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# The Revolving Door and Taxes

– POLITICAL CONNECTIONS DECREASE CORPORATE TAX RATES

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## Abstract

For fear of retribution, agencies may enforce rules more leniently against firms with political connections. I test the argument as it pertains to the enforcement of tax policy by the Internal Revenue Service (IRS). I compile a database of publicly listed firms, that have hired Members of the US Congress (MCs) in the period 2004-2015. I show that hiring a former MC decreases the average company's tax rate. The effect is strongest, when firms hire the best connected former MCs, who served in committees responsible for oversight of the IRS. To show that the effect is driven by more lenient enforcement, I map out the interactions between the IRS and the firms, and show that hiring a former MC is associated with a lower probability of being audited. These results indicate that rules are enforced differently against politically connected firms. They can use this to pursue significant economic rents.

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# 1 Introduction

It routinely attracts both great attention and condemnation, when elected officials leave office for private sector employment – the so-called revolving door phenomenon (e.g. Adolph 2013; LaPira and Thomas 2017; Palmer and Schneer 2016, forthcoming). The implicit or explicit conjecture often is that big companies hire former legislators to use their political connections to sway public policy in the direction, they desire. While mounting evidence suggests that firms can gain tremendously by hiring revolving door personnel (Blanes i Vidal et al. 2012; Goldman et al. 2009, 2013; Luechinger and Moser 2014; McCrain forthcoming), we know preciously little about why gaining political connections is such an effective non-market strategy. Particularly, companies might profit from hiring former politicians for benign reasons – not because they exert undue political influence (Furnas et al. 2017; LaPira and Thomas 2017). In this paper, I argue that political connections gained by hiring revolving door personnel leads agencies to enforce rules more leniently against the connected company – and that the firm profits from this regulatory forbearance (Gordon and Hafer 2013).

In this paper, I focus specifically on the effects of hiring revolving door legislators on corporate tax rates. While it obviously can only provide a small piece of the larger puzzle of the political effects of the revolving door phenomenon, the setting is particularly well-suited to test the argument for a number of reasons. First, unlike other agencies, the Internal Revenue Service (IRS) makes decisions regarding tax rates of all types of companies, and influencing them is relevant to corporate political actors across the board. Investigating the effect of political connections on tax rates, thus, allows us to include a broad variety of corporate actors in the sample. Second, as shown in Richter et al. (2009), firms stand to gain almost extravagantly from lowering their own tax rates, while the cost to public finances is relatively modest. This makes it an economically important case in its own right. Third, successfully lobbying for a selectively decreased tax rate yields a highly private benefit, which makes it unlikely that problems with firms free-riding on the lobbying endeavors of each other should arise. This stands in contrast to other political outcomes, e.g. lobbying on a particular text of a bill or its implementation, where lobbying success would benefit everyone affected by the bill.

To test the argument, I draw on a novel data set comprised of publicly listed companies that have hired former Members of Congress (MCs) in the period 2004-2015 – a total of 264 firms hiring 89 revolving door MCs. Using fixed regressions, my results show that hiring a former legislator on average decreases corporate tax rates. The estimate is large relative to normal changes in the tax rate a firm pays – amounting to half of a standard deviation of the variation a typical company experienced in the period, I study – but persists for a short while. To test whether the mechanism really is regulatory forbearance

by the IRS, I proceed to map out the interactions between the firms in my sample and the tax authorities. I do this by coding the sections of the 10-K reports, where the boards of directors inform the shareholders about new and ongoing business with the IRS. Specifically, I show that it is less likely that new audits are initiated of firms, who hire former MCs. **Note to the reader: I am only about halfway through coding the audit data, so I only run the test on a subset at this stage!**

To substantiate that the results are driven by political connectedness, I construct a network of bill cosponsorship for each Congress from the 102nd to the 114th and find that the drop in tax rates is driven exclusively by companies that hire well-connected MCs, who used to serve on committees with oversight of the IRS. Additionally, I uncover evidence that when firms hire former MCs, who used to serve on the committees overseeing IRS's activities, they *decrease* the part of their lobbying activity aimed at the tax authorities. I find similar – but much more noisy – patterns among firms hiring legislators, who are more generally well-connected. I also investigate, whether the results could be driven by general changes in the Tax Code or its implementation, instead of altered enforcement activities. I find no evidence for this, however.

Overall, the results suggest that the IRS eases off politically connected firms in their enforcement of the tax code. That is, the same tax legislation applies, but is enforced more leniently against connected firms. They do so as a direct result of the connection itself – not because of other lobbying activities.

Under a causal interpretation, my estimates suggest that a company with average revenue, paying the mandatory level of income tax, can save approximately \$80,000 on their tax bill by hiring an average former legislator – but if they hire a very well-connected one, they can save around \$200,000. The firms with the largest incomes in my sample, however, can save millions of dollars in taxes. To the individual firm, these are meaningful amounts, and legislators are likely to more than make up for their pay check. For the public finances, however, these are relatively modest amounts, which might be one reason, why the behavior goes unchecked.

Besides the growing literature on the effect of the revolving door on political outcomes, my results contribute to the existing body of knowledge in three ways. First, extant research has documented large effects of employing revolving door lobbyists on the revenue of lobbying firms (Blanes i Vidal et al. 2012; McCrain forthcoming). Similarly, research on the impact of political connections among US corporations has documented large effects on firm performance on the stock market (e.g. Acemoglu et al. 2016; Do et al. 2015; Fisman et al. 2012; Goldman et al. 2009; Luechinger and Moser 2014). However, both potential clients of lobbying firms and investors in publicly listed companies are likely to be attracted to politically connected firms in the *expectation* that their connections will

attract economic rents, or that the new, politically connected employee is highly skilled. This does not necessarily imply that connected firms, who experience increased lobbying revenue or abnormal stock market returns, actually are successful in using political means to extract rents. Studying the enforcement of tax law provides one feasible solution to these problems: regulatory forbearance cannot plausibly be conflated with, e.g., the perceptions of investors, and changes in tax rates provide a direct way of quantifying the returns to gaining a political connection. Thus, I complement the existing literature by documenting substantively similar effects in a setting, where it is difficult to see how actual rent extraction can be conflated with other, more benign, reasons for the observed outcomes.

Second, I add to the literature on corporate lobbying and political influence (see De Figueiredo and Richter (2014) for a review), by showing that through hiring as few as one highly connected lobbyist, a firm can have an impact on its regulatory environment.

Third, in doing so, I add to the research on how special interests can lobby the bureaucracy effectively (Bennedsen and Feldmann 2006; Godwin et al. 2012; Hall and Miler 2008; McKay 2011; You 2017), and especially the literature on how political connections can shape discretionary enforcement of rules against a firm (Blau et al. 2013; Fulmer and Knill 2012; Gordon and Hafer 2007, 2005; Yu and Yu 2011).

## **2 Lobbying the bureaucracy through political connections**

Lobbying the bureaucracy to have rules changed (Godwin et al. 2012) or to alter the implementation of a bill (You 2017) can be extremely lucrative for the politically active firm. However, changing how regulatory agencies apply their discretionary enforcement activities to one firm in particular yields a fully private good for that firm (Gordon and Hafer 2007, 2005). This could, for instance, be done by lobbying the IRS to pay lower tax rates – which is this paper’s focus.

For a corporation that seeks to change discretionary bureaucratic decisions through political activities, hiring a former Member of Congress (MC) may help their endeavor in two ways. First, a prominent strategy among interest groups seeking to change bureaucratic rules or decisions is to enlist sympathetic legislators to pressure the bureaucracy on their behalf (Hall and Miler 2008). Since legislators can use congressional oversight measures to make life hard for agencies the average MC can play a large role in shaping bureaucratic decisions (Ritchie and You 2017). However, lobbying Congress to pressure particular agencies can be difficult, if there are no sympathetic MCs to enlist (Hall and Deardorff 2006; Hall and Miler 2008). While it is easy to see how interest groups can

find legislators, who are sympathetic to their cause, when they sound fire alarms over agency decisions that adversely affect their constituents, are wrong, or simply in conflict with an MCs worldview, firms often undertake political endeavors with the goal of seeking out rents for themselves (Olson 1982; Stigler 1971). Decreasing the tax rate of one particular company is an example of a very private benefit – one that is less likely to encourage sympathy among legislators. In that sense, seeking out rents by lobbying to change bureaucratic decisions (e.g. through decreased tax rates) is similar to sounding the fire alarm, when there is no fire. In that situation, hiring a revolving door legislator can serve as a way in. Because of their connections in Congress, former legislators are unlikely to be turned away, when they reach out to their former colleagues, who currently serve. In this way, they might be able to draw upon these contacts to put pressure on the bureaucracy.

Second, hiring a former MC could serve as a signal of the firm’s political muscle and willingness to dispute the agency’s decisions (Gordon and Hafer 2007, 2005). In this case, it would be especially effective if the firm employed a former MC, with whom the agency has a history. Odds are that a former legislator, who has made herself known to the agency throughout her career by repeatedly contacting it, disputing its decisions and zealously fighting to protect the interests of her constituents, will work that way as a lobbyist as well. The agency knows that the former MC – through her contacts in Congress – could force them to justify every decision that adversely affects her employer, or in the extreme case have an impact on the agency’s budget. This makes the agency likely to shy away from conflict with the employer of the revolving door MC by accommodating the firm’s preferences in advance, without any contact being initiated.

In the case of corporate taxation, the politically connected firm could use either of these mechanisms to pressure the IRS to bend the rules in their favor. A connected company could use this to file tax returns at the edge of legality – or even fraudulent ones. If the tax authorities believe that a fight with the connected company will be too costly compared to the extent of the violation – either because they anticipate a reaction from the revolving door MC, or because they are pressured by her former colleagues – they are likely to let the violation slip. This is consistent with the broader literature, where it has been found that connections can decrease the probability that fraudulent firms are caught (Yu and Yu 2011) and lower the severity of the punishment, when they actually are caught (Fulmer and Knill 2012). We suggest that the reason for this is that the agency in question fears the potential backlash from legal action against a politically connected firm.

