Losers Go to Jail: Congressional Elections and Union Officer Prosecutions

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Abstract

Political competition is central to democracy. This competition is weakened if politicians can use criminal investigations of politically influential groups to undermine political opponents and protect supporters. I test whether prosecutions of politically active labor unions respond to Congressional election outcomes. Using novel data on federal indictments and a regression discontinuity to recover causal effects, I find that union officers are 67% more likely to be indicted when the candidate supported by their union barely loses rather than barely wins. I explore this result in a model in which 1) indictments reduce unions' campaign activity and 2) Congress chooses the budget of the investigative agency. By reducing union campaigning, indictments hurt union-supported Representatives but help those who were union-opposed. Thus, reallocating investigations from the district of the former to that of the latter helps *both*. This mutually beneficial reallocation creates a surplus which can be transferred back to the investigator through its budget. I present a range of empirical evidence supporting the model. The results show that US politicians manipulate the justice system to maintain power.

Keywords: Bureaucratic politics; Political competition; Labor unions

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"The politicians of the United States are not so fastidious as some gentlemen are... If they are successful, they claim, as a matter of right, the advantages of success. They see nothing wrong in the rule, that to the victor belong the spoils of the enemy."

– Sen. William L. Marcy (D-NY), 1832

1 Introduction

Economists value democracy partly because it can reproduce gains from competition and choice (Stigler, 1972). In markets, producer competition and consumer choice improve welfare through product quality; in democracies, political competition and voter choice improve welfare through policy quality. Empirical evidence shows democracy and political competition improve policy and increase growth (Acemoglu et al. 2015; Besley, Persson, and Sturm 2010). However, the degree of political competition depends on the institutions in place and those institutions are often established by reelection-minded politicians (Aghion, Alesina, and Trebbi, 2004). These politicians have an incentive to undermine political competition, and there is some evidence of laws created for this purpose (Baskaran and da Fonseca, 2016; Drometer and Rincke, 2014; Trebbi, Aghion, and Alesina, 2008). However, newly created laws are relatively observable, so political and constitutional constraints might be able to guard against this behavior. Political influence over the implementation of existing laws, on the other hand, is less transparent and more difficult to guard against.

In this paper, I study Congressional influence over criminal investigations of politically influential groups. I focus on labor unions, an ideal context because their political activity is substantial and transparent. Unions make up seven of the 10 organizations with the most federal campaign contributions (Center for Responsive Politics, 2016), and Figure 1 shows that even though union membership fell by 50% over the last 30 years, contributions rose by 300%. Evidence from an Australian ban of union contributions suggests they have significant policy effects (Stanfield and Tumarkin, 2015).

[Figure 1 about here.]

Beyond contributions, unions make endorsements, influence members' voting, organize demonstrations, and use members to staff phone banks, registration drives, and other "get out the vote" initiatives. These activities are important.¹ Flavin and Hartney (2015) exploit state variation in collective bargaining laws and show unions substantially increase their members' political activity. Feigenbaum (2015) uses a regression discontinuity in union certification

¹A large literature evaluates these activities, though not unions themselves (e.g., Arceneaux and Kolodny 2009; Garcia Bedolla and Michelson 2012; Green, McGrath, and Aronow 2013; Kendall, Nannicini, and Trebbi 2014; Madestam et al. 2013; Nickerson 2015).

elections and finds union membership increases Democratic vote share and make Congressional Representatives' policy positions more liberal. Moreover, Democratic votes increase by more than union membership does, implying unions influence voters beyond their members. Ahlquist (2016) reviews evidence of unions' political influence.

These political activities rely on public support, the union's reputation, and a strong membership base. When an officer is charged with embezzling union funds, it undermines these. Federal indictments like these are common (experienced by 68% of unions in my sample), wellpublicized, and consequential. Below, I show the indictments in my sample reduce membership, campaign contributions, and votes for union-supported candidates. By reducing union influence, an indictment makes a union-supported Representative worse off (weakening her reelection support base) but a union-opposed Representative better off (weakening her reelection opposition). Thus, reallocating criminal investigations from a pro-union Representative's district to that of an anti-union Representative makes *both* better off, creating a joint surplus. If they can transfer some of this surplus back to federal investigators, it creates an incentive to condition investigations on electoral outcomes.

