \beta(\text{Debtholder})_{jt-1} + \gamma X_{jt} + \varepsilon_{jt}.$$

The estimated model in Panel B is

$$\log\left(\frac{N_i^{\text{PACs with large contributions}}}{N^{\text{Contributing PACs}}}\right)_{jt} = \alpha_j + \alpha_t + \beta(\text{Debtholder})_{jt-1} + \gamma X_{jt} + \varepsilon_{jt},$$

where α_j and α_t are politician and year fixed effects, Debtholder_{jt-1} is an indicator variable set to one for politicians with positive debt outstanding from the prior campaign and zero otherwise, and X_{jt} is a vector of control variables that includes (i) the percentage of votes received in the general election in the prior campaign, (ii) the current politician rank in the Congressional chamber, (iii) a vector of indicator variables for each Congressional committee that a politician sits on, and (iv) state-year interaction fixed effects. Panel C reports β coefficients. SE's are adjusted for heteroskedasticity and clustered by politician. ^{a, b, c} designate significance at 1%, 5%, and 10% levels, respectively. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Politicians	Sources of PAC contributions								Types of PAC contributions				
	Corporate	Party	Labor	Trade	Members	Non-connected	Super PACs	Other	Hard money	Independent exp. for	Independent exp. against	Comm. cost for	Comm. cost against
<i>Panel A: More PACs?</i>													
All	0.0943 ^a (0.0260)	0.0462 ^b (0.0225)	0.0534 ^b (0.0250)	0.0498 ^b (0.0226)	0.1513 ^a (0.0279)	0.1443 ^a (0.0335)	0.3441 (0.3730)	0.0932 ^a (0.0242)	0.0803 ^a (0.0218)	-0.0084 (0.0325)	0.1909 (0.1267)	-0.2134 (0.1326)	0.1004 (0.0719)
House	0.1012 ^a (0.0261)	0.0554 ^b (0.0226)	0.0623 ^b (0.0253)	0.0552 ^b (0.0229)	0.1562 ^a (0.0283)	0.1503 ^a (0.0343)	0.3440 (0.3730)	0.0934 ^a (0.0248)	0.0860 ^a (0.0213)	-0.0036 (0.0325)	0.1548 (0.1291)	-0.2034 (0.1360)	0.0467 (0.0715)
Senate	0.1498 (0.1889)	-0.1259 (0.1777)	0.0556 (0.1612)	-0.0164 (0.1557)	0.0316 (0.1532)	-0.0137 (0.1505)	0.0000 (0.0001)	0.0254 (0.1097)	0.0703 (0.1842)	-0.0956 (0.1635)	0.0998 (0.7223)	-0.2129 (0.5803)	0.9098 (0.6524)
Democrats	0.1132 ^a (0.0359)	0.0615 ^b (0.0303)	0.0897 ^a (0.0252)	0.0921 ^a (0.0285)	0.1808 ^a (0.0399)	0.2068 ^a (0.0470)	-0.3486 (0.6406)	0.1228 ^a (0.0336)	0.1075 ^a (0.0267)	-0.0402 (0.0354)	0.0937 (0.1261)	-0.0749 (0.1623)	0.1051 (0.0842)
Republicans	0.0363 (0.0395)	-0.0048 (0.0371)	-0.0495 (0.0555)	-0.0146 (0.0393)	0.0672 ^c (0.010)	0.0651 (0.0510)	-0.7393 ^c (0.4073)	0.0624 ^c (0.0364)	0.0296 (0.0364)	0.0878 (0.0567)	0.4313 ^b (0.1967)	-0.2892 (0.2123)	-0.0409 (0.0910)
<i>Panel B: Larger PAC contributions?</i>													
All	0.0103 (0.0222)	-0.0115 (0.0172)	0.0767 ^b (0.0351)	0.0435 ^c (0.0223)	-0.0526 (0.0370)	-0.1010 ^a (0.0380)	-0.0841 (0.0794)	-0.0696 ^c (0.0384)	0.0364 ^b (0.0175)	-0.0232 (0.0276)	-0.0466 (0.0366)	-0.0514 (0.0443)	-0.0574 (0.0451)
House	0.0108 (0.0226)	-0.0225 (0.0171)	0.0842 ^b (0.0357)	0.0426 ^c (0.0227)	-0.0384 (0.0381)	-0.1075 ^a (0.0387)	-0.0957 (0.0910)	-0.0683 ^c (0.0391)	0.0385 ^b (0.0174)	-0.0253 (0.0276)	-0.0468 (0.0367)	-0.0614 (0.0444)	-0.0581 (0.0477)
Senate	-0.0767 (0.1110)	0.2604 (0.1810)	-0.2970 (0.2470)	-0.0490 (0.1150)	-0.1348 (0.1399)	0.1228 (0.1748)	0.0000 (0.0001)	-0.0752 (0.1607)	0.0397 (0.1123)	0.0140 (0.1725)	0.0000 (0.0001)	-0.0274 (0.1638)	-0.0338 (0.1121)
Democrats	0.0181 (0.0319)	-0.0255 (0.0206)	0.1776 ^a (0.0434)	0.0518 (0.0335)	-0.0479 (0.0472)	-0.1614 ^a (0.0527)	-0.0914 (0.0887)	0.0017 (0.0510)	0.0772 ^a (0.0232)	-0.0063 (0.0375)	0.0014 (0.0102)	-0.0698 (0.0508)	-0.0597 (0.0510)
Republicans	-0.0207 (0.0349)	-0.0049 (0.0278)	0.0223 (0.0652)	0.0192 (0.0305)	0.0219 (0.0615)	-0.0625 (0.0624)	-0.0843 (0.0799)	-0.0701 (0.0591)	-0.0058 (0.0321)	-0.0715 (0.0472)	-0.1337 ^b (0.0557)	-0.0446 (0.0410)	-0.0344 (0.0488)