Against this background, we would expect that hiring a former MC lowers corporate tax rates. Furthermore, we would expect the best connected (defined in a later section)

former legislators to bring about the largest decrease – either because they are able to scare away the IRS, or because they get their former colleagues to pressure the agency directly.

### 3 Methods & Data

The main independent variable is a binary indicator for the year a company hires a former Member of Congress in any capacity. To code this measure, I relied on a variety of sources. Center for Responsive Politics maintains a database of former politicians and which jobs they are hired in – most often however, they do not keep track on positions on corporate boards. To obtain this data, I use Relationship Science (RS), which is a private company, that keeps track on the careers of high level American executives, including former MCs. Whenever there were missing years in a former MCs career, I supplemented RS by using 10-K filings and Bloomberg CVs. Finally, to verify each employment record, I searched online for press releases announcing when MCs were hired by a specific firm. Combined, this should give reliable data on full time positions (such as in-house lobbyist), but also part-time positions such as board memberships – both as Directors and Advisors. Because data on employment termination is mostly missing, I only use the first year a former MC was employed in a company.

The sample covers all publicly listed companies that hired former Members of Congress in the period 2004-2015. In total, I track 264 companies and 89 revolving door MCs throughout the period. We obtained corporate financial data through Datastream – the Thompson Reuters database on publicly listed firms.

My main dependent variable, Tax Rate, is the fraction  $\frac{IncomeTaxes}{Pre-taxIncome}$ .<sup>2</sup> Because most revolving door MCs are hired sometime during the year, where tax rates are set, I expect that the tax decrease to set in with a lag. Therefore, I put a one year lead on the dependent variable, so it captures Tax Rate the year after a given company has hired a former politician.

Furthermore, I use the natural log of Tax Rate. This allows the effect to differ depending on how much a given company pay in taxes. In addition, there are a number of extreme observations on the Tax Rate variable. These are given less weight, when the natural log is used, but to make sure my estimates are not artificially inflated, I discard the top and bottom 2.5 pct. in the distribution of Tax Rate. In a later section, I document that excluding these observations decreases my point estimates by approximately 50 percent

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<sup>2</sup>Datastream proposes to measure Tax Rate in this way. Richter et al. (2009) suggests using effective tax rates instead, which can be measured by the fraction  $\frac{Income\ Taxes - Deferred\ Taxes}{Pre-tax\ Income - Equity\ in\ Earnings + Special\ Items + Interest\ Expenses}$ . Seeing as data on the additional variables is missing for a very large subset of my sample, I use the simpler measure.

across all main specifications.

To control for a company's size and assets, I include the natural log of the total dollar value of its combined assets and capital as well as its enterprise value. We also control for the number of employees. To capture the company's operating performance, I include logged revenue and gross income, both measured in US dollars. Finally, I include the turnover of the company's stock, as well as its stock-market value and share price. This is to capture potential effects of increased stock market attention. Because some of the financial variables can be very substantially negative, they are rescaled to range between 1 and 2, before being log transformed. Results are, however, robust to not using log scales and to adding a constant to bring variables above zero. The data for all of these variables is gathered from Datastream.

In a number of auxiliary analysis, I use a measure of the former legislator's degree of connectedness. I follow Fowler (2006a,b) and use the legislator's centrality in the cosponsorship network of Congress to capture this. First construct a directed network of cosponsorship for each Congress in both the Senate and the House for the period 1992-2015, where the directed connection between each pair of MCs increases in strength every time one cosponsors a bill proposed by the other. Cosponsoring a bill can be seen as a social act of support for the original sponsor, a tie which grows in strength for each act of cosponsorship. Since an MC does not actually have to meet or have lasting relationships with their cosponsors, however, these ties send a noisy signal of their connectedness. In an attempt to make the measure less noisy, I (again, following Fowler (2006a)) weight each act of cosponsorship by the total number of cosponsors on that bill. Combining these two sources of information (the total number of ties between two MCs, and how many other cosponsors a bill had) should provide me with a reasonable measure of the strength of the connection between each pair of MCs within both chambers. After the networks are constructed, I compute each MC's Congress-specific betweenness score, which measures the extent to which each MC has been able to garner support from cosponsors from different blocs in the network. To ease interpretation, I standardize the betweenness score in each Congress, and average over each MC's tenure. Thus, a positive score indicates that the revolving door MC on average scored above the Congress-specific mean throughout her tenure.

In a later section, I use data on lobbying activities made public under the Lobbying Disclosure Act (LDA) and made accessible by the Center for Responsive Politics.

Firms that have hired former MCs in the period are generally very profitable and profits have grown considerably throughout the period of investigation. Thus, while the average profits calculated over the entire period is \$33 million, this figure has evolved from \$29 million in 2007 to almost \$43 million in 2015. Many of the firms also engage

in more traditional forms of political activity – the probability of engaging in lobbying in any given year is 36 percent. 60 percent of the firms lobbied all years in the period, while only 12 percent never lobbied or only did so once. Among the firms engaged in lobbying, there was a 3 percent probability of lobbying the IRS directly. Conditional on engaging in lobbying, the average yearly expenditure is \$2.6 million, while contracts mentioning the IRS as a target of lobbying endeavors are on average worth \$2.7 million. The most profitable firms are also more likely to engage in lobbying – the Pearson correlation between firm profits and the probability of engaging in lobbying, lobbying expenditure and the probability of lobbying the IRS is, respectively, .21, .29 and .1. These three correlations are all statistically significant at the 1 percent level. I provide descriptive statistics on all variables in the appendix.

### 3.1 The empirical specification

To estimate the effect of hiring revolving door politicians on corporate taxation, I consider the following autoregressive distributed lags (ADL) specification within a two-way fixed effects (difference-in-difference) framework:

$$\ln TR_{c,t+1} = \omega \cdot \ln TR_{ct} + \delta_1 \cdot R_{ct} + \delta_2 \cdot R_{c,t-1} + \beta_1 \cdot X_{c,t-1} + \beta_2 \cdot X_{ct} + \gamma_c + \phi_t + \epsilon_{c,t+1},$$

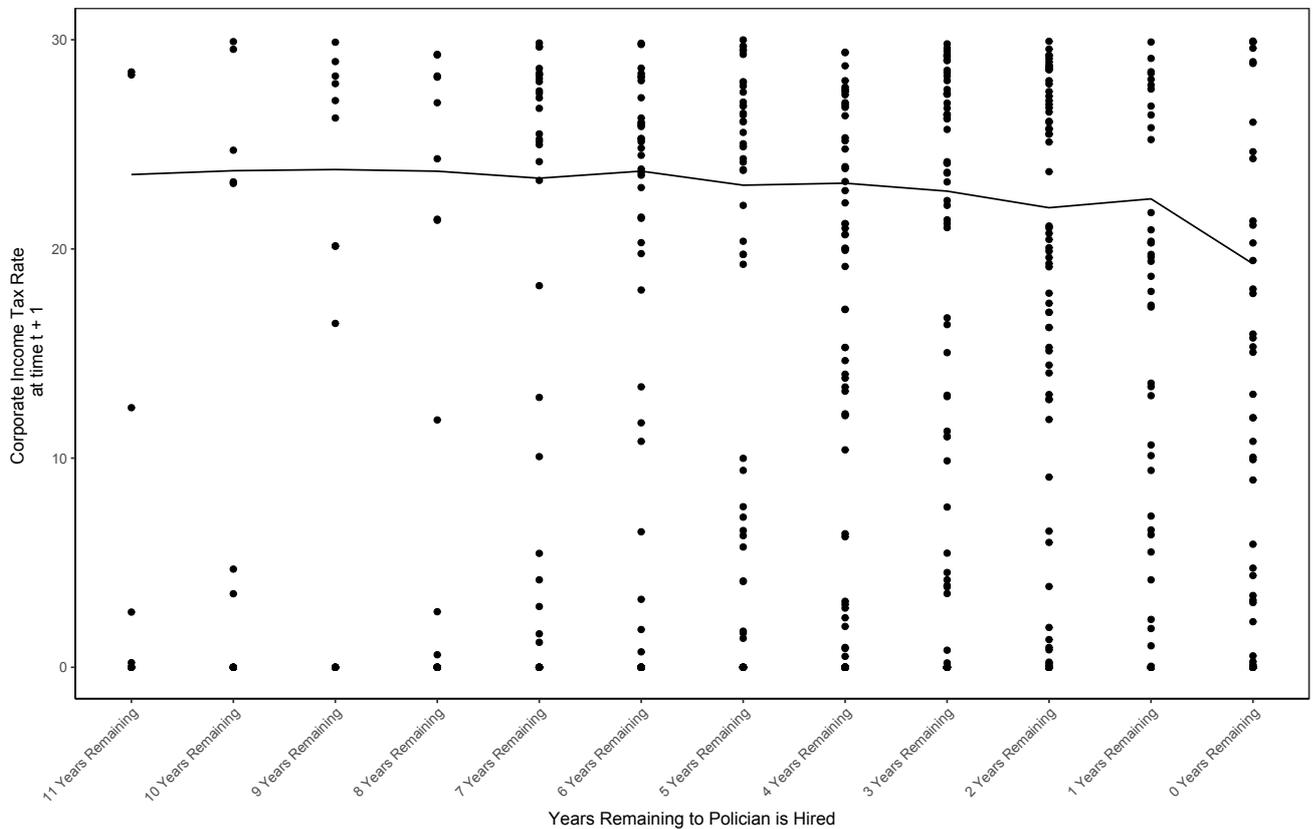
where TR is the tax rate paid by firm  $c$ . We include Tax Rate both as my outcome of interest with a one year lead, and as independent variable without a lead. This controls for potential mean reversion in the evolution of tax rate. We run the risk of instilling the Nickell (1981) bias with this specification, but the large number of time periods in the sample should mitigate this concern. Additionally, all results hold without including the lagged dependent variable.  $R$  is an indicator capturing the first year a politician works for the company, and  $\delta_1$  is the main coefficient of interest. The inclusion of fixed effects and the lag of  $R$  allows us to interpret the main coefficient as the change since the prior year relative to average changes. Therefore, if the coefficient on the lag is of insignificant size, while the main coefficient is large, it indicates that a change in tax rate happens abruptly after the legislator is hired by the firm, and that the change since the prior year is large relative to the average changes across time. It should be noted that by adding lags of the independent variables, I risk instilling post-treatment bias (Blackwell and Glynn 2013). All results hold without lags, however.

