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Voting for a Career

The Revolving Door Moderates the US Senate

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The Revolving Door Moderates the US Senate

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Abstract

I investigate how the revolving door affects voting in the Senate. The literature on final-term problems suggests that senators should become more extreme before they leave office, because they no longer are accountable to voters. Lack of electoral accountability could, however, have different effects depending on the senator's career ambitions. While retiring senators are no longer accountable to anyone but themselves, revolving door politicians will be accountable to their future employers, because they depend on them for post-elective employment. During their final Congress, this should lead revolving door senators to moderate themselves, while retiring ones should grow more partisan. Using data on post-elective career trajectories from 102nd to the 113th Senate, I present fixed effects estimates that back this claim. I show that the effect is driven by senators, who choose to resign, and provide evidence suggesting that the shift happens, because senators anticipate the preferences of their future employer.

Introduction

On February 12 2009 Senator Judd Gregg (R-NH) announced that he would not seek reelection for his 4th term in Congress (Hamby 2009). Throughout his tenure, he had been a staunch advocate of decreasing the role of government in the economy. During his final years in Congress, however, he moved to a more moderate position, among other things, by endorsing the bailout of the banking sector (Landrigan 2008). During his tenure, he had been the ranking Republican of the Senate Committee on Banking, Housing and Urban Affairs among others. Throughout the process of reforming US financial regulations in 2008-10, he worked against mandating that trades in derivatives happen on the exchange, the creation of an independent consumer protection agency for financial services customers (Gregg 2011), and a broadening of regulatory oversight in the financial sector. After leaving office, he landed a position on the board of directors of the ICE – a major exchange operator – and as international advisor for Goldman Sachs.

In recent years, this kind of revolving door arrangement has come under increased public scrutiny. One important reason is that once an elected official decides not to run again, she is essentially unconstrained by the electorate. A large body of literature concerns itself with the accountability issues that arise, when politicians approach their final term, and know that they do so (Alt et al. 2011; Barro 1973; Besley and Case 1995a, 2003; Figlio 1995; Lott and Bronars 1993; Parker and Dabros 2012; Snyder and Ting 2003; Tien 2001; Vanbeek 1991). Much less attention, however, has been paid to how the career ambitions of officials can play a part in molding their final-term behavior. It is clear that the pay-off to Members of Congress (MCs), who walk through the revolving door, can be extremely large (Eggers and Hainmueller 2009; Palmer and Schneer 2016). This begs the question of whether the promise of lucrative employment is incentive enough for the politicians to change behavior, when they choose not to run for reelection. While evidence does support the notion that final-term MCs put in more effort (Dabros 2015; Parker 2009; Parker and Parker 2009; Santos 2006), whether or not the revolving door affects policy output remains an open question. In this paper, I set out to investigate exactly that.

What should we expect of the behavior of revolving door senators during their final years in office? It depends on whom they are accountable to. If the accountability link between voters and senators is severed by the decision to resign, and nothing else takes its place, we would expect the senator to vote more sincerely and less moderately (Snyder and Ting 2003), because voters have tended to punish extreme politicians (Hall and Thompson 2016). I call this the *Final-term accountability deficit* account.

If, on the other hand, senators feel the need to court their future employer, we could expect them to start serving their preferences while they are still in office (Adolph 2013). From this point of view, we would expect the revolving door to make elected officials accountable to their future employer during the final Congress – when the senator would otherwise have been accountable to no-one but herself. I call this the *career ambitions* account.

To get a sense of how we would expect senators to behave, if they try to curry favor with their future employers, Figure 1 plots the distribution of preferences among special interests and senators on a one dimensional (economic) policy space. Ideal points are calculated using the cfScores from Bonica (2014), which I describe further in a later section.

It is clear that the preferences of the population of special interest groups (SIGs) are clustered around the political center, while MCs generally are much more polarized. If a senator were to court her future employer through her vote, this would in all likelihood lead her to vote more moderately throughout her final Congress, than she has previously done.

To test these propositions, I have collected data on the post-tenure career trajectories of senators serving in the 102nd to the 113th Congress – corresponding to the period 1992-2015. I run bayesian dynamic item response theory (D-IRT) (Martin and Quinn 2002) models on Senate roll calls to get estimates of the voting-patterns of the MCs.

My results robustly show that senators, who leave office to take jobs with SIGs, become substantially more moderate than they have been previously in their tenure. Importantly, however, this effect does not hold for everyone: those who lose their reelection
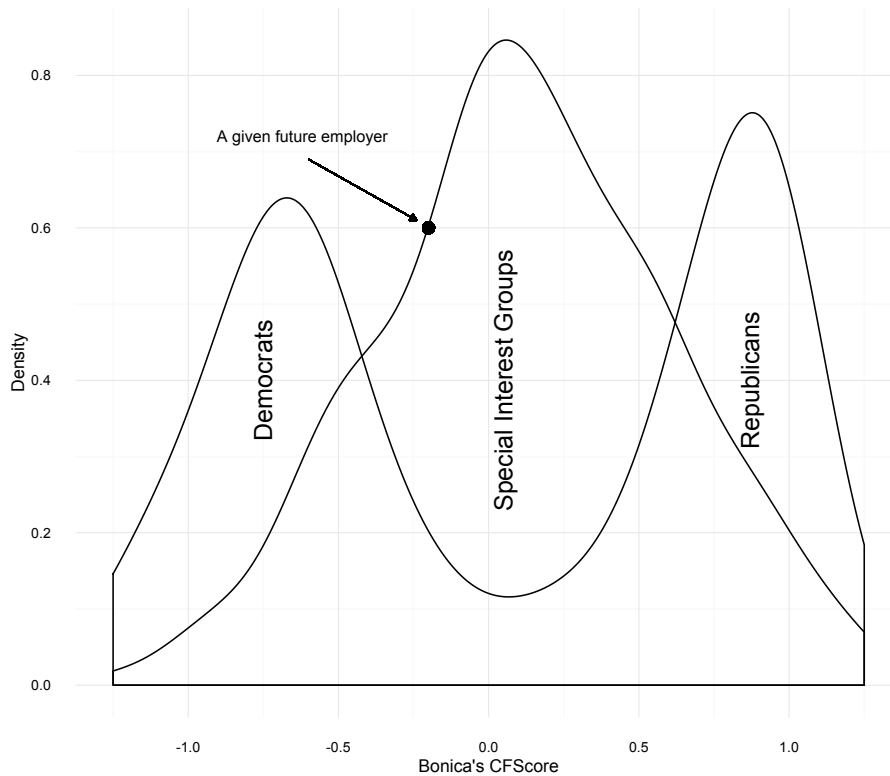
Figure 1: Distribution of preferences in the US among senators and special interest groups. *Political preferences are the Bonica (2014) cfScores, which span 1972-2011. See the methods section for more information on how they are calculated. The policy space is typically interpreted as the liberal-conservative divide on economic issues.*

bid – and, thus, are in a bad position to plan their post-Congress career – do not change behavior, while retiring senators, if anything, become more partisan, than they were previously. These findings accord well with the view that revolving door senators seek to curry favor with potential post-tenure employers, while retiring ones vote more sincerely, because they no longer are accountable to any constituency (Snyder and Ting 2003).

To further probe whether the moderation really is driven by the prospect of post-tenure employment, I investigate potential mechanisms. I distinguish between two competing theories of the revolving door. First, I test the hypothesis of job-for-policy bargains (Adolph 2013), where senators trade influence on public policy for a job with a specific company after they leave office. The second claim posits that revolving door senators seek to portray themselves as champions of industry in an attempt to curry the favor of a broader pool of potential post-elective employers. My results show that the move towards

the political center can be fully accounted for by a convergence to the average position of the senator's future sector of employment.

Revolving door politics has taken up a large part of the public debate. This has especially been so since the notorious lobbyist Jack Abramoff stated that his most effective tool when peddling influence was offering jobs to officials. When he had offered a job to a policy-maker, he stated that "everything that we want, they're gonna do. And not only that, they're gonna think of things we can't think of to do" (quoted in Klein (2011)). The results presented here do *not* indicate that this characterization generally holds true. They do, however, support the notion that when approaching the end of tenure, the mere prospect of gaining lucrative employment is enough to make the average senator change her voting-pattern. But in doing so, she seeks to appease the general preference in the industry, she wishes to be employed in – not the preferences of any single company. On one hand, this more subtle functioning of the revolving door between business and politics offers non-elected and non-accountable special interest groups indirect influence on public policy. But while this in itself can have stark consequences for the workings of the American democracy, it can have potential positive effects as well: in an age of extreme polarization of American politics (see among others Hare and Poole (2014), Layman et al. (2006), and Poole and Rosenthal (1984)) the moderation afforded by the revolving door might be welcome.

The article adds to a number of literatures. While career ambitions have been shown to impact the behavior of public officials (e.g. Adolph (2013) and Black and Owens (2016)) not a lot is known about how the revolving door affects the behavior of legislators (see Dabros (2015), Parker and Dabros (2012), and Santos (2006) for exceptions). Casting her vote is arguably one of the most important functions a senator has, and investigating the revolving door's effect on that is my most important contribution. Second, I show that career ambitions may actually counteract polarization in Congress, even as the revolving door itself was a consequence of increasingly partisan tendencies (LaPira and Thomas 2016). Finally, I add to the literature on political accountability (Alt et al. 2011; Barro 1973; Besley and Case 1995a,b; Fearon 1999; Ferejohn 1986), by showing that senators

not only react to the risk of electoral punishment, but to career incentives more generally (see also Parker (2009)).

The Revolving Door and Voting in Congress

Despite obvious differences, the *final-term accountability* and the *career ambitions* accounts of revolving doors in legislatures are similar in at least one respect – both concern the issues that arise, when politicians no longer stand for reelection. It is well-established that elections have a profound impact on the behavior of elected officials by holding them accountable to the will of the electorate (Barro 1973; Ferejohn 1986). In the absence of elections, however, officials would be free to follow other agendas, and no longer heed the will of the voters (Besley and Case 1995a,b).

The final-term literature translates this into a focus on how officials shirk, when they no longer stand for reelection (Alt et al. 2011; Barro 1973; Besley and Case 1995a,b, 2003; Lott and Bronars 1993; Vanbeek 1991).

The career ambitions account, on the other hand, highlights that when leaving public office for a private sector career, officials do not only become less dependent on voters, they also gain a 'shadow principal' in their future employer (Adolph 2013). It has been suggested that, to gain post-elective employment, MCs signal future employers that they posses a particular set of skills, which they have acquired throughout their career in Congress (Parker et al. 2013), by putting in more effort. This mitigates final-term shirking (Dabros 2015; Parker and Dabros 2012). Thus career ambitions force revolving door officials to exert costly effort in much the same way as elections, but they do so to accommodate their future employers, not on behalf of the voters.