I test whether indictments and prosecutions of union officers respond to election outcomes. I use novel data, created from press releases, on the universe of indictments in cases by the Department of Labor's Office of Labor-Management Standards (OLMS), which conducts nearly all criminal investigations of unions and is only responsible for union investigations. I combine these indictments with union financial reports and contributions to Congressional campaigns. Using contributions to establish support, I use a regression discontinuity (RD) to estimate the causal effect of a candidate's win on indictments of locally-based officers in supporting unions.^{2,3} I find that a close win lowers the probability of indictment, relative to a close loss, from just under 4% to just over 2%, a large and statistically significant effect.⁴ Given that the average close election has 20 union contributors, these estimates imply that an indictment is subject to political manipulation in roughly one out of every three close elections. Because supporting

²Caughey and Sekhon (2011), Grimmer et al. (2011), and Snyder (2005) find evidence that incumbents are systematically more likely to win close Congressional elections and have criticized the validity of RD designs. (See Eggers et al. (2015) and Snyder, Folke, and Hirano (2011) for a critical response.) I do not find close winner are significantly more likely to be incumbents in my sample (a more recent time period than these studies). Moreover, indictments are not predicted by union support for the incumbent and controlling for this variable has no effect on the results.

 $^{^{3}}$ My main sample is based on nearly 564 indictments (2001-2012) and 620 elections from 2000-2010 where the winner received less than 60% of the vote (289 less than 55%; 117 less than 52%).

⁴As is common in studies of crime, I cannot prove that indictment effects capture investigations rather than underlying criminal behavior. However, many of the indictments are for embezzlement occurring over several years, mitigating this concern. Moreover, I find *fewer* indictment rates when the union-allied Representative wins, the opposite of what deterrence would predict for criminal behavior. A model in which union-supported politicians channel pork-barrel spending to those supporters, increasing opportunities to embezzle funds, would also predict the opposite finding.

one candidate necessarily means opposing their opponent (unions almost never contribute to both), this difference between a close win and a close loss includes any indictment reduction to protect the winner's supporters, as well as any increase to undermine the winner's opponents.

In interpreting this result, it is important to emphasize that this is the effect of a federal Representative on indictments *in their district* and not the effect on aggregate indictments. If pro-union or anti-union Representatives only changed laws and policies, this would only affect indictments nationally. Since there are equal numbers of close winners and losers each year, the identifying variation is orthogonal to these national changes. Instead, the discontinuity captures differences between districts in the same year (comparing those where a union-supported candidate narrowly won to those where one lost) and reflects the allocation of indictments. An account of this discontinuity must explain why Representatives affect *which* officers are indicted, rather than simply how many. Since the allocation protects incumbents from future electoral challengers, a politically motivated interpretation is natural.

While it might be tempting to describe politically-responsive indictments as "corruption," a political bias like this can emerge even in strong institutional environments without illegal, unofficial activity. To show this, I model the strategic interactions of unions, the investigator, and politicians, assuming that the investigator has no intrinsic political objectives (and seeks only to maximize the number of successful cases), that politicians have some ability to influence the investigator's budget but no unofficial means of exerting pressure (i.e., no "back-room" phone calls), and that unions only engage in politics to change collective bargaining policies (with no attempts to "buy" protection from investigations). Even in these circumstances, I show that an equilibrium with politically-responsive indictments is sustainable.