$X$  is a vector of controls, which are included with and without lags. The two fixed effects are denoted by  $\gamma$ , a company fixed effect, and  $\phi$ , a set of year effects. We have run models including fixed effects for the legislator as well, which does not change the

statistical or economic significance of the results. We leave them out in the main models, because very few companies have had the same politician employed. Thus, the revolver fixed effect would be estimated using only a handful of individuals.  $\epsilon$  is the idiosyncratic error term. Uncertainty estimates in the main models are obtained using Beck and Katz (1995) panel corrected standard errors.

## 4 Baseline Results

Figure 1 plots pooled corporate tax rates at  $t + 1$  in the years leading up to the hiring of a former MC. This allows us to take a look at the patterns in the raw data, before log transforming and modeling Tax Rate. The fitted line is estimated using a lowess smoother indicating the expected tax rate across companies within each time period.



**Figure 1: Corporate Tax Rate and Time Until Revolving Door Hire.**

*Note: Lowess smoother is estimated on pooled observations with 2.5 pct. trimmed means. Y axis is censored for presentational purposes.*

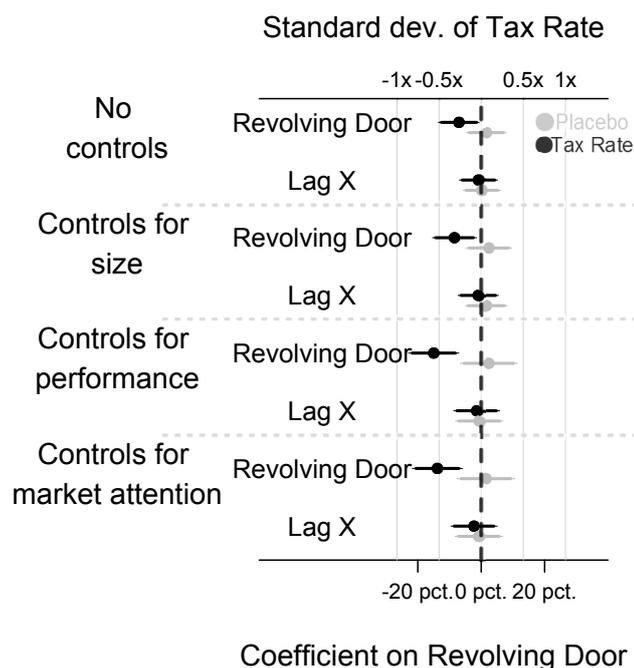
As we can see, the tax rate across companies is relatively stable throughout time with a slightly decreasing trend. What is striking is the sudden and sharp decrease in tax rates the year after a former MC is hired. A pooled OLS regression suggests that companies that hire a revolving door politician pay approximately 5 percentage points lower taxes

than other firms the year following the hire. This provides an initial look at the pattern in the data.

In Figure 2, I present a range of twoway fixed effects ADL specifications. All results hold if the lagged variables are excluded. The first specification is the simple association between hiring a former MC and corporate tax rate the year after with twoway fixed effects and lagged dependent and independent variables. The coefficient suggests that hiring a revolving door lobbyist decreases tax rate by 7 pct. The top axis shows that this amounts to approximately 20 pct. of a standard deviation. Thus, the estimate is economically meaningful, but also noisy and marginally significant at the five pct. level. There is good reason to believe, however, that the association could be suppressed by other firm-level characteristics.

Very wealthy companies are more likely to be able to afford hiring former politicians, and because tax rates vary according to assets, this is likely to bias my initial estimate. Therefore, the second specification includes controls for the number of employees, enterprise value as well as total assets and capital controlled by the company. The coefficient on Revolving Door increases slightly and remains statistically significant at the five pct. level. The firms that perform best on the market will be able to hire former politicians and pay more in taxes. Thus, the following model includes controls for operating performance as measured by net revenue and gross income. This more than doubles the coefficient on Revolving Door. The estimate suggests that hiring a former legislator could decrease the average firm's tax rate by 12 pct. – corresponding to almost half of the typical within-company change during this period. We can reject the null at the 1 pct. level, indicating that this result is unlikely to be driven by noise. Finally, companies that hire former politicians are likely to receive a lot more attention on the stock market from traders, who expect that the new hire will usher in a more profitable period for the company's investors. If such a surge in attention translates into more investment, this may impact the tax rate. To control for this, I include three measures of stock market attention: traded volume, share prices and market value. Besides stressing the correlation, this further discards a number of observations, but the coefficient on Revolving Door is virtually unchanged and remains statistically significant.

The key identifying assumption behind my twoway fixed effects (difference-in-difference) design is that tax rate would have evolved similarly among treated and untreated firms, if the treated firms had not hired a former legislator. This parallel paths assumption is by definition untestable, but a violation is likely to produce differences in tax rates, before the politician is hired, and I can test whether the decision to hire revolving door personnel is correlated with the prior trend in Tax Rate. If, for instance, the companies, who employ former MCs, were already riding a downward trend in their tax payments, it



**Figure 2: The revolving door and corporate tax rates.**

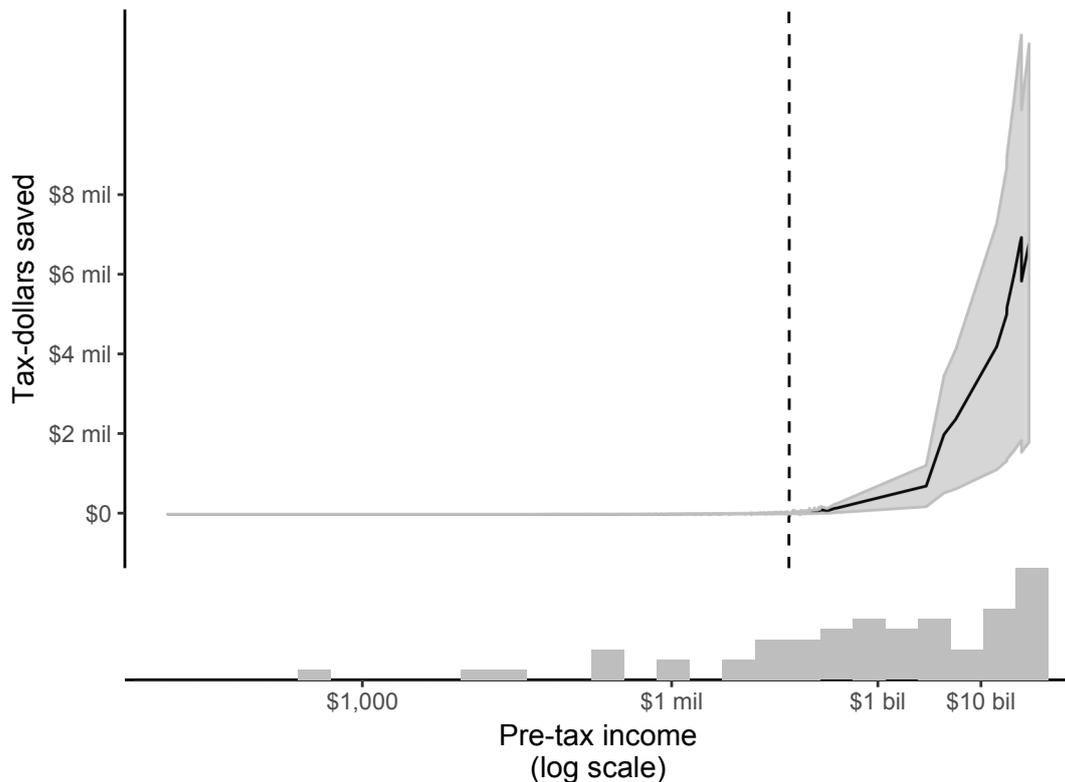
*Note: The dependent variable in the primary models is the natural log of the firm's tax rate with a one year lead. Dependent variable in the placebo models, is the one-year lag of corporate tax rate. Top and bottom 2.5 pct. in the distribution of Tax Rate excluded. The specification is a two-way fixed effects autoregressive model with distributed lags on the covariates. The shown coefficients are on the dummy for hiring a former MC and its lag. The controls described in row labels are added incrementally. Light gray dashed lines separate specifications. Bottom axis shows unstandardized OLS coefficients. To gauge effect sizes, top axis shows the standard deviation of the within transformed logged tax rate. Confidence intervals are 95 pct. (thin lines) and 90 pct. (thick lines), computed using Beck-Katz panel corrected standard errors.*

would indicate a selection effect that would yield biased estimates. I provide two tests of this. First, I show the coefficient on the lagged version of the revolving door variable. If there is an effect of the lag after conditioning the main revolving door variable, it would show that the change in tax rate does not happen abruptly, after the revolver is hired, but was a long time coming. It should be noted, that this estimate is likely to be tainted by post-treatment bias. The fact that it is very small in size, however, does provide an indication that there is not pre-treatment trend. Because of the risk of post-treatment bias in this result, I also estimate a number placebo models with lagged tax rate as the dependent variable in specifications that are otherwise similar to the main models. In Figure 2 the results are presented in gray. In all specifications, the coefficient on hiring a former legislator in these models is diminutive – less than 1/10 of the coefficient in

the main models. It is striking, how consistently the coefficient on both the placebo and the lag of the revolving door indicator fall very close to the null. Overall, this provides reassurance that the results are not driven by pre-treatment trends.