Both theories would predict that revolving door senators vote differently during their final years in office, but the direction of the expected change differ between the two accounts.

Final-term Accountability Deficit

From the vantage point of the final-term accountability literature, we would expect elections to have a moderating effect on the voting behavior of MCs. That is, we would expect Democrats to vote less liberally and Republicans less conservatively, than they would actually prefer. There are two reasons for this.

First, as is well-known from the Downs (1957) model, the median voter casts the decisive vote when (re-)electing representatives, therefore, accountable politicians generally cater to their preferences (Lindbeck and Weibull 1987; Schultz 2008). Whenever voter preferences are clustered around the center of the political spectrum – in a two-party system, at least – the decisive voter will be centrist, and we would expect MCs to moderate themselves. Looking at the empirics, American voters do seem to be more moderate than their elected representatives (see Barber and McCarty (2015) for a review), and voters, indeed, tend to punish extreme politicians and reelect moderate ones (Canes-Wrone et al. 2002).

Second, more recent work has indicated that it is not because voters behave in an ideological fashion (as assumed in the Downs (1957) model) that extreme candidates are punished on Election Day. Rather, partisans are ousted, because the base of the opposing party tends to turn out in larger numbers, when they face candidates with policies that are further away from their own ideal points (Hall and Thompson 2016).

No matter the mechanism, however, the fact that partisans are generally punished should lead politicians to moderate themselves. However, when legislators approach their final years in office, and know that they do so – either because of term limits or because they have already made the decision to retire – this accountability link is severed. Elections will no longer be able force them to heed the will of the voters (Alt et al. 2011; Barro 1973; Besley and Case 1995a,b). Indeed, previous research has shown that retiring MCs become more partisan (Snyder and Ting 2003) and vote less in accordance with the preferences of their district (Tien 2001).

From this point of view, it is reasonable to expect that leaving office for a private sector job is no different than meeting term limits or making the decision to retire. In

all three situations, the politician will no longer be dependent on voters to further her career. The accountability link is severed, and they can vote sincerely, in accordance with own preferences. Thus, senators should become less moderate immediately before they leave office to take a job with an SIG. Furthermore, we would not expect this final-term behavior to be any different for retiring senators.

Career Ambitions

When a legislator approaches her final term she arguably not only becomes less dependent on the voters. She shifts constituency and instead becomes dependent on the private sector actors, who now control her future career trajectory – the post-elective constituency. In this way, the relationship between revolving door legislators and the companies, that hire them, is comparable to the accountability link between a politician and her voters. The legislator designs her behavior in expectation of getting hired (whether as elected official or with a private company), while voters or employers reward her by actually providing the job.

Thus, when the revolving door legislator makes the decision to resign from office, we would expect her to start communicating to potential post-elective employers, that she is a champion of their interests and has represented their causes well while in office. This behavior resembles that of job-seeking individuals trying to improve their CVs to increase their value as employees. It is a direct extension of the research showing that MCs actively build capacities that will increase their value on the post-elective job market (Dabros 2015; Parker 2009; Parker and Parker 2009).

Of course, MCs can send such a signal in a variety of high-profiled ways (through floor speeches, media appearances, etc.). The roll call vote, however, might be the most credible medium. Because benefits to employers from policies enacted by Congress are highly concentrated, while they are much more diffuse for voters, SIGs are faced with a strong incentive to monitor the legislator's voting behavior (Downs 1957; Olson 1965), and disseminate this information to their members. Indeed, the way MCs vote is heavily monitored by SIGs, and made public through so-called 'scorecards', that track how individual

legislators vote on the issues that are important to the specific group[1]. This provides the potential for punishing or rewarding elected officials by, for instance, providing them with a post-elective job. The knowledge that potential employers monitor her vote provides strong incentives for the legislator to vote in accordance with their preferences, when she approaches the end of her tenure.

All of this would lead us to expect that the revolving door MC uses her vote to signal that she is a champion of the industry. She does this, of course, in expectation of being rewarded with a job.

As was evident from Figure 1, the distribution of SIG preferences is single-peaked with an average close to zero – the center of the political spectrum. The distribution of senator preferences, on the other hand, is highly bimodal, with Democrats and Republicans occupying the left and the right wing, respectively. Thus, if senators converge to the position of either a sector or a specific employer, odds are that they will be more moderate than the senator currently is. The convergence would entail a moderation of the voting pattern.

Furthermore, senators that leave Congress, because they lose a reelection bid, are not in a very good position to plan their future careers. This will make it harder for them to tailor their voting patterns to suit the preferences of their future employers (Santos 2006). An important observable implication of the career ambitions theory is that any moderating effect, the revolving door might have, should be driven by senators, who resign of their own volition.

To substantiate that moderation happens in anticipation of the preferences of future employers, with inspiration from Adolph (2013), I later propose and test two mechanisms through which career ambitions may impact the behavior of revolving door politicians.

Commitment, Collective Action and Career Ambition

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[1]For instance, the US Chamber of Commerce and the AFL-CIO annually publish scorecards tracking how MCs vote on a number of bills important to business and labor, respectively.

Models where SIGs exchange goods for influence are plagued by commitment problems. Whether the good is campaign contributions (Grossman and Helpman 1994, 2001, ch. 7), information (see Grossman and Helpman (2001, ch. 4); Bouwen (2002); Klüver (2012)) or, in this case, a job, it leaves the problem, that once policy favorable to the firm has been implemented, the corporation no longer has an incentive to follow through on their end of the bargain (Gordon and Hafer 2007). Why would an employer care about how the legislator used to vote, once she has left office? An answer can be found by thinking in terms of repeated games (Adolph 2013; Fudenberg et al. 1990). If SIGs, who benefit from an MC converging to their political preferences, want to profit from subsequent legislators doing the same, they would be irrational not to hire them. In this way, an unspoken agreement is forged between career-minded legislators and the special interests – if MCs redistribute private goods towards their future employers, they get hired. If no one were to hire them, the flow of private goods through the revolving door would dry up.

This leaves an obvious collective action problem (Olson 1965). The firm makes the costly decision to hire the legislator to gain policy favorable to the entire industry, leaving the remaining companies with the incentive to free ride on their decision to employ. The hiring firm, however, gains a selective benefit from the employment in itself. Employing former politicians can be a very profitable enterprise for the politically active firm, among other things, because they provide lucrative political information (LaPira and Thomas 2016) and connections (Do et al. 2015; Goldman et al. 2009; Luechinger and Moser 2014; Vidal et al. 2012). Hiring former politicians serves the dual purpose of achieving favorable legislation for the industry as a whole and gaining a valuable employee[2].

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[2]The situation is similar to when firms provide political contributions with the dual goal of achieving forbearance from the regulating agency and influencing policy at the sector level (Gordon and Hafer 2007, 2005).

Data for Main Results

Independent Variable: Post-Senate SIG Career

My main explanatory variable (*SIG Career*) is binary and coded 1 for all senators during their last Congress (that is, the final two years) before they leave for a job with an SIG. When I estimate the average effect of walking through the revolving door, I only let SIG Career equal unity, if the senator resigned from office without being voted out. When I test whether the effect varies depending on senators leaving because they lose an election, I code all revolving door senators to 1 in their final Congress. I then interact the variable with a dummy indicator for whether the senator resigned of her own volition.

I define revolving door senators as those who leave office for a job with either contract lobbying firms, private companies (as employees or board members) or for civil society jobs. I counted jobs with NGOs, universities[3], public interest groups and think tanks as civil society jobs. I record the first employment after the politician has left the Senate. Since 1998 the Senate Office of Public Records has made registrations of the post-Congress employment of government officials electronically available. These registrations are collected by the Center for Responsive Politics (CRP). I used the CRP database to code my main variables of interest. Additionally, whenever the CRP registry was incomplete (namely in the period 1992-1996), I used a combination of biographies from Encyclopedia Britannica and Wikipedia, press releases and SEC filings.

In total, the dataset tracks the 259 senators who served throughout the period 1992-2015, which gives 1244 Senator-Congress observations.

## Dependent Variable: Voting Patterns in the Senate

To measure the voting patterns of senators, I rely on the Martin and Quinn (2002) D-IRT model. Like the canonical estimators of political ideal points (i.e. McCarty et al. (1997)), it relies on the spatial model of voting, which assumes that legislators will vote in favor of

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[3]Lazarus and McKay (2012) show that universities that hire revolvers gain more federal funding. This bolsters the claim that they hire them – partly, at least – as lobbyists.

policy proposals that are more ideologically proximate to their preferred position (Martin and Quinn (2002), see also Armstrong et al. (2014) for a review). This assumption makes it possible to model roll call voting as a function of each senator's latent policy preference (Jackman 2001). Estimation of the ideal points is done using a two-parameter bayesian IRT model (see Clinton et al. (2004)). Dynamics are introduced into the estimation by using the ideal points in the previous Congress as priors for the ideal points in the current one. This makes sure that estimates are temporally comparable (see Groseclose et al. (1999)). Mechanically, the estimation is done by initiating a random walk over the parameter space, which allows us to draw a series of samples from the posterior distribution using the Gibbs sampling procedure. To identify the model, I fix the 102nd Congress ideal points of senators Ted Kennedy (D-MA) and Jesse Helms (R-NC) at -1 and 1, respectively. The random walk prior then ensures that the policy space of the remaining Congresses is identified. I run three chains, and set the prior for the ideal point to be equal to the value in the previous Congress with a gamma distributed prior on the innovation parameter. I collected the roll call data from the Voteview website (Poole and Rosenthal 2015)