The investigator prefers to allocate investigations without reference to politics, but recognizes that politicians can spend costly effort to adjust its total budget of investigations. I show that union-supported politicians best response to a non-political allocation is to spend effort to lower the total budget, and union-opposed politicians best respond by spending effort to raise it. Since a single budget cannot rise *and* fall, some costly effort to raise it cancels some effort to lower it and is wasted in this equilibrium. Because of this waste, I show that it is possible in a repeated game to sustain an equilibrium with politically-responsive indictments (which fall with a union-supported candidate's win, relative to a loss). This benefits both types of politicians and since they can transfer surplus to the investigator through its budget, this equilibrium makes all politicians and the investigator are strictly better off. While models of many allocation problems can yield a political bias under certain conditions, union investigations are unusual because they help some politicians and harm others: to some they are a good and to others they are a bad. This sets my context apart from models of federal spending, for instance, where all politicians benefit from spending so the effect of political outcomes depend on conditions like the control of Congress (e.g., Albouy 2013) or important committees (e.g., Berry and Fowler 2015). Because a politically biased reallocation of union investigations from one district to another (or one union to another) can be mutually beneficial, it depend less on legislative conditions.

The model relies on two key assumptions. First, indictments are politically meaningful and politicians have a reason to invest costly effort to influence them. Second, Representatives can transfer their rents to OLMS because they can condition their budget actions on its indictments (and OLMS can punish Representatives because it can condition indictments on their budget actions). I provide evidence to support both assumptions.

First, I estimate the effects of indictments using a difference-in-difference strategy that exploits the timing of indictments among the sample indicted during my period. An indictments reduces the union's membership, dues collected, campaign contributions, and operation of local affiliates. Moreover, after an indictment, the party previously supported by the union loses two percent of the vote. For these outcomes, I find modest evidence of pre-trends suggesting that, if anything, unions were getting *stronger* before the indictment. I find no evidence that post-indictment declines were a continuation of an ongoing trend, and the magnitude of the declines exceeds what simple mean reversion might predict. In total, Representatives seem to have good cause to take these indictments seriously.

The second assumption is that Representatives and OLMS can condition their actions on those of the other (which allows surplus to be transferred). To look for evidence of this, I study a 2007 amendment to the House Budget Resolution that isolates OLMS funding from other agencies. Representatives with an opponent indicted are more likely to vote for increased funding and those with a supporter indicted are less likely (both relative to the unaffected in their party). Moreover, the results show that only narrowly elected Representatives are willing to deviate from the party line. Thus, the Representatives driving identification in the RD are particularly important for OLMS' funding.

My model can produce a political bias in the allocation of indictments under fairly general conditions because this bias is mutually beneficial. I provide two types of evidence that this mutual benefit is important. First, I exploit the fact that cities have multiple Congressional districts, and candidates supported by a particular union might win some of those and lose others. If a single city has both Representatives who were supported by this union and those who were opposed by it, then neither increasing nor decreasing local investigations of this union can be mutually beneficial. OLMS has ambiguous incentives: an indictment that helps one Representative hurts the other. In cases with these ambiguous incentives, I find that the effect of an election outcome is significantly smaller and indistinguishable from zero, a conclusion that becomes even stronger when adjusting for the small number of observable differences in these cases. This suggests that indictments only respond to election outcomes when a mutually beneficial adjustment is possible.

Second, I decompose total discontinuity into two components. As discussed, the RD identifies the casual indictment effect of a union-supported candidate's win instead of union-opposed win, which includes any indictment reduction that benefits the union-supported Representative ("protection") and any indictment increase that benefits the union-opposed one ("aggression"). For the discontinuity to actually be mutually beneficial, both components (both types of benefits) must be positive. Focusing on unions that contribute to multiple close elections, I isolate quasi-random variation in the joint realization of election outcomes. I treat those who narrowly won some and lost other elections as a quasi-random "control group" with no political interference (since OLMS has ambiguous incentives for these unions). I then use quasi-random variation in winning *all* and losing *all* close elections to identify the magnitudes of the protection and aggression components. I find both components are statistically significant: union-opposed Representatives raise the indictment rate and union-supported Representatives lower it. These two effects comprise roughly equal parts of the total discontinuity.