To further gauge how economically meaningful the effect is, Figure 3 presents the amount of tax dollars a firm can save by hiring a former MC. Estimates are predictions from the fourth specification in Figure 3. For the average firm, the tax saving is meaningful, but not extravagant – approximately \$80,000. The amount that is saved quickly increases, however, and while there is very considerable uncertainty associated with the estimate for the very largest firms, the evidence suggests that their savings amount to several million dollars. It should be noted that the income distribution among the firms in my sample is highly left-skewed, indicating that most firms have above-average incomes.

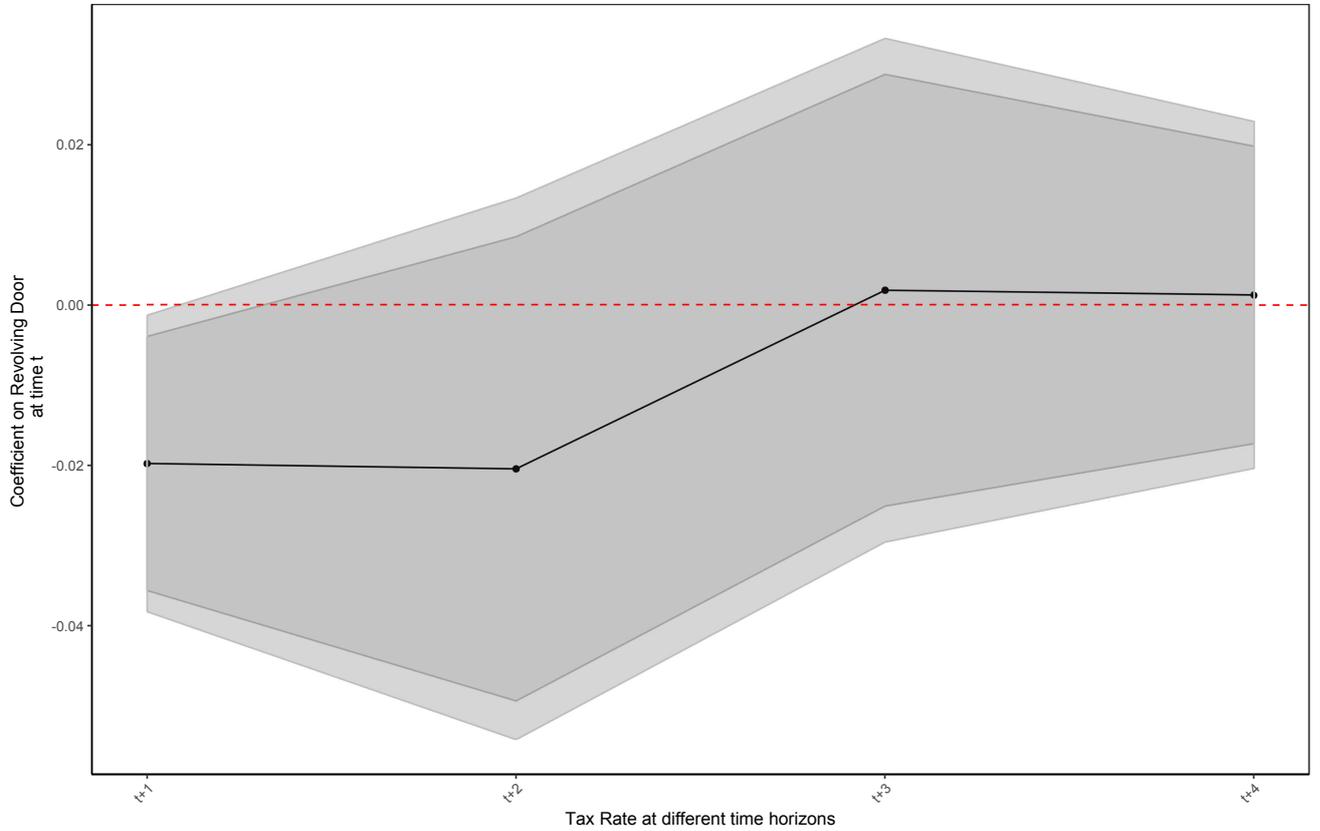
While this indicates that hiring a former legislator can be very lucrative in the short run for a firm, the cost to the public finances is quite modest – especially, because the effect is short-lived (as we will see in the following section) and firms do not hire politicians all the time.



**Figure 3: How much money can be saved?**

*Note: Tax-dollars saved predicted from the model presented in fourth specification in Figure 2, with controls held at their means. Dashed vertical line a the mean level of pre-tax income. Shaded gray areas are 95 pct. Beck-Katz robust confidence intervals.*

In Figure 4, I investigate how persistent the decrease in Tax Rate is. The first specification is the same as presented in the final row of Figure 2. The following specifications shows the effect of hiring a revolving door MC on Tax Rate two, three and four years after the employment begins respectively.

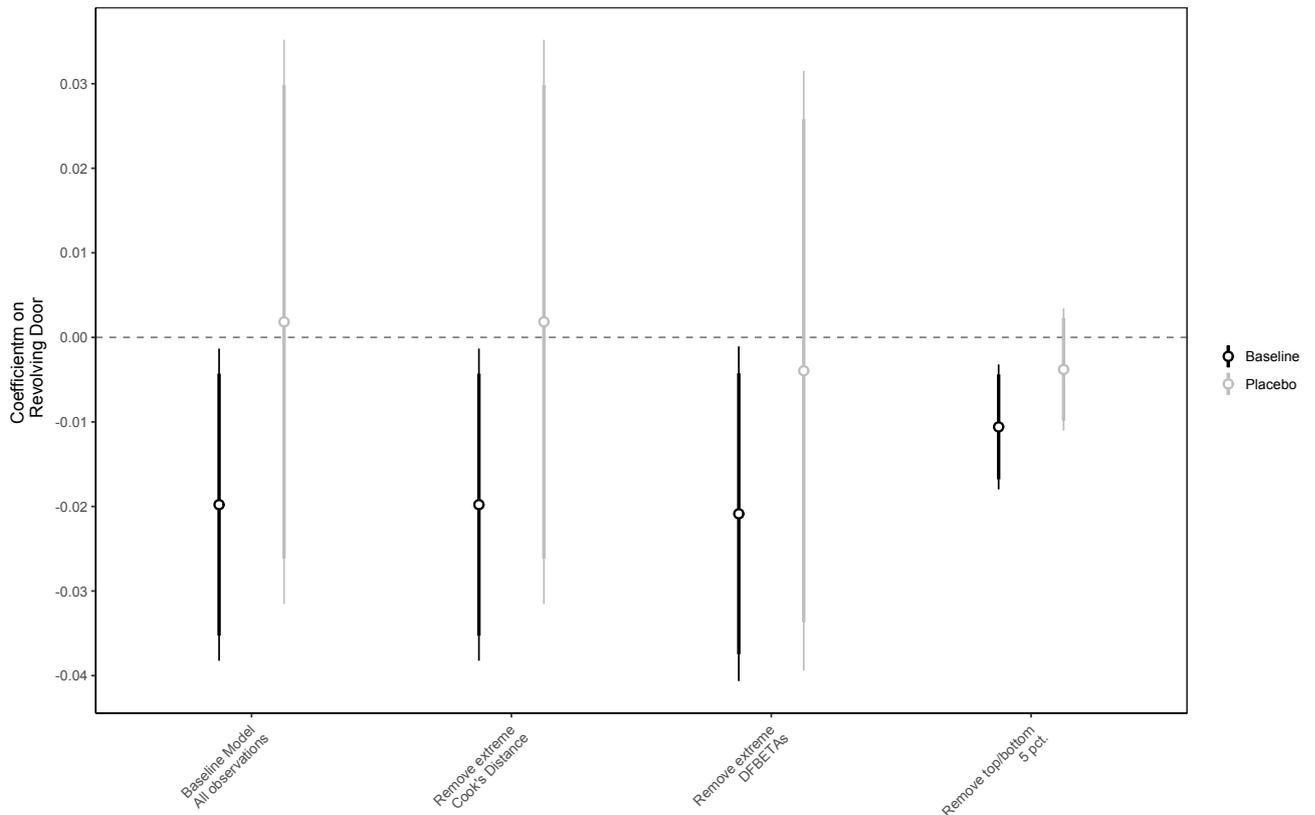


**Figure 4: Effect of Political Connections on Tax Rate for different time horizons.** Baseline model ( $t+1$ ) is identical to row 4 of Figure 2. Dependent variable is Tax Rate (logged). Each specification increases the time horizon by one year. Dark and light gray shaded areas represent 90 and 95 pct. confidence intervals, respectively, calculated using panel corrected standard errors.

The point estimate increases slightly two years after the MC is hired. Probably because an entire cross section is excluded, however, the effect is no longer statistically significant at conventional levels. When the time horizon increases to three and four years after the MC is hired, the effect quickly drops to being indistinguishable from zero in both substantive and statistical terms. This indicates that the decrease in Tax Rate experienced by companies that hire former politicians is sizable, but relatively short-lived – probably two years.

## 4.1 Robustness to outlying observations

As remarked upon previously, there are a number of extreme values on the dependent variable. In the main specifications, their influence on the parameters of interest was limited by excluding the observations paying the 2.5 percent highest and lowest tax rate. This generally has the effect of decreasing the main coefficient by 50 pct compared to models including all observations. However, there are a number of different ways to deal with this problem. In Figure 5, I show that the results are robust to various ways of dealing with outliers. I also present the results from placebo models similar to the ones shown in Figure 2.



**Figure 5: Sensitivity to Outlying firms.** Each set of models exclude observations that are influential by some metric. Cook's  $D$  threshold of  $4 * \bar{D}$  excludes 8 observations. No observations exceeded the standard threshold for  $DFBETA$  ( $2/\sqrt{n}$ ), so the 8 observations with highest scores were excluded. Dependent variable in baseline specifications is Tax Rate (logged) the year after hiring a politician. Dependent variable in placebo models is the Tax Rate (logged) the year prior to hiring a politician. Thick and thin lines represent 90 and 95 pct. confidence intervals, respectively, calculated using robust standard errors clustered at the firm level.