The D-IRT scaling procedure, however, only provides a measure of each senator's left-right leaning. To score the moderateness of the legislators, I use the absolute value of the D-IRT score. As the panel on the left hand side of Figure 2 shows, ideal points are distributed bimodally and centered around zero, with Democrats and Republicans taking on negative and positive values, respectively. Using the absolute of the D-IRT score places moderate senators close to zero, while more partisan ones receive high values. This is similar to the approach taken by Canes-Wrone et al. (2002) and should provide more efficient estimates of moderateness (partisanship) than introducing an interaction term between party and SIG Career or estimating separate models for Democrats and Republicans, as has been done in previous work (Snyder and Ting 2003). The distribution of the absolute values is shown in the panel to the right in Figure 2.
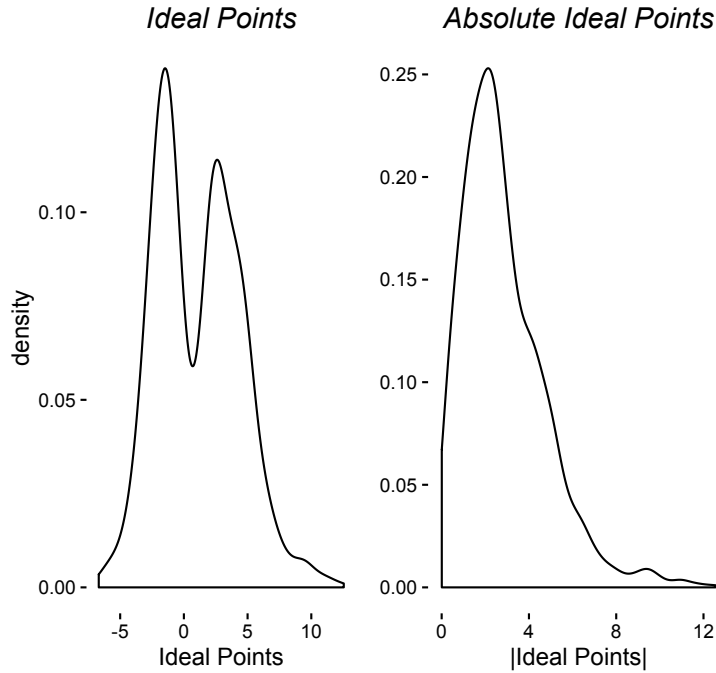
Figure 2: Distribution of ideal points and absolute ideal points in the 102nd to the 113th Congress.

Other Covariates

Two other covariates are of special interest. To contrast the effect of having a future employer to that of only being accountable to oneself, I include a dummy for retirement post-Senate. Since the effect of career ambitions should be concentrated among senators, who are best positioned to plan their post-elective careers, I interact SIG Career with a dummy variable indicating whether they resigned from office or were voted out.

To deal with potential sources of endogeneity, I include an array of controls. First, I control for other post-tenure career trajectories, namely if they left Congress for another political career (as ambassador, in the cabinet or as governor). Furthermore, I include data on the seniority of the senator – measured as the number of years she has served at time t – the party position – estimated using the party median of the dependent variable – and a measure of how liberal the senator's home state legislature is. For this, I use the Caughey and Warshaw (2015) state liberalism scale. Finally, I include a dummy indicating whether the senator was up for re-election in the given Congress.

My measure of party position is likely to be a 'bad control' (Angrist and Pischke

2008). In a different set of models, I use spatial eigenfiltering (Tiefelsdorf and Griffith 2007) techniques as an alternative way of alleviating endogeneity concerns.

For descriptive statistics on the included covariates, see A1 in the online appendix.

The Empirical Specification

The main model I consider throughout the analysis is the following:

$$V_{st} = \delta C_{st} + \alpha R_{st} + \beta X_{st} + \gamma_s + \omega_t + \epsilon_{st} \tag{1}$$

Where V is the voting-pattern (absolute D-IRT score) of senator s at time t. C is an indicator for the last Congress before taking an SIG job, and, hence, δ, measures the primary coefficient of interest. R is a dummy for the final two years before a senator retires. Thus, comparing the estimates of the δ to the α parameters, allows me to assess whether revolving door senators behave differently retiring ones.

γ is a senator-specific fixed effect, and ω is a Congress fixed effect (corresponding to a set of time dummies). This differences out all potential confounders, that are unit specific but time-invariant (e.g. senator 'type' and many characteristics of the constituency) as well as shocks with common effects across senators. Importantly, it puts the specification in the family of twoway fixed effects (difference-in-differences) models. This is a highly appealing estimator, since the identifying assumption is that the voting of senators, who leave for a career with an SIG, follow trends that are parallel to those of others until their final Congress. While it is clear that senators, who walk through the revolving door, do not do so at random, this specification can provide some leeway for identification in an otherwise highly endogenous system – as long as it can be substantiated that the parallel paths assumption is not broken.

To justify the assumption, I conduct various tests for pre-treatment trends, but I also include X, a vector of the control variables previously introduced. This leaves, finally, the idiosyncratic error term, ϵ. While specifying my model, I found evidence of both temporal autocorrelation and heteroskedasticity. Both excluding and including the lag of the dependent variable to deal with autocorrelation could potentially bias my

estimates.[4] Since revolving door senators will not be voting in future Congresses, however, it is not of much theoretical interest to estimate the long-run effects. Therefore, I refrain from including a lagged dependent variable in my main models. Instead, I compute robust standard errors, that are clustered at the senator level to deal with arbitrary autocorrelation within units. In A3 of the online appendix, I show that purging temporal autocorrelation using first-difference and dynamic estimators yields results that are similar to the ones presented here.

# Main Results: The Revolving Door Moderates Voting

Recall that if the revolving door leads to senators being less reliant on voters and more free to follow own preferences, we would expect them to become more partisan immediately before leaving Congress. If, however, the revolving door senator's reliance on voters is replaced with a new dependence on her future employer, we would expect her to become more moderate during her final years in Congress.

Figure 3 plots senator voting patterns as a function of remaining Congresses with a LOWESS smoother. Fully colored points represent senators who at some point leave for SIG jobs, faded points depict those who leave to retire. There are two important points of notice in the plot. First, the solid fitted line shows that, looking across senators, those who leave for SIG careers vote more moderately during their final two years in Congress. The change sets in abruptly during the final Congress, and is larger than any shift that happens at other times (barring, of course, the shift with nine Congresses remaining, which is based on very few observations). Retiring senators, on the other hand, vote in a more partisan fashion in the term before they leave. Thus, in their final Congress, revolving door senators become more than two D-IRT points more moderate than retiring ones, and approximately .35 points more moderate than in their second to last Congress. This amounts to 180 pct. and 30 pct. of the within-senator standard deviation, respectively.

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[4]Including lag of the dependent variable alongside fixed effects would lead to Nickell (1981) bias, while excluding it could lead to inconsistent estimates, if the true data generating process is dynamic (Adolph et al. 2005; Wilkins 2017)
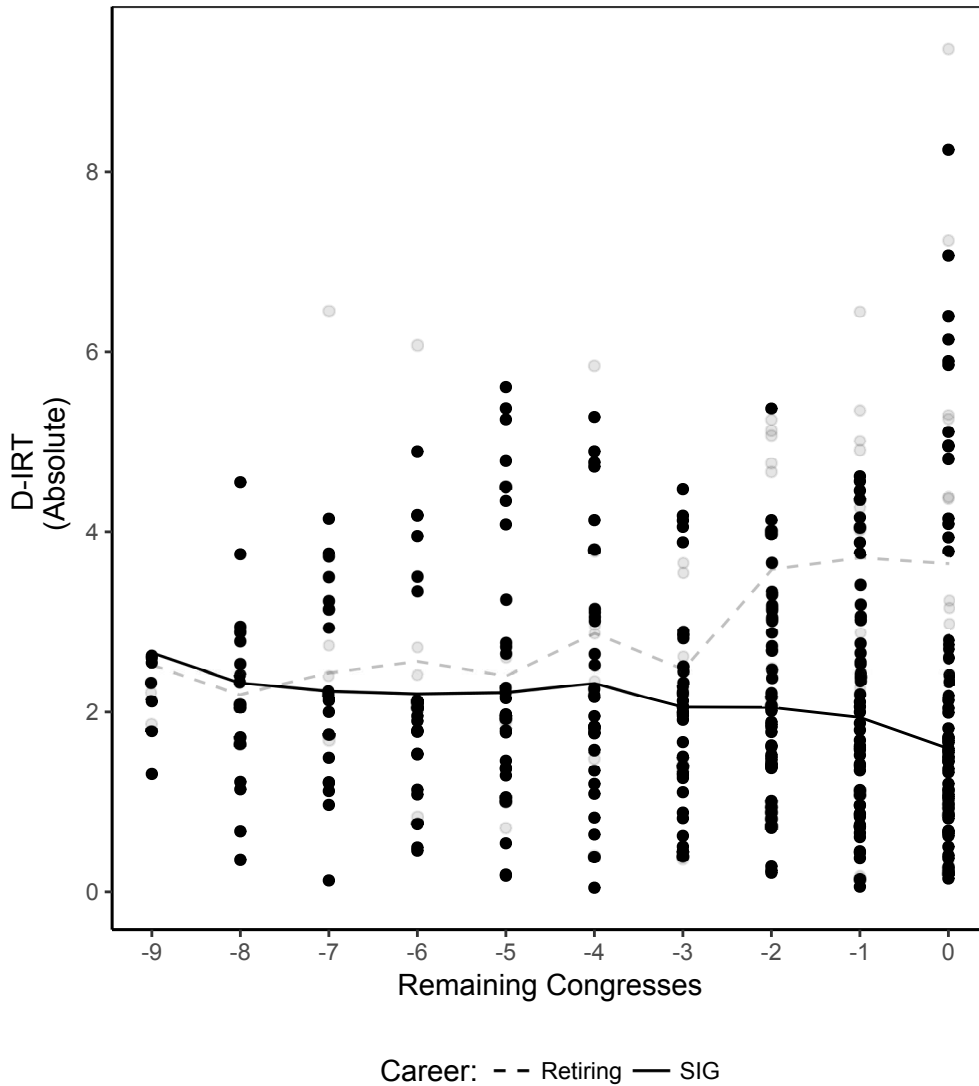
Figure 3: LOWESS Estimates of Senator Voting Across Remaining Terms in the Senate. *Points for senators who eventually leave for an SIG career are fully colored, while points for senators who retire are faded. The solid line represents LOWESS estimates of partisanship for Senators leaving for SIG careers. Faded, dashed line is LOWESS estimates for retiring ones.*

Second, comparing the faded and fully colored lines, it seems that these two groups follow relatively parallel paths. The similarity in trends persists until the time, when the retiring senators begin on their final term (that is, final six years) in office, when they become more partisan. The fact that the shift sets in earlier for retiring senators than for revolvers could indicate that they simply decide on retirement earlier than revolving

door senators make up their minds to join an SIG.

Fixed effects results

I now turn to estimating Eq. (1). In Panel A of Table 1, I present the results from a number of fixed effects models. In the first column, I estimate the bivariate relationship. The results show that in the last Congress before taking a job with an SIG, senators on average vote in a more centrist fashion than they have otherwise done throughout their tenure. The estimate indicates that revolving door senators move approximately .39 D-IRT points closer to the center, an estimate which is highly significant both in practical and statistical terms.