Politicians may be willing to shift their position to gain support from unions and improve their electoral prospects. The model shows that these shifts have predictions for unions' contribution behavior. The intuition rests on theoretical and empirical evidence that incumbents face constraints in changing policy positions because voters punish them for a lack of "character" (Doherty, Dowling, and Miller, 2015; Fedaseyeu, Gilje, and Strahan, 2015; Kartik and McAfee, 2007). As a result, if there is an increase in unions' ability to influence voters, electoral challengers will be better able to respond than the incumbent, and thus will garner union support more effectively. I develop a shift-share (Bartik-style) instrument for incumbent popularity based on swings in national public opinion and changes in ideologically similar Representatives' vote share. Because a negative shock to incumbent popularity makes the election closer, union campaigning becomes more consequential, and I show that union contributions rise in response. However, consistent with the model's prediction, contributions to challengers respond three to five times more strongly to popularity shocks than contributions to incumbents.

This work contributes to the literature on political competition and endogenous protective policies. There is substantial empirical evidence that political competition gives politicians an incentive to exert effort and improve policy.⁵ However, politicians would prefer less competition

⁵Political competition and electoral incentives increase growth (Besley et al., 2010; Padovano and Ricciuti, 2009); improve supply of local public goods (Arvate, 2013; Martinez-Bravo et al., 2014), policy implementation (de Janvry, Finan, and Sadoulet, 2010), and efficiency of government services (Ashworth et al., 2014; Helland and Sørensen, 2015); increase politician effort (Becker, Peichl, and Rincke, 2009; Bernecker, 2014; Dal Bó and Rossi, 2011; Gavoille and Verschelde, 2015) and entrant quality (De Paola and Scoppa, 2011; Galasso and Nannicini, 2011); and reduce corruption (Ferraz and Finan, 2011), interest group influence (Solé-Ollé and Viladecans-Marsal, 2012), and other rents to politicians (Galindo-Silva, 2015; Svaleryd and Vlachos, 2009). Research has

and some evidence shows they create legal barriers to candidate entry in response to new competition.⁶ Yet recent political economy literature emphasizes that policy implementation and discretion are as important as policies themselves (Agarwal et al. 2014; Ashraf, Bandiera, and Lee 2016; Callen, Gulzar, Hasanain, Khan, and Rezaee 2015; Rasul and Rogger 2016), and a literature in political science has identified a range of tools through which Congress can influence bureaucracies.⁷ I show this these channels can produce policy implementation that protects Representatives.

It also contributes to a literature in law and economics on political pressures in the justice system. A large literature studies elected judges' response to political incentives (Ash and MacLeod, 2016; Berdejó and Yuchtman, 2013; Canes-Wrone, Clark, and Park, 2012; Gordon and Huber, 2007; Huber and Gordon, 2004; Lim, 2013; Lim and Snyder, 2015; Lim, Snyder, and Strömberg, 2012). I contribute to this literature by showing that non-elected actors (e.g., investigators) can inherit the political incentives of others, which might affect the justice system more broadly. A separate body of work has studied whether federal prosecutors (presidential appointees) exhibit a political bias in corruption trials of politicians (Alt and Lassen, 2014; Gordon, 2009; Meier and Holbrook, 1992; Nyhan and Rehavi, 2016). I contribute to this literature by showing that political biases can emerge in cases against groups that are politically influential, and not just politicians.

The next section provides some background on OLMS and anecdotal evidence of political influence. I describe the data in Section 3 and the RD approach in Section 4. Section 5 presents my causal estimates of how election outcomes affect indictment indictments. It also summarizes identification tests, robustness checks, and important heterogeneity. Section 6 summarizes the model (developed in the Appendix) and Section 7 provides evidence to support its assumptions and implications. Section 8 uses the magnitudes from the literature on the effects of political competition to interpret my results and give suggestive evidence about potential welfare implications. Section 9 concludes.

also shown that political competition sometimes has harmful effects, such as short-sighted policy (Azzimonti, 2015; Bagchi, 2016; Bracco, Porcelli, and Redoano, 2013; Fiva and Natvik, 2013). See Khemani et al. (2016) for an extensive review of both sides.