In the first model, I show the results from including all observations. As mentioned previously, this approximately doubles the coefficient. Next, I exclude the eight observations with Cook's Distance values above  $4 * \bar{D}$  – the standard, if arbitrary, threshold. The

changes to my estimate, compared to including all observations, are negligible. In the third column, I use DFBETA to exclude influential observations. Since no observations exceed standard thresholds, I exclude the eight observations with the highest values, since this was the number of extreme values identified by the Cook’s D metric. Both the point estimate and the standard error increases slightly, compared to when I include all observations, but the coefficient remains significant both in practical and statistical terms. Finally, I trim away the companies that pay the five percent highest and lowest tax rates, respectively. Compared to the model including all observations, this decreases the coefficient somewhat. Seeing as the estimate gets substantially less noisy as well, the coefficient remains highly significant in statistical terms. It is approximately the same size as the baseline estimate shown in Figure 2, where I only trim away the top and bottom 2.5 pct. Looking across specifications, the coefficient of interest in the placebo model is always very close to zero and statistically insignificant at conventional levels.

Overall, this provides reassurance that the results are not driven by influential observations.

## **5 The Mechanism: Political Connections and Regulatory Forbearance**

There are two main turning points in the argument, I present. First, the decrease in corporate tax rates should come about, because the IRS carries out its discretionary enforcement activities in a less strict fashion against politically connected firms – not because of more general changes in rules, which could apply to a number of firms. Second, hiring a former legislator is but one non-market strategy a firm could follow to gain decreased taxes. The decrease in corporate tax rates should be driven by the connectedness of the former legislator – not other changes in corporate political strategy that accompany the hiring of a revolver.

In this section, I show that firms that hire former MCs are less likely to be audited, and the decrease in corporate tax rates is driven by the best connected legislators. Additionally, I provide evidence that the patterns uncovered here are not driven by general changes to the Tax Code.

### **5.1 Political Connections and IRS Auditing Activity**

The main proposed mechanism in the argument is that hiring former MCs should lead agencies – including the IRS – to enforce rules more leniently against the company. To capture how strictly the IRS carries out its enforcement activities against any particular

firm, I code a binary indicator capturing whether an audit of the company's accounts was initiated in each year. To do this, I have coded the sections of all 10-K reports that explain tax matters and interactions with the IRS to the shareholders of the companies. This captures two important aspects of the IRS's enforcement activities: First, being audited may directly impact a firm's tax rate. During an audit, the IRS investigates whether the tax benefits claimed by a firm actually maps onto its expenses. If, for instance, a tax benefit is claimed for an expense that is not liable for one, this may result in both fines and additional taxes. If a company's accounts go unaudited – and the firm knows it – it may even choose to engage directly in tax fraud. In the aftermath of an audit, the IRS makes decisions regarding the company's claims of unrecognized tax benefits. There is a statute of limitations on these decisions, however, and if a company's accounts are not audited and the claim of an unrecognized benefit investigated within five years, the claim is automatically validated. Thus, avoiding an audit or pushing it into the future can significantly impact a firm's tax rates. Second, the IRS's decision about whether or not to audit a company's finances is the one that initiates an investigation. To the extent that the decision about whether or not to initiate an audit proxies the lenience of the IRS enforcement, it stands to reason that – if a company is audited – the administrative decision subsequent to the audit would be more lenient as well. **Note to the reader: I am only about halfway through coding this, so I do not have all the data yet!**

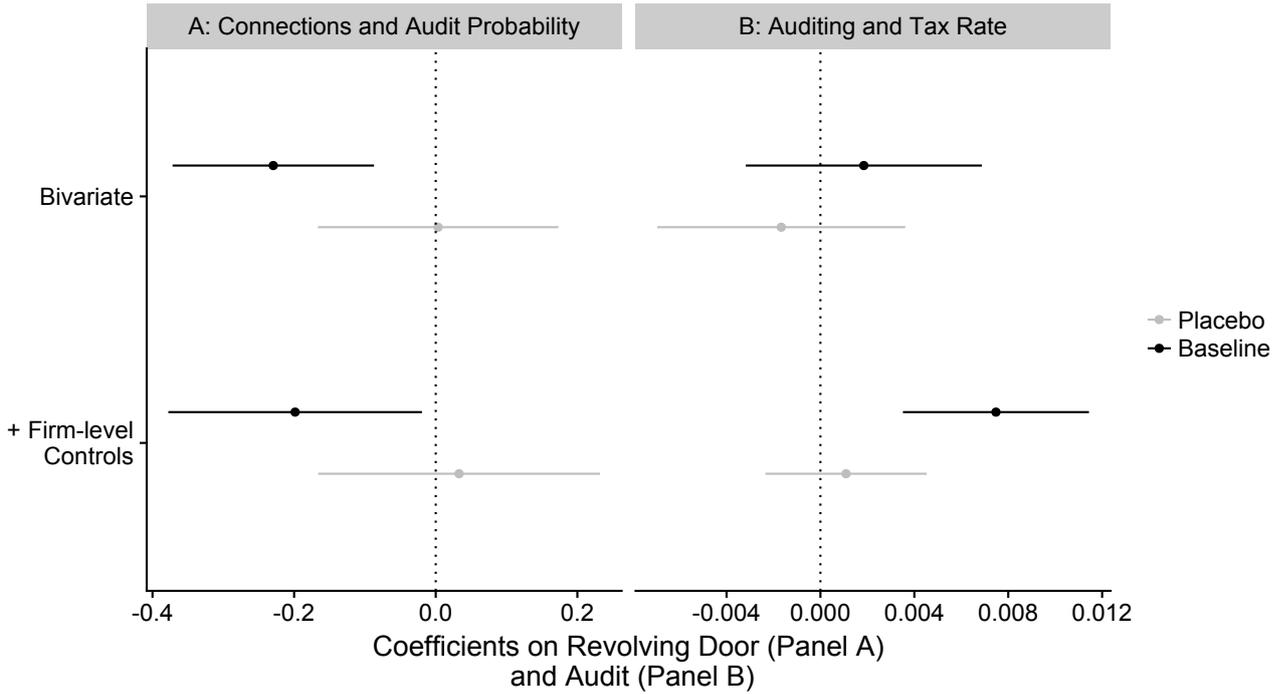
I use these data to investigate two questions: first, whether firms that hire former MCs are audited less frequently than others, and second, whether firms that are audited pay more taxes than other firms.

Figure 6 shows the results with and without controls. Panel A shows the association between hiring former MCs and the probability of being audited, while Panel B shows the relationship between audits and the company's tax rate. The figure also includes placebo models, where the dependent variables are lagged by one year.

From Panel A, we can clearly see that politically connected firms are less likely to be audited. The year after a company hires a former MC, the IRS is between 19 and 22 percent (depending on whether or not controls are added) less likely to initiate an audit of their finances. From Panel B, the results indicate that – after controls are added – audited firms pay more taxes. I estimate that firms pay almost one percent more in taxes during the year of an audit. Additionally, it is important to note that coefficients in the placebo models are all very small and indistinguishable from zero, statistically speaking.

### 5.1.1 Political Connections and the Tax Code

Previous research by Richter et al. (2009) suggests that companies can bring down their tax rates by lobbying for changes in the Tax Code, which grants them lucrative depreci-



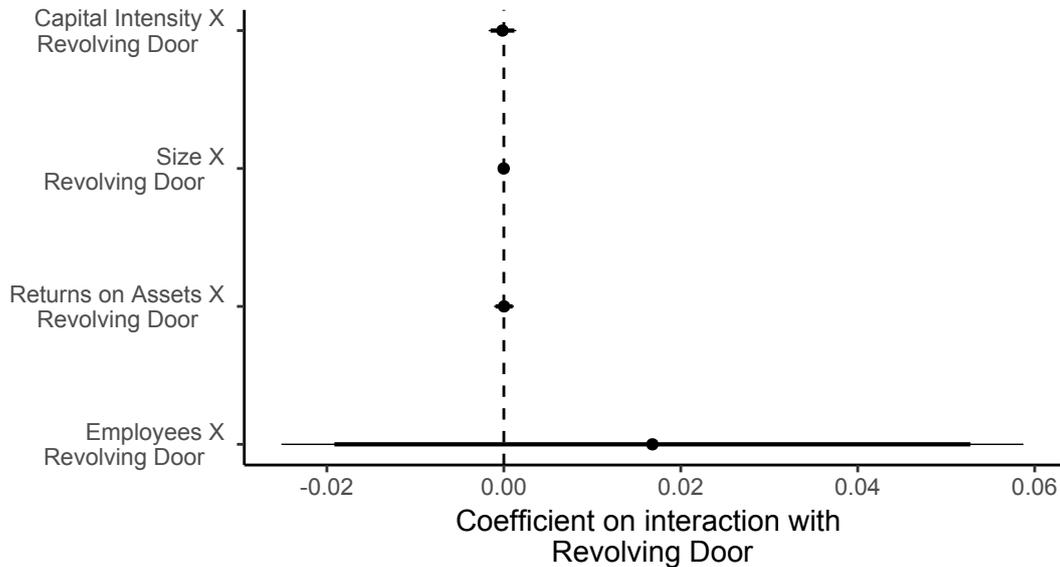
**Figure 6: Political Connections and IRS Audits.**

*Note: Panel A shows the relationship between hiring a former MC and the firm’s likelihood of being audited (with a one-year lead). Panel B shows the association between being audited and tax rates. Twoway fixed effects are included in all models, and the lag of Tax Rate is included in the models in Panel B. The placebo results model the one-year lag of the dependent variable. Lines are 95 percent confidence intervals based on Arellano-White standard errors with clustering at the firm-level (Panel A), and Panel Corrected Beck-Katz standard errors (Panel B).*

ation schedules that are tailored specifically to their portfolio. If this is the mechanism that connects hiring revolvers to decreases in tax rates – and not only direct lobbying activities – it would in part invalidate my results.