In column 2, I include dummies for retirement and a future political career as controls. These are the alternative career trajectories senators have followed in my sampling period. The inclusion of these controls decreases the coefficient on SIG Career slightly, but it remains sizable, as I now estimate that revolving door senators become .38 points more moderate on the D-IRT scale.

More extreme candidates tend to be punished in their reelection endeavors (Canes-Wrone et al. 2002; Hall and Thompson 2016). If senators, who anticipate that they might lose their reelection bid, become more moderate, and losing senators take private sector employment more often than others, elections would be a salient concern for identification. In column three, I include a dummy indicating whether the senator ran for reelection during the current Congress. The coefficient on SIG Career does decrease somewhat to -.34, but it remains large and statistically significant at the five pct. level.

Generally, parties influence the roll call votes of their members by influencing long-term career prospects (Snyder and Groseclose 2000). But as senators get more senior, they will be less reliant on party leadership and, thus, in a better position to follow own preferences. The more senior position would also increase their value as potential lobbyists (Vidal et al. 2012). In the fourth and final column, I therefore include a control for the senator's seniority.

The final estimate in column four is that senators who leave for a job with an SIG

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Table 1: Moderate voting and post-congress special interest career

	DV: Absolute D-IRT score (Mean = 2.28; within-senator std.dev = 1.14)			
	Bivariate	Other Careers	Elections	Seniority
	(1)	(2)	(3)	(4)
	Panel A: Average effects.			
SIG Career	−0.393	−0.378	−0.340	−0.345
	(0.120)	(0.120)	(0.131)	(0.132)
Retirement		0.408	0.426	0.375
		(0.305)	(0.305)	(0.316)
Political Career		0.185	0.210	0.196
		(0.286)	(0.287)	(0.283)
Election Year			−0.050	−0.047
			(0.056)	(0.057)
Seniority				0.031
				(0.015)
Seniority^2				0.0003
				(0.0004)
$\delta_{SIGCareer} - \alpha_{retire}$		−0.786	−0.766	−0.721
		(0.323)	(0.326)	(0.339)
	Panel B: Heterogeneities for voluntary revolvers.			
SIG Career	−0.331	−0.322	−0.290	−0.289
	(0.176)	(0.176)	(0.179)	(0.182)
SIG Career X Resigned	−0.622	−0.888	−0.871	−0.868
	(0.376)	(0.429)	(0.430)	(0.428)
$\frac{\partial DIRT}{\partial SIGCareer}\vert$ Resigned = 1	-0.953	-1.21	-1.161	-1.158
	(0.331)	(0.389)	(0.402)	(0.401)
Two-way FEs?	Yes	Yes	Yes	Yes
Observations	1,229	1,229	1,229	1,217

Note: Dependent variable is absolute D-IRT score. Coefficients are unstandardized OLS estimates. Robust standard errors clustered at the senator-level in parentheses. Panel A shows the average effects. Bottom row in that panel presents the estimated differences in effects between SIG Career and Retirement. Panel B reports specifications allowing effects to differ between voluntary and involuntary retirees by estimating difference-in-difference-in-differences. Base term for Resigned included but not shown to save space. The third row of Panel B shows the marginal effect calculated based on the first two rows in the panel. Same covariates included as in Panel A, but not shown to save space.

become approximately .35 points more moderate on the D-IRT scale. This corresponds roughly to 30 pct. of the within-senator standard deviation. Under a causal interpretation, this would have meant that Joe Biden (D-DE) would have become as moderate during his final two years as Max Baucus (D-MT), if he had left to join an SIG instead of becoming vice president.

At this point, it is worthwhile to contrast the coefficients on SIG Career and Retirement. The difference in coefficients – i.e. the difference-in-difference-in-differences estimate – is shown in the bottom of Panel A. Following the literature on sincere voting, we would expect retiring senators to become more partisan in their voting pattern (Snyder and Ting 2003). On the other hand, taking an SIG job leads to more moderate voting. If the estimated impact of leaving office for a lucrative private sector career were purely an effect of being less accountable to voters, the coefficient on the retirement dummy should be of the same magnitude and sign as the indicator for an SIG career path. Since it is positively signed and large, this indicates that the effects of career ambitions and limited final-term accountability are empirically distinct and run counter to each other. While the coefficient on retirement is too noisy to be counted as statistically significant in itself, its size is – in absolute terms – similar to that on SIG Career. Furthermore, the differences between the two coefficients ranges from -.72 to -.79, and are statistically significant in all models.

In Panel B of Table 1, I investigate an important observable implication – the effect should be driven by senators who resign of their own free will, and not by those, who are voted out. To do this, I interact SIG Career with a dummy for whether the senator resigned on her own volition, thus estimating an additional difference-in-difference-in-differences model. As we can see from the first column, the effect is substantially larger for resigning senators. While senators who are voted out of office and then take a job with a special interest become approximately .33 more moderate in their voting, this effect is almost three times larger for resigning senators, who get .95 more moderate. The estimate of the interaction effect is somewhat noisy, however, and only statistically significant at the ten pct. level. Adding controls – first dummies for alternative careers,

then an election year indicator and, in the final column, a measure of seniority – increases the coefficient as well as its statistical significance. Additionally, the correlation between SIG Career and moderation for senators, who lose their reelection bid, decreases and loses statistical significance, as controls are added. Depending on the controls that are included, I estimate that resigning senators become between 1.1 and 1.2 more moderate than they otherwise would have been – an effect which is between .86 and .88 larger than for senators who are voted out. This difference in effects is statistically significant at the five pct. level.

As previously noted, the risk of being voted out could be a strong moderating force. This is supported by the fact that revolving door senators, who lose their reelection bids, on average become somewhat more moderate as well – even though this correlation loses statistical significance, when controls are included. Besides being an important observable implication, the interaction is part of a solution to this threat to identification. Decomposing the average effect by estimating this triple difference allows me to distinguish the impact of walking through the revolving door voluntarily from moderation that happens involuntary, in the face of a tough reelection contest.

It is the revolving door senators, who actively choose to resign, that drive the moderating effect. This supports the notion that it is the senators, who are able to plan their resignation from Congress, that will feel accountable to their future employer and tailor their roll call vote to their political preferences. This indicates that when senators leave for a job with an SIG they will be much less dependent on voters to progress their career. The electoral accountability, however, is replaced, with an increased dependency on the special interests, who could potentially hire them, after they leave the Senate.

Further Controls

As remarked previously, senators depend not only on voters to advance their political careers, but also their fellow party members and their party's leadership (Snyder and Groseclose 2000). I now turn to controlling this potential source of bias away in a variety of fashions. In Figure 4, I have plotted the results from adding a number of additional

controls. In the first row I present a baseline specification, which includes controls for alternative career trajectories. Panel A presents the effect of leaving office for a job with an SIG, while Panel B presents the conditional effect of taking an SIG job for those who voluntarily choose to resign from office. Panel C presents the coefficient on Retirement while, finally, Panel D summarizes the results from a number of placebo models.

First, I include the absolute value of the median of the party's D-IRT score. If reliance on party leadership is what is driving my results, this should be controlled away in this fashion. While the average effect of taking an SIG job decreases and becomes statistically insignificant, the effect of resigning to take a job remains sizable and statistically significant. In the third row I include State Policy Liberalism (Caughey and Warshaw 2015) to control away the decreased reliance on home-state politics as a source of spuriousness. Both the average and conditional effects remain robust to this inclusion. The model presented in the fourth row includes both controls, which shows a result that is similar to the one presented in the second row.

As mentioned previously, party position is likely to be subject to severe reverse causality, which would bias the results from the rest of the model. The dependence on peers to further one's career could, however, be conceptualized as a form of spatial dependence. As an alternative way of purging my results of this confounder, I apply spatial eigenfiltering (Tiefelsdorf and Griffith 2007) in the fifth and final row.[5] I start by specifying a matrix of spatial weights, using the ideological distance between each pair of senators. I then extract the first five principal components from the spatial weights matrix and include them in the model as controls alongside State Policy Liberalism. In this specification, both the average effect and the impact of leaving Congress of one's own free will remain sizable and statistically significant.

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[5]This technique also deals with the somewhat similar concern that senators vote together in factions with that are ideologically similar
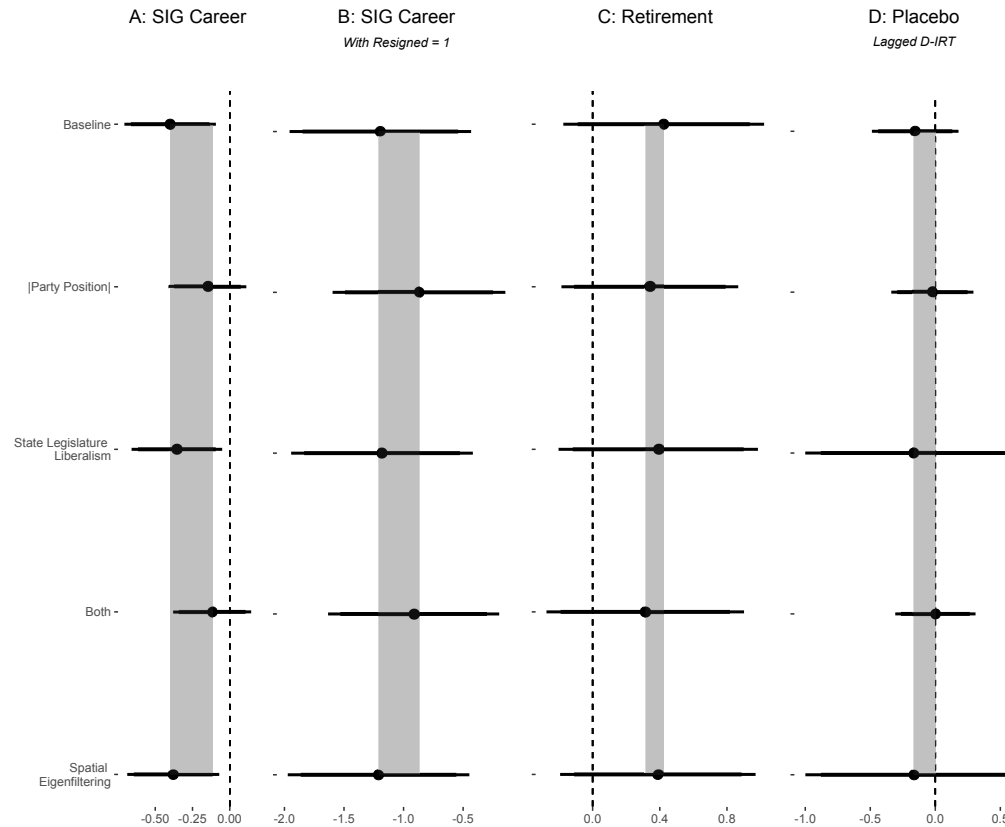
Figure 4: Further Controls. *Panel A shows average effect of taking revolving door job. Panel B shows the effect of taking a revolving door job, if the senator chose to resign from office. Panel C shows the effect of leaving office to retire from the labor market. Panel D shows placebo models. Similar placebos for the interaction models can be found in A2 of the online appendix. Baseline includes all covariates from the model presented in column two of Table 1. Grey-shaded area shows total variation in coefficients. The label on each row describes which additional variable is added as control. Thick and thin lines are 90 pct. and 95 pct. confidence intervals, respectively, calculated using robust standard errors clustered at the senator-level. All results are from two-way fixed effects regressions. First five PCs included in the model with eigenfiltering.*

This suggests that the average move towards moderation among senators, who walk through the revolving door, could come about because of fierce reelection contests, which forces them to move away from the median party position. This should, of course, be taken with the caveat that my measure of party position is likely to induce post-treatment bias. Decreased reliance on party leadership, however, does not seem to be driving the moderating effect for senators, who take private sector jobs voluntarily. At the lowest, I estimate that they move approximately .87 D-IRT points towards the center, which corresponds to more than a half standard deviation.