Table 9
Indebted politicians, labor contributions, and labor voting, 2000 – 2014

The estimated model is

$$PLV_{jt} = \alpha_j + \alpha_t + \beta_1 \left(\log \left(\frac{\text{Labor Contributions}}{\text{Total PACs}} \right) \right)_{jt} + \beta_2 (\text{Debtholder})_{jt-1} \\ + \beta_3 \left(\log \left(\frac{\text{Labor Contributions}}{\text{Total PACs}} \right) \right)_{jt} \times (\text{Debtholder})_{jt-1} + \gamma X_{jt} + \varepsilon_{jt}$$

where α_j and α_t are politician and year fixed effects, Debtholder_{jt-1} is an indicator variable set to one for politicians with positive debt outstanding from the prior campaign and zero otherwise, and X_{jt} is a vector of control variables that includes (i) the percentage of votes received in the general election in the prior campaign, (ii) the current politician rank in the Congressional chamber, (iii) a vector of indicator variables for each Congressional committee that a politician sits on, (iv) state-year interaction fixed effects, and (v) controls for other contributions received. Panel C reports β coefficients. SE's are adjusted for heteroskedasticity and clustered by politician. ^{a, b, c} designate significance at 1%, 5%, and 10% levels, respectively. The sample consists of all U.S. House of Representatives and Senate election campaigns for the period 1983 – 2014.

Politicians	Labor contributions (β_1)	Other contributions	Debtholder (β_2)	Labor contributions \times Debtholder (β_3)	N
<i>Panel A: Unconditional results</i>					
All politicians	0.0021 ^c (0.0012)				4,924
House members	0.0020 (0.0012)				4,186
Senate members	-0.0089 ^c (0.0048)				738
Democrats	0.0155 ^a (0.0053)				2,450
Republicans	0.0010 (0.0014)				2,474
<i>Panel B: Results for indebted and other politicians</i>					
All politicians	0.0011 (0.0012)	-0.0515 ^a (0.0127)	-0.0004 (0.008)	0.0061 ^b (0.0031)	4,924
House members	0.0008 (0.0012)	-0.0646 ^a (0.0151)	-0.0033 (0.0090)	0.0060 ^b (0.0031)	4,186
Senate members	-0.0096 ^c (0.0052)	0.0259 ^a (0.0091)	0.0232 (0.0298)	0.0036 (0.0092)	738
Democrats	0.0095 ^c (0.0049)	-0.0389 ^a (0.0142)	0.0071 (0.0140)	0.0251 ^b (0.0119)	2,450
Republicans	0.0001 (0.0014)	-0.0058 (0.0401)	0.0132 (0.0161)	0.0075 ^c (0.0041)	2,474