To test whether general rule changes rewarding specific types of asset holdings can account for the effect, I follow Richter et al. (2009) and interact the indicator for hiring a revolving door MC with a number of firm-level characteristics capturing common types of assets, which depreciations schedules could be aimed at. Changes in the Tax Code are extremely difficult to observe, and even harder to attribute to a company’s political activities. The strength of the Richter et al. (2009) approach is that it allows us to use the outcome of enforcement to assess whether firms with similar asset portfolios drive the effect of hiring former MCs. I use capital intensity (the ratio of fixed to total assets), size (total assets) and returns on assets (the ratio of pre-tax income to total assets). The only statistically significant moderator used by Richter et al. (2009), which I do not investigate, is R&D intensity, since I could not acquire data on it. I also add the number of employees as a moderator. If politically connected firms are able to get decision makers to implement changes to the tax code that would benefit firms with their portfolio of assets, I would

expect negative and statistically significant interaction terms (Richter et al. 2009). Figure 7 shows the coefficients on the interaction terms.



**Figure 7: Portfolio of assets does not drive the effect.**

*Note: The dependent variable is Tax Rate (logged). All moderating firm characteristics are logged. Coefficients show the estimated interaction between a firm characteristic and the revolving door dummy. Each interaction is estimated in a separate model. Lines are 95 pct. (thin) and 90 pct. (thick) confidence intervals, computed using panel corrected standard errors. Lagged versions of tax rate and the revolving door dummy included as covariates.*

As we can see, none of the interaction terms are statistically significant. In addition, the first three are very small – less than 1/10 of the baseline effect presented in Figure 2. The coefficient on the interaction between the revolving door dummy and the number of employees is substantively meaningful, but has the wrong sign. Additionally, it is very noisy and statistically insignificant.

It is obviously impossible to investigate all asset types, which depreciation schedules could be aimed at, and – as noted – it is very difficult to attribute changes in the Tax Code to the activities of individual firms. As an alternative, I investigate whether access to rule-makers drive the effect. Firms might use their political connections to get a chance to give testimony in Congressional committees. Recent research has shown that, for instance, text from letters from interest groups finds its way into legislation (e.g. McKay (2018)), indicating that firms could influence the content of the Tax Code in this way. If firms that hire former MCs are invited to give testimony in the committees that are responsible for tax legislation, it could suggest that the firm may have an impact on the Tax Code, which we could not observe through the analysis in Figure 7.

To investigate this, I have manually collected data from the ProQuest Congressional database on the number of times each firm has been invited to testify in hearings at

committees with oversight of the IRS. In Figure 8, I show the results. I model, respectively, the probability of giving testimony in hearings at IRS oversight committees (Panels A and C) and the (logged) number of times firms have testified (Panels B and D). In Panels A and B, I show results from an interaction between the revolving door indicator and a dummy for whether the MC served on the committees with oversight of the IRS. In Panels C and D, I interact the revolving door dummy with my general measure of legislator connectedness, which is based on the revolver’s position in the cosponsorship networks of Congress. All controls as well as two-way fixed effects are included. Because participation in hearings are very skewed, I use the non-parametric bootstrap with resampling at the firm-level to measure uncertainty around the estimates.

All estimates are small – in no case does hiring a former MC increase the probability of the company being invited to give testimony more than five percentage points – and statistically insignificant. While there is some noise in the estimates, this indicates that the companies cannot gain access to the committees responsible for the Tax Code by hiring former MCs – no matter whether they previously served on those committees or were just generally well-connected.<sup>3</sup>

## 5.2 Is Connectedness Just One of Many Non-Market Strategies?

Hiring a former MC may be one of many viable non-market strategies – most notably, directly lobbying the IRS or other decision-makers could be used alongside employing a revolving door legislator. Importantly, if direct lobbying in itself is an effective means for a firm to lower its tax rate (as is previous work suggests (Richter et al. 2009)), it would be very difficult to assess, whether the effect is driven by political connections or some other form of corporate political activity. On the other hand, if the effect is driven by certain, well-connected legislators and hiring a revolving door MC is not associated with direct lobbying, this would suggest that the effect really is driven by political connections.

In this section, I first show that the effect of gaining a connection on corporate tax rates is moderated by individual characteristics of the former legislator. Specifically, the effect is driven by the best connected MCs, who served on the committees with oversight of the IRS. Second, I present evidence that firms substitute away from direct lobbying, when they hire the most valuable revolving door legislators.

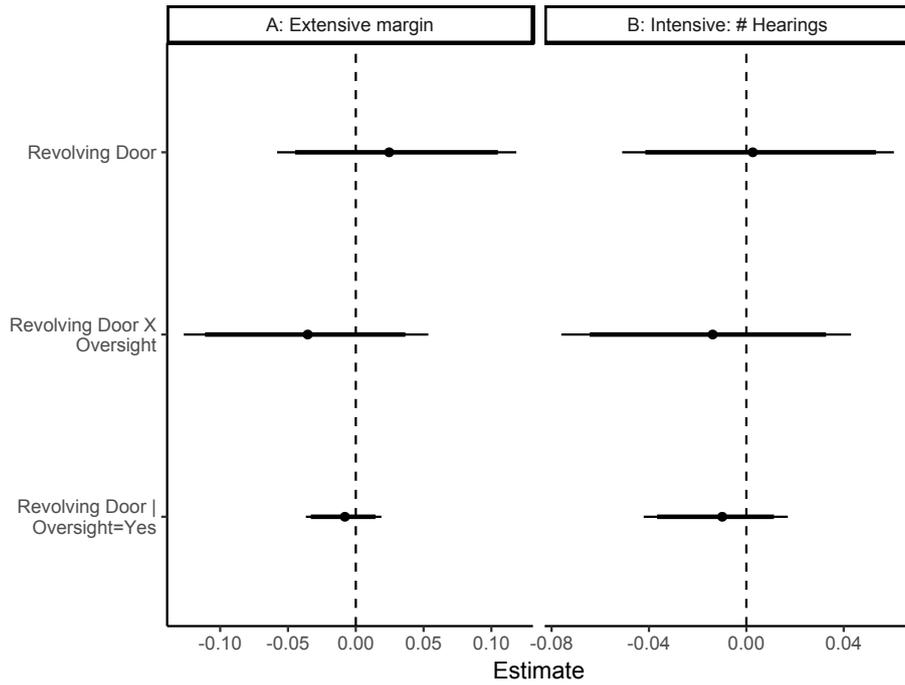
### 5.2.1 The Legislator’s Connectedness Drives the Association

First, I investigate, whether legislators who either served in committees with oversight over IRS, or who have extensive political connections more generally, drive the decrease

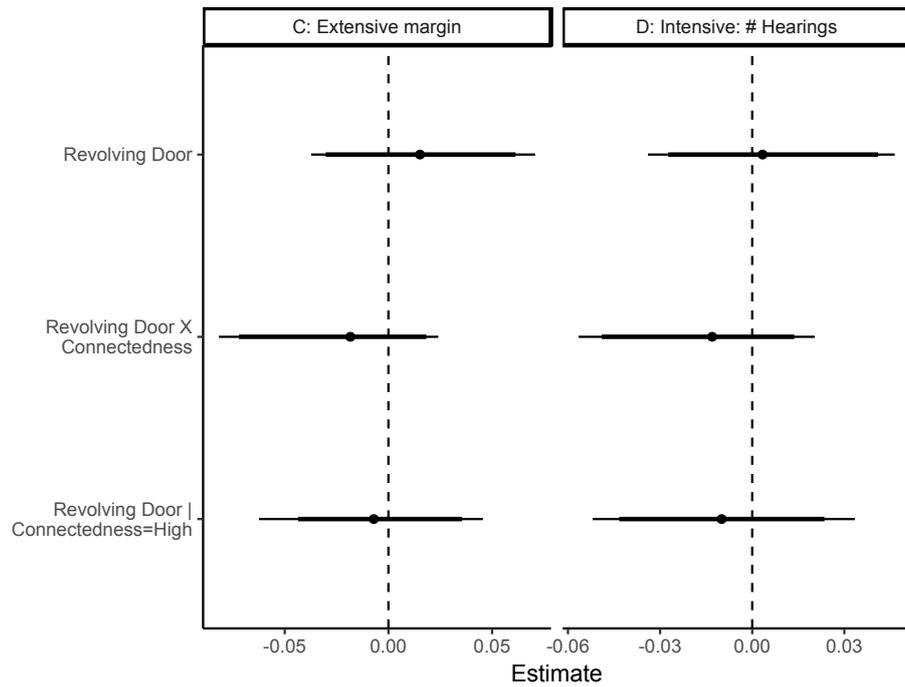
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<sup>3</sup>It should also be noted that the coefficient on Revolving Door without conditioning on the connectedness of the MC is smaller than the ones presented here.

**A and B: Former members of committees with oversight of IRS**



**C and D: Generally Well-Connected Revolvers**



**Figure 8: Hiring a Former MC and Testifying in Committees Responsible for IRS Oversight.**

*Note: Note: The dependent variable in Panels A and B is, respectively, the probability of testifying in a hearing held by one of the committees responsible for oversight of the IRS, and the (logged) number of times they testified. In Panels C and D, the dependent variable is, respectively, the probability of giving testimony at hearings held by any committee, and the (logged) number of testimonies they give. Confidence intervals are (thick) and 95 pct. (thin) lines from the relevant percentiles of a distribution of 500 non-parametric bootstraps with resampling at the firm-level. All controls as well as firm, MC, and time fixed effects are included.*

in corporate tax rate. The results are presented in Figure 9, where Panels A and B show the results from two sets of twoway interactions, while Panels C and D show a threeway interaction. Estimated interaction coefficients are printed in the top right corner of each plot.