Furthermore, it is worth noticing that the coefficient on Retirement is consistently large and positive. Even though it never reaches statistical significance, it is remarkably stable around .4, which is indicated by the grey shaded area. This is numerically very similar to the coefficient on SIG Career. This suggests that – if anything – retiring senators become more partisan.

Finally, I present the results from a number of placebo models. The dependent variable in these models is the lag of the absolute D-IRT score – that is, during the senator's second to last Congress. If SIG Career were correlated with being moderate already before the final Congress, it would indicate that the parallel paths assumption was violated and important factors were omitted. In these placebo models, the coefficient is around -.15 in the first, third and fifth models, otherwise it stays around or above -.02. Thus, the coefficient on SIG Career in all of the placebo specifications is small and statistically insignificant. This pattern is consistent with the D-IRT score following parallel trends until the final Congress, which provides some assurance that the results are sound.

Instrumental variable results and sensitivity checks

A number of omitted individual-level factors remain that could cause bias. For example, differences in reputation, wealth and preferences for post-elective employment could be important drivers of selection. In appendix C1 of the SI, I leverage the dollar size of lobbying contracts that former senators work on as an instrument (IV) for the career choices

of those, who currently serving. The intuition behind this is that, when currently serving senators observe how well their former colleagues, who now work as lobbyists, perform in the private sector, this informs them about how well, they would do themselves. When their career prospects are good enough, it will induce them to walk through the revolving door. Importantly, because the size of the lobbying contracts of former senators is decided without regard to the ones, who currently serve, this measure of career prospects is likely to evolve exogenously to the individual characteristics of currently serving senators. This was originally shown in Egerod (2018), a point I further substantiate it in the appendix.

The results from a variety of specifications using this IV produces estimates, which are sizable and statistically significant, corroborating the main results. Still, it is important not think of this as a silver bullet for causal estimation, but rather as a model specification that relaxes some problematic assumptions, at the cost of imposing other ones. This IV has the important feature that it is unrelated to many senator-level characteristics, which could simultaneously cause senators to walk through the revolving door and become more moderate, while also strongly affecting career choice. Absent truly random variation in career prospects, however, this is simply a way of testing the hypothesis with a different set of assumptions.

In C2 of the online appendix, I conduct a number of further robustness checks. Because relatively few senators actually walk through the revolving door during each Congress, the estimates are vulnerable to extreme observations. To alleviate this concern, I show that excluding observations with high DFBETA and the most moderate senators does not change my results. Finally, I deal with temporal autocorrelation in two additional ways. First, I use the first-difference estimator (Wooldridge 2015). Second, I use the generalized method of moments estimator (Arellano and Bond 1991) to run dynamic models. The results are robust to these specifications as well.

Champion of the industry or job-for-policy bargains?

According to the argument presented here, there are two potential mechanisms through which career ambitions may force senators to moderate themselves. Both are concerned

with the size of the revolving door legislator's post-elective constituency – that is the pool of potential employers. First, a revolving door senator may attempt to portray herself as the champion of an entire industry, thus currying favor with a broad pool of potential employers. When the senator decides to leave Congress, she may not know with whom she will be employed, after her tenure ends. But she may still know what she would prefer to work with, and – broadly speaking – which industry she would like a job in. If this is the case, it stands to reason that the senator would not attempt to curry favor with any single employer. Instead, she would navigate after the aggregate preference in that industry, and customize her vote to suit it.

Second, the change in voting may come about because of an implicit contract between the senator and a specific employer. When the senator has a clear idea of whom she wants employment with, the size of her post-elective constituency effectively decreases to one. This may happen if the senator has developed specific ties to private sector actors throughout her tenure. Because of lobbying activities, campaign contributions, public consultations etc. the legislator could very well get to know not only the specific preferences of particular actors, but also come to desire employment with them. She will not have to aim her signal broadly to capture the general preferences of an entire sector, but can instead tailor her roll call votes specifically to match the interests of the actor, she wants to be employed by. Thus, an implicit contract arises, where the senator trades influence on policy for a post-tenure job (Adolph 2013).

Measuring the mechanisms

To measure policy positions of the SIGs, I rely on the cfScores from Bonica's (2014) Database of Ideology Money in Politics and Elections. The intuition behind the cfScores is similar to the one underlying the roll call models mentioned above – donors are more likely to contribute to the campaigns of politicians who are ideologically proximate to themselves. Using all registered campaign contributions in the period 1972-2011, Bonica (2014) uses a form of multiple correspondence analysis to estimate the latent policy preferences that drive political contributions. I use this to measure the political ideal

points of specific future employers. Furthermore, I compute the average ideal points of the industries (CRP's classification) that employ senators.

To get a measure of how senator voting converges to the preferences of their future employers, I compute the absolute difference between the senator's D-IRT[6] score and the cfScores on the employer and the industry level, respectively:

$$CONV_{employer} = |CF_{emp} - DIRT_{st}|;$$
$$CONV_{sector} = |CF_{sec} - DIRT_{st}|$$

These measures capture how senator voting-patterns move relative to the preferences of future employers.

The D-IRT positions and cfScores do not refer to the same underlying ideological scale, however. To deal with this, I use a slightly different version of the D-IRT score, which I estimate using each senator's cfScore as a prior with a gamma distributed precision parameter. This will place the D-IRT scores on the same scale as the cfScores of their future employers. In A4 ofthe online appendix, I show that my results are robust to different ways of adjusting the measures and to not adjusting them at all.

A different – but highly salient – concern when using cfScores is that SIGs donate campaign funds strategically (Gordon and Hafer 2007, 2005; Grossman and Helpman 2001; Hansen 1991). This would induce non-random measurement error into to the cfScores (Thieme 2017), biasing the results (King et al. 1994). In A4 of the online appendix, I explore the consequences of this measurement error by using the framework proposed by Gallop and Weschle (2017). I show that the bias induced by strategic giving is likely to attenuate my results, pulling them towards zero.

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[6]Bonica (2014) also provides cfScores for senators. They would, however, represent the donors' evaluation of senator ideal points, and would not be a behavioral indicator. Especially in the final Congress, when the senator oftentimes already has made public that she will not stand for reelection, this is likely to introduce severe measurement error.

Figure 5 plots the distribution of industry preferences and how many senators took jobs within each sector. It is clear that by far the most took jobs with lobbying firms – a group of companies that are very predominantly moderate. Otherwise, revolving door hires are fairly spread out on industries across the political spectrum. The exception is that quite a few senators have left for jobs lecturing politics on universities, which is a mostly liberal industry.
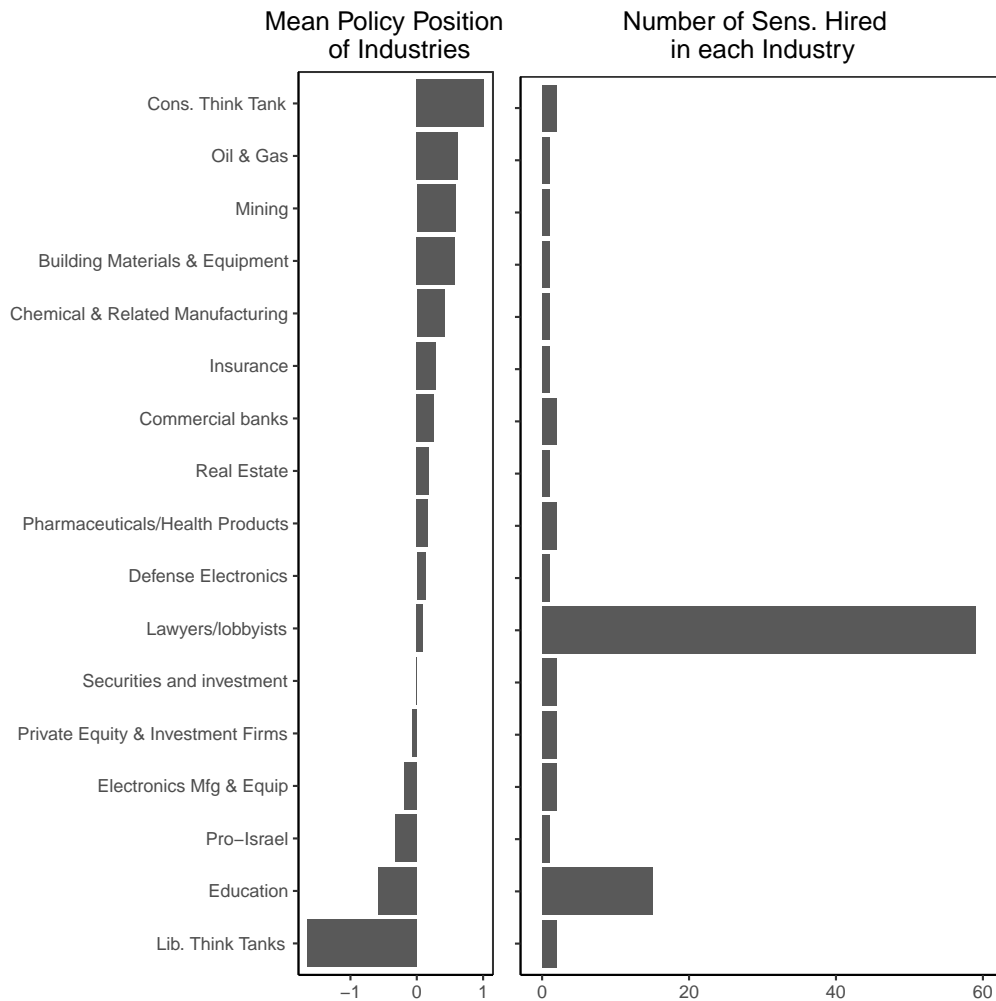
Figure 5: Mean Preferences of Industries and Distribution of Revolving Door Hires. *Left panel shows the mean cfScore of each industry in the sample. The panel to the right shows how many senators have been hired by each sector, throughout my period of investigation.*

It has been documented in the extant literature that political connections is an extremely valuable asset for revolvers (Do et al. 2015; Goldman et al. 2009; Vidal et al.