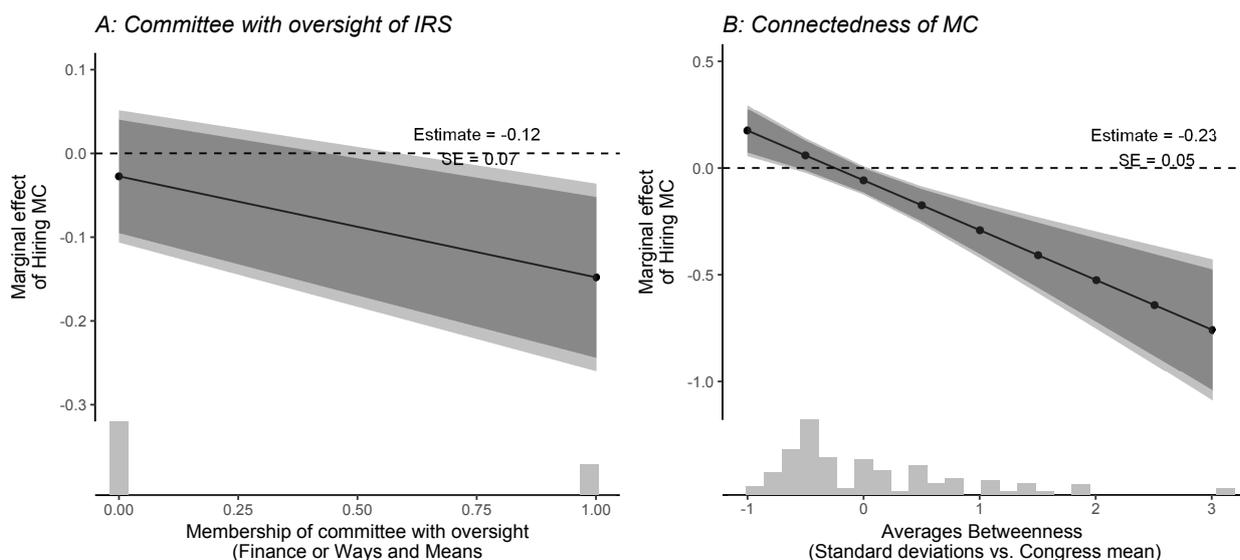
First of all, MCs, who served on committees with oversight of the IRS, are likely to have connections with currently serving members of those committees. Furthermore, they are likely to have had extensive interactions with the IRS. In Panel A, I interact my dummy for the year in which a revolving door MC was hired with an indicator for whether or not she served in the Senate Finance Committee or the Ways and Means Committee in the House. I acquired data for this through Stewart III and Woon (2017). I estimate that the decrease in tax rate is 12 percent larger, when firms hire a former member of a committee with oversight of the IRS. This interaction effect is noisy, however, and only significant – statistically speaking – at the 10 percent level.

Second, an MC, who was able to bridge gaps between important coalitions in Congress during their tenure, should be more effective in lowering corporate tax rates. First of all, they are likely to preserve their connections to currently serving MCs, and because they are connected to different coalitions in Congress, they can rally support among various blocs to pressure the IRS. Even if these assets are not used to pressure the IRS directly, hiring a well-connected MC sends a very strong message about the firm’s political muscle to the agency.

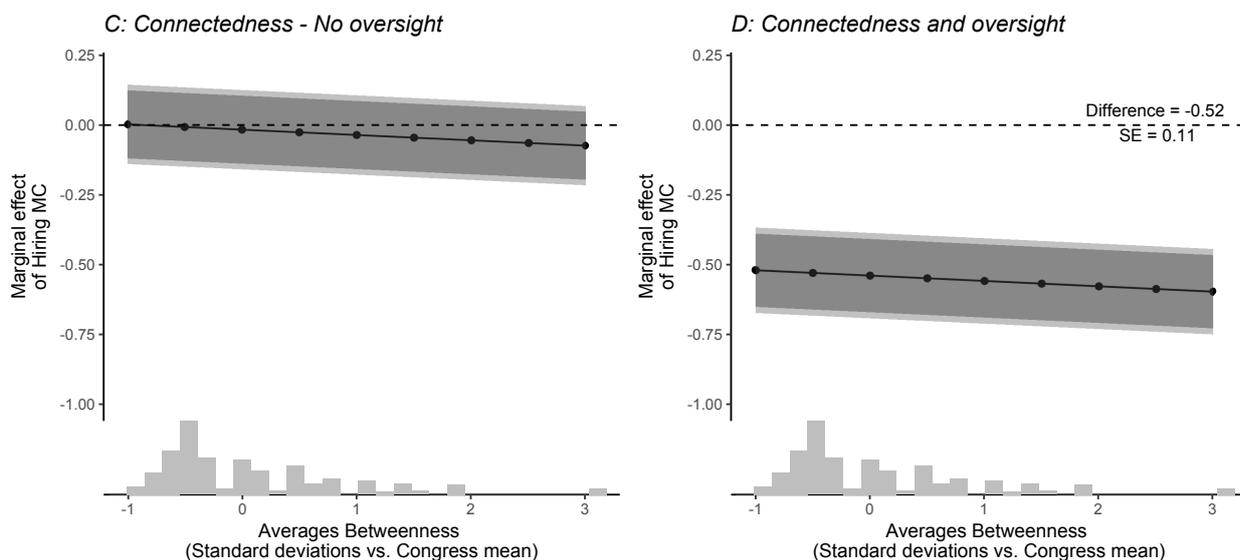
To get at this, I use my proxy of the individual MC’s political connectedness, which I measure using their average betweenness score in the cosponsorship network in Congress. In Panel B, I show the results from an interaction between this measure and the revolving door indicator. This shows that the MC’s average betweenness score strongly moderates her effect on the corporate tax rate. For each standard deviation she generally was above the Congress mean, her hiring decreases the tax rate by 1 additional percent. Looking at the marginal effect for MCs with average betweenness scores, the impact is very small and statistically insignificant. However, it increases markedly and becomes significant in statistical terms at the five pct. level, as betweenness increases in increments of one half standard deviation. It should be noted that there is one very outlying observations. In other models, which I do not present here, I have excluded it, which does not change the results substantively, in that it increases the effect very slightly.

Finally, the MCs, who are best poised to make life hard for the IRS, are the ones, who are both well connected and served on committees with oversight. Thus, either because of the strength of the signal, or because they actually make use of their connections to pressure the IRS, the largest decrease in tax rates should come, when hiring MCs, who have both these characteristics. In Panels C and D, I present the results from a threeway inter-

### A and B: Twoway interactions



### C and D: Threeway interaction



**Figure 9: Heterogeneous effects for well-connected legislators.**

*Note: The plots show the marginal effect of hiring a revolving door MC on tax rate (with a one-year lead) across different values of two moderator variables. Panels A and B show the marginal effect for MCs that did or did not serve on a committee with oversight of the IRS (Panel A), and across different levels of average betweenness centrality of the hired MC (Panel B). Panels C and D show marginal effect across different levels of betweenness centrality for MCs that did not serve on a committee with oversight (Panel C) and those who did (Panel D). The latter estimated using a threeway interaction including both moderator variables. All models include fixed effects for firm and year as well as lagged values of tax rate and hiring a revolving door MC. All terms of the interactions are included but not shown for presentational purposes. Confidence intervals are 90 pct. (dark) and 95 pct. (light shaded areas) computed using Beck-Katz panel corrected standard errors.*

action between hiring a revolving door MC, her average betweenness score and whether

she served on a committee with oversight of the IRS. The interaction is highly significant, statistically speaking, and shows that the moderating effect of hiring a well-connected MC increases by 2 pct. if that MC also served on a committee with oversight. Conversely, the additional effect of hiring an MC, who served one such a committee, increases by 2 pct. each time her betweenness improves by one standard deviation. Looking at the marginal effects, increasing betweenness adds close to no additional effect, when the MC did not also serve in an oversight committee, but adds very substantially, when she did.

It should be noted that all of the above-mentioned results also hold, when legislator fixed effects are included by themselves or in conjunction with the firm fixed effects.

These results show that the effect is strongest and almost exclusively present, when hiring the most well-connected legislators.

### 5.2.2 Connected Firms Substitute Away from Direct Lobbying

If firms use their political connections as an integral part of a lobbying campaign, this could be a key part of the mechanism linking the revolving door to decreases in tax rates. In this situation, however, it would be unclear whether we could attribute the decrease in taxes to the lobbying campaign or the revolving door MC.

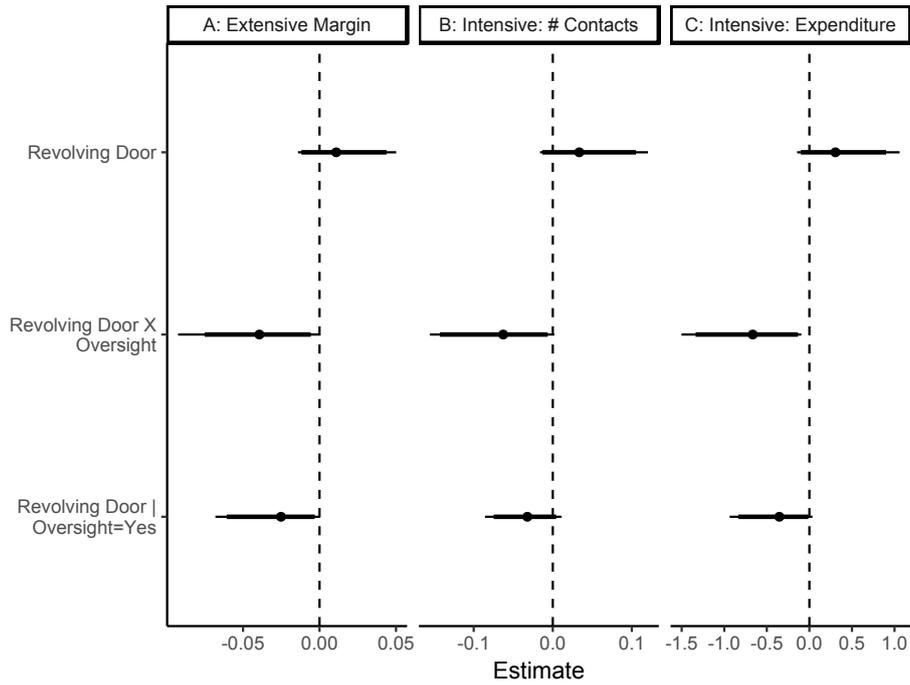
However, if hiring former MCs is a strong signal of political muscle (Gordon and Hafer 2005), it could be a substitute for direct lobbying campaigns. If political connections provide other and more efficient means of pressuring the IRS than directly contacting the agency, it stands to reason that firms would substitute away from direct lobbying, and use these alternative channels instead. Additionally, and as we have seen previously, the impact of hiring a former MC may depend on how well-connected she is.