2012). Therefore, a serious concern would be that senators really moderate themselves, because they want to signal future employers that they can speak the language of both parties. In this case, convergence to a future employer would be purely coincidental – the real driver moderating voting patterns would be the senator's attempt to appear highly connected. If this is true, we would expect revolving door senators to form more social ties immediately before they take a private sector job. To exclude this possibility, I follow Fowler (2006a,b) and measure social ties of senators by constructing cosponsor networks for all Congresses in the time period. I collect data on bill sponsorship from GovTrack **Cite!!**. The networks are directed in that cosponsors offer support for the sponsor's bill. This gets at the connectedness in two ways. First, it captures that senators use their established relationships with others to garner support for their bills. Second, it captures the inherit social act of relationship building it takes, when senators garner support among Members, they do not have a strong connection to as of yet. Additionally, it captures that senators, who are able to drum up a greater following of cosponsors work harder (Carnes 2013). I weight all ties by the total number of cosponsors on each bill to capture the fact that ties often are stronger, when there are fewer cosponsors (Fowler 2006a). I compute betweenness, closeness, the Fowler (2006a) score connectedness and eigenvector centrality scores. All results hold without the final weighting scheme.

In appendix XX of the SI, I explore how these measures of connectedness are related to my main variables of interest. Surprisingly, the association between all these measures of connectedness and moderate voting is consistently very small, and in no case am I able to reject the null of no correlation. It does not seem that moderate senators are better connected. There is some indication, however, that senators become better connected before taking a revolving door job. Since this especially holds for the Fowler score of connectedness, I use that as a control in the following section. However, the results hold no matter which centrality scores, I use.

Further results: Evidence on the mechanism

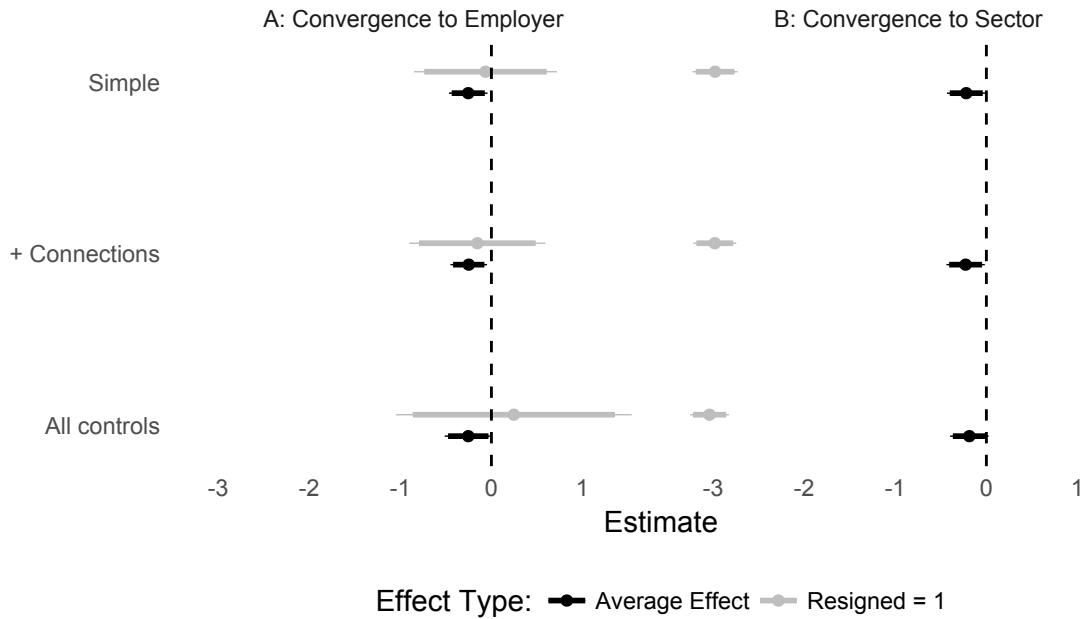## Convergence to Future Employers

I now turn to investigating, how the final-term behavior of senators, who take SIG jobs, conforms to the interests of their future employers. To do this, I use the natural log of the convergence measures as outcome variables in models that are otherwise similar to eq. (1). The main coefficient of interest now captures whether revolving door senators get closer to their future employer. In Figure 6, I report the results. In Panels A and B, I model convergence to the specific future employer and convergence to the future sector of employment, respectively. Estimates in black show average effects, while the gray ones show the effect of SIG Career conditional on resigning voluntarily.

Panel A first reports how taking an SIG career impacts convergence to the preferences of the specific companies, who eventually will employ revolving door senators. The first row shows the bivariate relation, the second adds of how well connected the senator is, and the third adds all controls. While the coefficient remains sizable and statistically significant in all these models, the effect is not driven by senators, who choose to resign without having lost an election. This suggests that the convergence to a specific future employer is not an effect of the revolving door, but is could be by senators moderating themselves in the face of a tough reelection contest.

Second, Panel B shows the effect of walking through the revolving door on convergence to sector level preferences. The results suggests that during their final Congress, the ideal points of senators, who take on private sector employment after their tenure, get approximately 27 pct. closer to the average preferred policy in the sector, they later get employed in. Importantly, these the results clearly show that the initial average effect is driven by senators who resign of their own free will.

Future Employers Drive Change in Senator Voting

I will now explore whether this convergence drives the general move towards the center of the political spectrum. Simply adding the convergence measure as a control to the original

Figure 6: Resigning Senators Converge to Positions of Future Employers.
Panel A shows models with convergence to a specific future employer as the dependent variable. The dependent variable in Panel B is convergence to a future sector of employment. Estimates colored black show the average results, without conditioning on having retired. Gray estimates show the predicted effect of taking an SIG job for senators who lost an election and who resigned of their own free will. Included controls are seniority, election year, state legislative liberalism and political career. Political careers not included in interaction model in Panel B, because the number of observations that would have been dropped, would have made it impossible to estimate the interaction terms. Confidence intervals are 95 pct. (thin) and 90 pct.(thick) calculated from senator-clustered robust standard errors.

model would, however, induce intermediate variable bias. Instead, I utilize sequential g estimation to compute the controlled direct effect (CDE) (Acharya et al. 2016). While this obviously is not a silver bullet that overcomes issues of endogeneity, it provides substantial leverage to explore mechanisms, while avoiding post-treatment bias.

In Figure 7, I plot the results from these models. Panel A shows the CDEs of SIG Career, while Panel B shows the coefficient on distance to the ideal points of the future

industry of employment. The first row, as usual, represents the baseline estimate of the correlation between taking an SIG career and voting more moderately. The baseline model reported in this figure is estimated using only the 438 observations with valid values on the convergence variable, to make sure that my results are not driven by estimating the model on a different set of observations.

The baseline estimate in the reduced sample is close to the results obtained when using all observations: Senators become approximately .33 D-IRT points more moderate immediately before taking a job with an SIG. Adding the distance to the future sector of employment in the second row decimates this correlation, reducing it to approximately -.15 points – about half of the original estimate and indistinguishable from zero in terms of statistical significance. Meanwhile, as we can see from Panel B, the correlation between
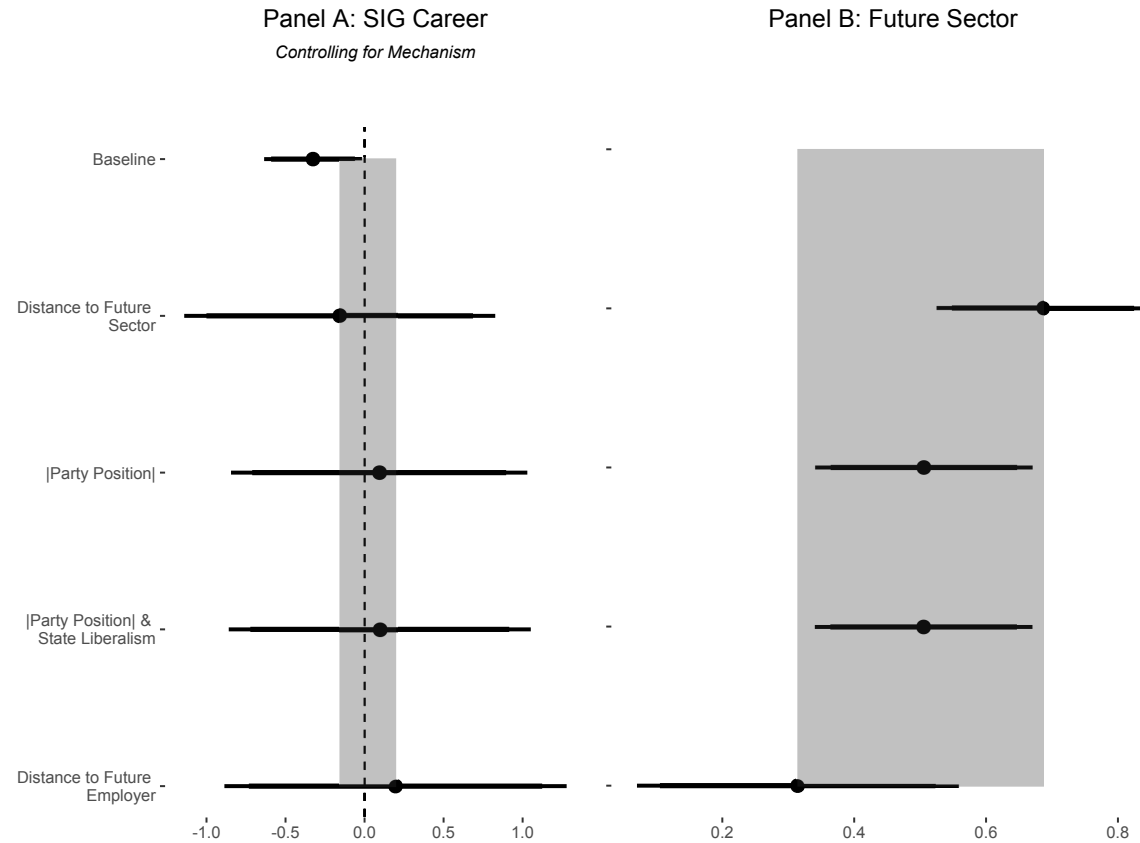
Figure 7: The Controlled Direct Effect of the Revolving Door. *Dependent variable is absolute D-IRT score. Panel A and Panel B show, respectively, the CDE (Acharya et al. 2016) of SIG Career and the coefficient on Distance to Future Sector under different specifications. Baseline model includes controls for alternative careers, election year and seniority, but only including the senators with valid values on the variables measuring Distance to Future Sector. Labels on the rows indicate which covariates are added besides the baseline controls. Due to missing observations, alternative careers are dropped from the model that also controls for Distance to Future Employer. All results are from two-way fixed effects regressions. Thick and thin lines are 90 pct. and 95 pct. confidence intervals, respectively. Standard errors on CDEs computed using senator-clustered non-parametric bootstrap, while standard errors on the baseline coefficient are cluster-robust.*