In Figure 10, I investigate this. In Panels A, B and C I do so by interacting the revolving door indicator with a dummy for whether the former MC served on a committee with oversight of the IRS. I use three different measures of the propensity to lobby the IRS directly as outcome variables. In panel A, I investigate how hiring a former MC is related to the probability of lobbying the IRS. In Panels B and C, I investigate the intensive margin – that is how political connections are related to the (logged) number of contracts, where the IRS was lobbied, and the (logged) amount spent in those contracts.

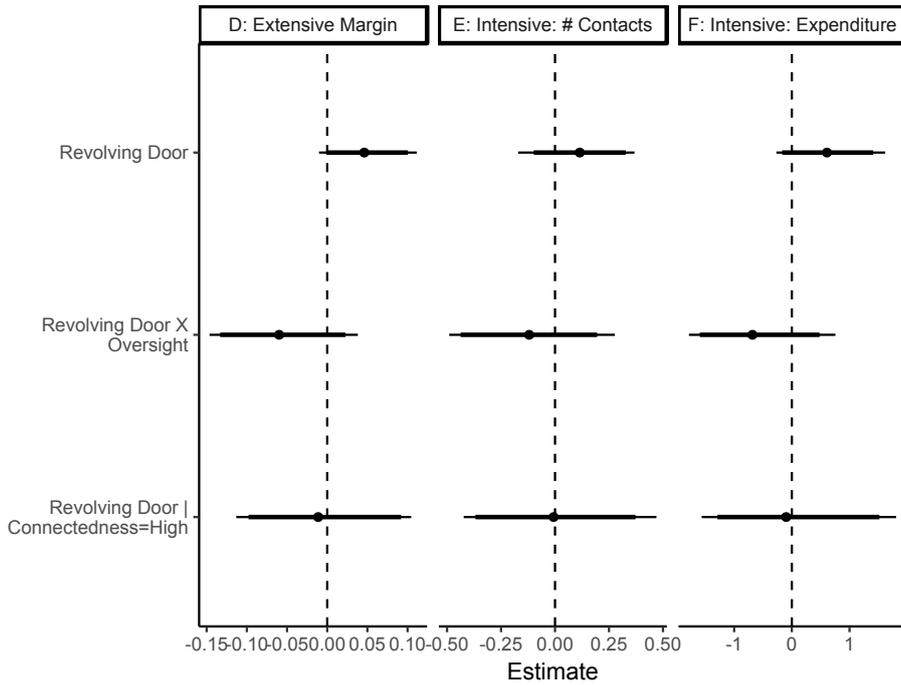
In Panels D, E and F, I interact the revolving door indicator with my measure of general legislator connectedness. Here, I look at the propensity and extent of their engagement in lobbying generally – not just aimed at the IRS. Because the outcome variables are highly skewed, I use non-parametric bootstrap with 500 resamples at the firm-level to compute uncertainty in all models presented here.

First examining the results in Panels A, B and C, we can see that across all three specifications, hiring a former member of one of the oversight committees significantly

**A, B and C: Connections and lobbying IRS**



**D, E and F: Connections and general lobbying**



**Figure 10: Hiring a former MC and directly lobbying the IRS.**

*Note: The dependent variable in Panels A, B and C is, respectively, the probability of lobbying the IRS directly, the (logged) number of lobbying contracts with the IRS as target, and the (logged) expenditure of contracts with the IRS as a target. In Panels D, E and F, the dependent variable is, respectively, the probability of lobbying in general, the (logged) number of lobbying contracts, and the (logged) lobbying expenditure. Confidence intervals are 90 pct. (thick) and 95 pct. (thin) lines from the relevant percentiles of a distribution of 500 non-parametric bootstraps with resampling at the firm-level. All controls as well as firm, MC, and time fixed effects are included.*

decreases a firm's propensity to lobby the IRS and the extent of its lobbying. Hiring a revolver is associated with a decrease of three percentage point in the probability of lobby the IRS (significant at the five percent level), a three percent decrease in the number of contracts indicating that the IRS is lobbied – an estimate which is too noisy to be statistically significant – and a decrease of just short of 50 percent in the amount of money associated with the contracts aimed a lobbying the IRS. Especially the latter decrease is very marked. Hiring former legislators, who did not serve on oversight committees, seems to be associated with an increase in the propensity to contact the IRS. The coefficients on the base term of the revolving door dummy is almost of the same size – in absolute terms – as the marginal effect of hiring a former member of IRS oversight committees. However these latter associations are noisy and not statistically significant at conventional levels, even though the estimates are sizable.

Turning to the results in Panels D, E and F, they are generally more noisy than the ones presented in the first three panels. However, since they show the same patterns, and the coefficients are quite large, the results in these latter three panels should not be disregarded. On average, I find that hiring a former legislator, who is not well-connected, is associated with an increase in the probability of engaging in direct lobbying by 3 percentage points, in the number of lobbying contracts by 12 percent, and in total lobbying expenditure by 50 percent. Among the firms hiring a highly connected legislator, however, I estimate a (noisy) null – the point estimates are very small.

Finally, in the appendix, I show that spending an additional percent on lobbying the IRS is associated with a 0.5 percent decrease in taxes a firm pays. This confirms that the results in Richter et al. (2009) hold even among the very particular subset of firms and the period of time, I investigate here.

In sum, the results presented in this section provides, first, a positive indication that the decrease in corporate tax rates is due to the political connection gained by the firm. Second, that firms hire well-connected former MCs as a substitute for traditional lobbying activities. It indicates that for the firms that gain tax reductions by hiring revolving door legislators, political connections is not equivalent to other forms of non-market strategy. Together, these two pieces of evidence provides a strong indication that it is hiring the former MC that decreases the company's tax rate – not the direct lobbying that could accompany it.

## 6 Conclusion

The principle of legal egalitarianism – that all entities should be equal before the law – is one of the foundations of liberal democracy. In this paper, I have presented evidence that

enforcers of tax policy prefer to give politically connected firms a wider berth than other actors. Consequently, it seems that the Tax Code applies differently to firms, depending on their political resources. While these principles are, indeed, central for the functioning of democratic government, political connections are also likely to distort markets in the favor of politically resourceful firms, potentially leaving society in a poorer state than it otherwise would have been (Olson 1982). This latter point is especially pertinent, since political connections have been found to benefit firms in a variety of contexts, extending well beyond tax policy (e.g. Acemoglu et al. 2016; Blanes i Vidal et al. 2012; Do et al. 2015; Fisman 2001; Goldman et al. 2009; Lazarus and McKay 2012; McCrain forthcoming; Szakonyi 2017). Thus, while the economic effect of political connections on any single topic may seem negligible in the broader picture, the cumulative impact across different spheres of public policy could ultimately be quite large.

The baseline results were from twoway fixed effects models, which documented a decrease in the tax rates the average listed company pays following the employment of a former Member of Congress. The estimated decrease was economically meaningful – but persisted only two years – and robust to specification choice. Furthermore, companies exhibited no differences in trends prior to the hiring of the MC. All of this indicates that, on average, hiring a former MC lowers the income taxes paid by a firm.

Overall, the weight of the evidence indicated that the association was driven by the IRS enforcing the same rules differently against connected firms, and that it was the political connection itself, which swayed IRS decision-making. To substantiate these mechanisms, I followed two tracks. First, and perhaps most importantly, I investigated whether the decrease in tax rates could be attributed to regulatory forbearance or general rules changes. To do this, I uncovered evidence that hiring a former MC decreases the probability of being audited. However, I did not find any heterogeneities across different asset portfolios, as we would expect if the connected companies brought about rule changes tailored to their specific asset portfolios. Furthermore, I found no evidence that employers of former MCs played a larger part in the formulation of tax policy, as measured through testifying at committees responsible for tax policy.

Second, I investigated whether the effect could be attributed to gaining a political connection, or to other non-market strategies that might be pursued simultaneously. Here, I found that the association was driven by the most highly connected former legislators – especially if they also served on a committee with oversight of the IRS. Additionally, I provided evidence that firms, which hire former members of committees responsible for IRS oversight, decrease the part of their lobbying activities aimed at the IRS. I also provided some suggestive evidence that lobbying more generally is not associated with hiring highly connected former MCs. This latter estimate was, however, very noisy and

should not be given excess weight.

It is important to note that, while the estimated effects were meaningful for the individual firm, the impact on public finances are modest. The fact that the cost is small in the entirety of things, and the bill is not footed by any single actor, is likely to be one reason why the effect persists (Olson 1965).

I sketched two reasons why political connections might lead to regulatory forbearance – revolving door politicians could either be used to pressure the IRS directly, or as a signal of the firm’s political muscle. While the fact that connected firms substitute away from direct lobbying of the tax authorities could be interpreted as an indication of the latter mechanism, adjudicating between the theories is beyond the scope of this paper. Instead it would be an interesting venue for future research.

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