convergence to the mean position in the future sector and senator voting is extremely strong – including it increases the R^2 from just below .02 in the baseline model to .2. On average, I estimate that an increase of 1 pct. in the distance to the future sector, will be associated with a voting-pattern that is a bit more than .006 points more partisan. The estimate is clearly statistically significant – zero does not even enter into the middle graph. In the last three specifications, I report here, I further add controls for the absolute median of the D-IRT score for each party, and liberalism in the state legislature. First the party position on its own and then both variables together. This decreases the correlation between a future private sector job and senator voting markedly, but it remains strong and highly significant. The inclusion of these controls makes the coefficient on SIG Career slightly positive, but it remains statistically insignificant. Including the distance to specific future employers in the final row does not change these results.

A Final Plausibility Probe

One important implication of the career ambition theory is that senators who take jobs in ideologically extreme industries should not moderate themselves – instead, they should become more partisan. As is clear from Figure 5 very few of the industries, that have hired former senators, are placed elsewhere than in the middle of the spectrum, making it difficult to model quantitatively. Instead, I conduct a brief plausibility probe by more closely examining the behavior of two senators, who took jobs in extreme and moderate industries, respectively

In January 2011, Chris Dodd (D-CT), left Congress for a position as chairman and CEO of The Motion Picture Association. The industry is the most liberal one in my sample. Thus, if he were to curry favor with potential employers in that sector – and generally had voted further towards the political center, than the movie industry preferred – we would expect him to move towards the left wing. And this is exactly what we observe. In his final term, Dodd became less moderate, than he had been until then. During his final two years in Congress, Dodd moved 1.75 D-IRT points (just short of one standard deviation), to the left of his average throughout his tenure. Looking at Dodd's tenure as

a senator, it is clear that a relationship formed between him and the movie industry. The TV, Movie and Music industry was consistently among his top contributors – ranking 6th until 2009-10, when it dropped to 13th. Furthermore, he consistently ranked among the top 10 recipients of campaign finances from the Cable TV industry[7]. Throughout the final years – especially during his failed presidential bid in 2008 – he fund-raised heavily among Hollywood executives, with whom he has several personal ties (Sheshgreen 2011). Besides generally voting in a more liberal fashion, however, there is no indication that he worked to legislate specifically in favor of the movie industry (the anti-piracy act SOPA was not introduced until after his tenure ended).

Throughout his tenure, Judd Gregg had been conservative in his voting with a D-IRT score reaching its peak of 3.1 in the 109th Congress – the third quantile is at 3.5. But during his final two years in office, he voted more moderately, than he had otherwise done, with a D-IRT score reaching its low at 1.54. A position much closer to the average investment firm, whom – with a cfScore of .04 – is very close to the center. Alongside his legislative efforts to keep financial regulation at a minimum, Gregg vocally championed the causes of investment companies. Among other things, in an interview, he defended Goldman Sachs' right to receive a government bailout, even though it was not needed[8]. Goldman Sachs – whom he later became employed with – also ranked among his top five contributors. Looking at contributions from the industry as a whole, Securities and Investment ranked second[9].

[7]I used the CRP database on campaign contributions to get this information: https://www.opensecrets.org/politicians/industries.php?cycle=2010&type =I&cid=N00000581&newMem=N&recs=20 accessed on February 21 2017

[8]The entire interview with Greta van Susteren can be streamed at https://www.youtube.com/watch?v=AvIPBViZBB0

[9]I used the CRP database on campaign contributions to get this information: https://www.opensecrets.org/politicians/summary.php?cycle=2010 &cid=N00000444&type=I

Concluding Remarks

In the most recent proposal to curtail the influence of the revolving door on American politics, President Donald Trump vowed to 'drain the swamp'. Among other things, he would increase the cooling off period – where MCs are not allowed to register as lobbyists – from two to five years after they leave Congress. But aside from the anecdotes by the likes of Jack Abramoff not a lot is known about how – or if at all – the revolving door affects policy output from Congress.

In this paper, I have shown that senators, who take on private sector employment, become substantially more moderate in their voting behavior immediately before they leave office. This effect is concentrated among the senators, who are in a position to plan their post-elective career trajectory, and is opposite to that of retirement, which induces more partisan behavior. Furthermore, I provided evidence that the moderation happens, because senator voting-patterns converge to the preferred policy of their future sector of employment. In a nutshell, revolving door senators moderate themselves, because special interests prefer moderate policies.

I established these results using an original dataset of post-Congressional career trajectories of MCs active from the 102nd to the 113th Senate. The results were robust to the inclusion of a wide range of controls, different estimation techniques, and a variety of sampling restrictions. The models were estimated using twoway fixed effects specifications, and a battery of tests for pre-treatment differences were consistent with senator voting following parallel paths.

There are some obvious and potentially large democratic and economic consequences of senators currying favor with their future employers. Among political economists, for instance, it is widely accepted that companies become politically active in an attempt to use regulation to build entry barriers for potential competitors, thereby shielding themselves against free market competition (Stigler 1971). If the special interests that recruit revolving door personnel are successful in their rent-seeking behavior, it is likely to cause deadweight losses due to inefficient regulation, which can have stark distributive consequences and inhibit technological innovations (Olson 1982), leaving society in a poorer

state than it otherwise would have been (Acemoglu and Robinson 2006; Robinson 2012). In the end, these economic distortions carry with them the prospect of damaging political conflict (Olson 1982).

Polarization, however, has stark consequences for American politics. For all its potentially negative impacts, the moderating effect of the revolving door may indeed have the positive side-effect of counteracting tendencies of polarization. Furthermore, the move toward moderation might actually decrease the disconnect between how senators vote, and what their constituencies prefer. Thus, the net effect of the revolving door on representation might actually be positive – despite the fact that the special interests originally involved themselves in the revolving door arrangement for private benefit alone.

A fruitful way of approaching the trade off may be through the lense of the second best theorem (Lipsey and Lancaster 1956). Viewed in isolation, the revolving door is likely to have negative impacts, but stemming its flow might actually exacerbate polarization and decrease representation. At present, it is not clear whether the revolving door's impact on the Senate is large enough to carry with it any of these consequences – positive nor negative. This suggests that it may be a fruitful venue of future research.

References

Acemoglu, Daron and James Robinson (2006). "Economic backwardness in political perspective". In: *American Political Science Review* 100.01, pp. 115–131.

Acharya, Avidit, Matthew Blackwell, and Maya Sen (2016). "Explaining causal findings without bias: Detecting and assessing direct effects". In: *American Political Science Review* 110.3, pp. 512–529.

Adolph, Christopher (2013). *Bankers, bureaucrats, and central bank politics: The myth of neutrality*. Cambridge University Press.

Adolph, Christopher, Daniel Butler, and Sven Wilson (2005). "Like shoes and shirt, one size does not fit all: Evidence on time series cross-section estimators and specifications from Monte Carlo experiments". In: *101st annual conference of the American Political Science Association, Washington, DC*, pp. 1–5.

Alt, James, Ethan Bueno De Mesquita, and Shanna Rose (2011). "Disentangling accountability and competence in elections: evidence from US term limits". In: *Journal of Politics* 73.01, pp. 171–186.

Angrist, Joshua and Jörn-Steffen Pischke (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.

Arellano, Manuel and Stephen Bond (1991). "Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations". In: *Review of Economic Studies* 58.2, pp. 277–297.

Armstrong, David et al. (2014). *Analyzing spatial models of choice and judgment with R*. CRC Press.

Barber, Michael and Nolan McCarty (2015). "Causes and consequences of polarization". In: *Solutions to Political Polarization in America* 15.

Barro, Robert (1973). "The control of politicians: an economic model". In: *Public Choice* 14.1, pp. 19–42.

Besley, Timothy and Anne Case (1995a). "Does Electoral Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits". In: *Quarterly Journal of Economics* 110.3, pp. 769–798.

— (1995b). "Incumbent Behavior: Vote-Seeking, Tax-Setting, and Yardstick Competition". In: *American Economic Review* 85.1, pp. 25–45.

— (2003). "Political institutions and policy choices: evidence from the United States". In: *Journal of Economic Literature* 41.1, pp. 7–73.

Black, Ryan C and Ryan J Owens (2016). "Courting the president: how circuit court judges alter their behavior for promotion to the Supreme Court". In: *American Journal of Political Science* 60.1, pp. 30–43.

Bonica, Adam (2014). "Mapping the ideological marketplace". In: *American Journal of Political Science* 58.2, pp. 367–386.

Bouwen, Pieter (2002). "Corporate lobbying in the European Union: the logic of access". In: *Journal of European Public Policy* 9.3, pp. 365–390.

Canes-Wrone, Brandice, David Brady, and John Cogan (2002). "Out of step, out of office: Electoral accountability and House members' voting". In: *American Political Science Review* 96.01, pp. 127–140.

Carnes, Nicholas (2013). *White-collar government: The hidden role of class in economic policy making*. University of Chicago Press.

Caughey, Devin and Christopher Warshaw (2015). "The Dynamics of State Policy Liberalism, 1936–2014". In: *American Journal of Political Science*.

Clinton, Joshua, Simon Jackman, and Douglas Rivers (2004). "The statistical analysis of roll call data". In: *American Political Science Review* 98.02, pp. 355–370.

Dabros, Matthew (2015). "Explaining final term changes in US Congressional foreign travel". In: *Journal of Legislative Studies* 21.3, pp. 428–446.

Do, Quoc-Anh, Yen Teik Lee, and Bang Dang Nguyen (2015). "Political connections and firm value: Evidence from the regression discontinuity design of close gubernatorial elections". In:

Downs, Anthony (1957). "An economic theory of political action in a democracy". In: *Journal of Political Economy*, pp. 135–150.

Egerod, Benjamin CK (2018). "The Lure of the Private Sector: Career prospects affect selection out of the US Senate". In: *Working Paper, University of Copenhagen*.

Eggers, Andrew and Jens Hainmueller (2009). "MPs for sale? Returns to office in postwar British politics". In: *American Political Science Review* 103.04, pp. 513–533.

Fearon, James (1999). "Electoral accountability and the control of politicians: selecting good types versus sanctioning poor performance". In: *Democracy, accountability, and representation* 55, p. 61.

Ferejohn, John (1986). "Incumbent performance and electoral control". In: *Public Choice* 50.1, pp. 5–25.

Figlio, David (1995). "The effect of retirement on political shirking: Evidence from congressional voting". In: *Public Finance Review* 23.2, pp. 226–241.

Fowler, James (2006a). "Connecting the Congress: A study of cosponsorship networks". In: *Political Analysis* 14.4, pp. 456–487.

Fowler, James (2006b). "Legislative cosponsorship networks in the US House and Senate". In: *Social Networks* 28.4, pp. 454–465.

Fudenberg, Drew, David Kreps, and Eric Maskin (1990). "Repeated games with long-run and short-run players". In: *Review of Economic Studies* 57.4, pp. 555–573.

Gallop, Max and Simon Weschle (2017). "Assessing the impact of non-random measurement error on inference: A sensitivity analysis approach". In: *Political Science Research and Methods*, pp. 1–18.

Goldman, Eitan, Jörg Rocholl, and Jongil So (2009). "Do politically connected boards affect firm value?" In: *Review of Financial Studies* 22.6, pp. 2331–2360.

Gordon, Sanford and Catherine Hafer (2007). "Corporate influence and the regulatory mandate". In: *Journal of Politics* 69.2, pp. 300–319.

— (2005). "Flexing muscle: Corporate political expenditures as signals to the bureaucracy". In: *American Political Science Review* 99.02, pp. 245–261.

Gregg, Judd (2011). "Congress Caused Financial Crisis". In: *The Hill Opnion Columns (Online). Available at: http://thehill.com/opinion/columnists/judd-gregg/153521-opinion-financial-meltdown-caused-by-congress [Accessed: 27 Dec. 2016]*.

Groseclose, Tim, Steven Levitt, and James Snyder (1999). "Comparing interest group scores across time and chambers: Adjusted ADA scores for the US Congress". In: *American Political Science Review* 93.01, pp. 33–50.

Grossman, Gene and Elhanan Helpman (1994). "Protection for Sale". In: *American Economic Review* 84.4, pp. 833–850.

— (2001). *Special Interest Politics*. MIT press.

Hall, Andrew and Daniel Thompson (2016). "Who Punished Extremist Nominees? Candidate Ideology and Turning Out the Base in U.S. Elections". In: *Working Paper*.

Hamby, Peter (2009). "Gregg 'probably' won't seek re-election in 2010". In: *CNN Blogs (Online). Available at: http://politicalticker.blogs.cnn.com/2009/02/12/gregg-probably-wont-seek-re-election-in-2010/ [Accessed: 27 Dec. 2016]*.

Hansen, John (1991). *Gaining access: Congress and the farm lobby, 1919-1981*. University of Chicago Press.

Hare, Christopher and Keith Poole (2014). "The polarization of contemporary American politics". In: *Polity* 46.3, pp. 411–429.

Imai, Kosuke and In Song Kim (2016). "When Should We Use Linear Fixed Effects Regression Models for Causal Inference with Longitudinal Data?" PhD thesis. Working paper, Princeton University, NJ.

Jackman, Simon (2001). "Multidimensional analysis of roll call data via Bayesian simulation: Identification, estimation, inference, and model checking". In: *Political Analysis* 9.3, pp. 227–241.

Jones, David (2001). "Party polarization and legislative gridlock". In: *Political Research Quarterly* 54.1, pp. 125–141.

King, Gary, Robert Keohane, and Sidney Verba (1994). *Designing social inquiry: Scientific inference in qualitative research.* Princeton university press.

Klein, Ezra (2011). "Jack Abramoff's guide to buying congressmen". In: *Washington Post. Available at: http://wapo.st/2rX1ttL [Accessed: 27 Jun. 2017].*

Klüver, Heike (2012). "Informational lobbying in the European Union: The effect of organisational characteristics". In: *West European Politics* 35.3, pp. 491–510.

Landrigan, Kevin (2008). "Gregg urges change in financial regulation". In: *New Hampshire Business Review (Online). Available at: http://www.nhbr.com/September-26-2008/Gregg-urges-change-in-financial-regulation/ [Accessed: 27 Dec. 2016].*

LaPira, Tim and Herschel Thomas (2016). "Congressional Analytic Capacity, Party Polarization, and the Political Economy of Revolving Door Lobbying". In:

Layman, Geoffrey, Thomas Carsey, and Juliana Horowitz (2006). "Party polarization in American politics: Characteristics, causes, and consequences". In: *Annu. Rev. Polit. Sci.* 9, pp. 83–110.

Lazarus, Jeffrey and Amy McKay (2012). "Consequences of the revolving door: Evaluating the lobbying success of former congressional members and staff". In:

Lindbeck, Assar and Jörgen W Weibull (1987). "Balanced-budget redistribution as the outcome of political competition". In: *Public Choice* 52.3, pp. 273–297.

Lipsey, Richard and Kelvin Lancaster (1956). "The general theory of second best". In: *Review of Economic Studies* 24.1, pp. 11–32.

Lott, John and Stephen Bronars (1993). "Time series evidence on shirking in the US House of Representatives". In: *Public Choice* 76.1-2, pp. 125–149.

Luechinger, Simon and Christoph Moser (2014). "The value of the revolving door: Political appointees and the stock market". In: *Journal of Public Economics* 119, pp. 93–107.

Martin, Andrew and Kevin Quinn (2002). "Dynamic ideal point estimation via Markov chain Monte Carlo for the US Supreme Court, 1953–1999". In: *Political Analysis* 10.2, pp. 134–153.

McCarty, Nolan, Keith Poole, and Howard Rosenthal (1997). *Income redistribution and the realignment of American politics*. AEI Press publisher for the American Enterprise Institute.

Nickell, Stephen (1981). "Biases in dynamic models with fixed effects". In: *Econometrica*, pp. 1417–1426.

Olson, Mancur (1965). "The logic of collective action: Public goods and the theory of groups." In:

— (1982). *The rise and fall of nations: Economic growth, stagflation and social rigidities*. New Haven: Yale University Press.

Palmer, Maxwell and Benjamin Schneer (2016). "Capitol gains: The returns to elected office from corporate board directorships". In: *Journal of Politics* 78.1, pp. 181–196.

Parker, Glenn (2009). *Capitol investments: the marketability of political skills*. University of Michigan Press.

Parker, Glenn and Matthew Dabros (2012). "Last-period problems in legislatures". In: *Public Choice* 151.3-4, pp. 789–806.

Parker, Glenn and Suzanne Parker (2009). "Earning through learning in legislatures". In: *Public Choice* 141.3-4, pp. 319–333.

Parker, Glenn, Suzanne Parker, and Matthew Dabros (2013). "The labor market for politicians: Why ex-legislators gravitate to lobbying". In: *Business & Society* 52.3, pp. 427–450.

Poole, Keith and Howard Rosenthal (1984). "The polarization of American politics". In: *Journal of Politics* 46.4, pp. 1061–1079.

— (2015). "Voteview". In: *Voteview.com (Online). Available at: http://voteview.com/dwnl.htm [Accessed: 1. Jan. 2017].*

Robinson, James (2012). "Elites and institutional persistence". In: *The role of elites in economic development*, pp. 29–52.

Santos, Adolfo (2006). *Do Members of Congress Reward Their Future Employers?: Evaluating the Revolving Door Syndrome.* University Press of America.

Schultz, Christian (2008). "Information, polarization and term length in democracy". In: *Journal of Public Economics* 92.5, pp. 1078–1091.

Sheshgreen, Deidre (2011). "Is Chris Dodd Auditioning for the role of MPAA's leading man?" In: *The Connecticut Mirror. Available at: http://ctmirror.org/2011/02/11/chris-dodd-auditioning-role-mpaas-leading-man/ [Accessed: 21 Feb. 2017].*

Snyder, James and Tim Groseclose (2000). "Estimating party influence in congressional roll-call voting". In: *American Journal of Political Science*, pp. 193–211.

Snyder, James and Michael Ting (2003). "Roll calls, party labels, and elections". In: *Political Analysis* 11.4, pp. 419–444.

Stigler, George (1971). "The theory of economic regulation". In: *The Bell Journal of Economics and Management Science*, pp. 3–21.

Thieme, Sebastian (2017). "Ideology and Extremism of Interest Groups: Evidence from Lobbyist Declarations in Iowa, Nebraska, and Wisconsin". In: *SSRN. Available at: https://ssrn.com/abstract=2950719.*

Tiefelsdorf, Michael and Daniel Griffith (2007). "Semiparametric filtering of spatial autocorrelation: the eigenvector approach". In: *Environment and Planning* 39.5, pp. 1193–1221.

Tien, Charles (2001). "Representation, voluntary retirement, and shirking in the last term". In: *Public Choice* 106.1-2, pp. 117–130.

Vanbeek, James (1991). "Does the decision to retire increase the amount of political shirking?" In: *Public Finance Review* 19.4, pp. 444–456.

Vidal, Jordi Blanes, Mirko Draca, and Christian Fons-Rosen (2012). "Revolving door lobbyists". In: *American Economic Review* 102.7, pp. 3731–3748.

Wilkins, Arjun (2017). "To Lag or Not to Lag?: Re-Evaluating the Use of Lagged Dependent Variables in Regression Analysis". In: *Political Science Research and Methods*, pp. 1–19.

Wooldridge, Jeffrey (2015). *Introductory econometrics: A modern approach*. Nelson Education.