⁶Baskaran and da Fonseca (2016) study municipal governments in modern Germany and Drometer and Rincke (2014) and Trebbi et al. (2008) study them in the 1960's United States.

⁷Congress appoints directors (Wood and Waterman, 1991) and special advisory committees (Balla and Wright, 2001); designs authorizing legislation (Calvert et al., 1989; Gailmard and Patty, 2012; Huber and Shipan, 2008; McCubbins et al., 1987) and adds further restrictions in later legislation (MacDonald, 2010); and holds oversight and investigatory hearings (Kriner and Schwartz, 2008; MacDonald and McGrath, 2016; McGrath, 2013; Parker and Dull, 2009). See Weingast and Moran (1983) for early work and McCubbins (2014) for a review.

2 Institutions

2.1 History, overview, and discretion

The Office of Labor-Management Standards (OLMS) is an agency in the Department of Labor that has its roots in the McClellan hearings on union corruption (1957-1959).⁸ Many historians believe these hearings were an attempt to undermine public support for unions after President Eisenhower was unable to win their support for the Republican Party (Lee, 1990; McAdams, 1964; Witwer, 2011). The nationally broadcast hearings exposed widespread corruption among labor unions and gave birth to the 1959 Labor Management Reporting and Disclosure Act (LMRDA or Landrum-Griffin Act) that is still the main set of criminal laws for labor unions. OLMS is the only federal agency that enforces the LMRDA, and except for cases directly linked to larger organized crime investigations, OLMS is responsible for all union-related criminal cases (OMB, 2008).⁹ OLMS' annual budget is roughly \$50 million and its staff is around 300 FTE employees, though both depend on partisan control (see Figure C1). Two-thirds of staff are investigators, mostly spread across 21 District Offices. OLMS conducts 500-750 audits per year, half of which are of randomly selected unions. Audits and criminal investigations account for 50-60% of staff time.

The case process involves numerous discretionary decisions.¹⁰ Moreover, few formal rules guide this process. According to the Office of the Inspector General (2012), OLMS' process for choosing unions to audit was essentially arbitrary and there was no systematic approach to focus on high-risk unions until mid-2011. According to the GAO (2000), OLMS is not even supposed to conduct investigations without a waiver from the DOJ, which it stopped requesting in the 1970's (calling it "a formality").¹¹ In addition to near-complete discretion, OLMS is largely autonomous (only 10% of cases involve another agency) and "obscure" (which facilitates Congressional interference according to former DOL Chief Economist Furchtgott-Roth (2007)).

⁸This section draws upon several performance reports (Department of Labor, 2008; DOL Office of the Inspector General, 2012; Government Accountability Office, 2000, 2006; Hayes, 2013; Office of Management and Budget, 2008; Yud, 1999).

⁹Organized crime cases are usually handled by the FBI and DOL Office of the Inspector General. Because OLMS is designated specifically to investigate unions, the FBI, IRS, and other agencies generally refer union-related cases to OLMS. Also embezzlement and financial crimes are generally to complex for local police departments (as noted by Jacobs (2006)).

¹⁰Roughly 7-10% of random audits (no time trend) and 11-22% of targeted audits (increasing over time) produce a criminal case. 37% of cases are referred for federal prosecution and 80% of those are accepted. When accepted, 75% lead to an official indictment (federal arrest warrant) and 90% of indictments result in conviction. When federal prosecutors turn down a case, OLMS has the opportunity to bring it to state prosecutors.

¹¹In the theoretical literature on bureaucratic delegation, a common result is that discretion in design will occur when politicians can better influence implementation (Huber and Shipan, 2008).

2.2 Evidence of political influence

Ample evidence suggests OLMS is politicized. The President's Commission on Organized Crime reported:¹²

Former enforcement officials of the Department of Labor have noted that the opening of investigations into funds related to certain powerful unions, or a significant local of those unions, often resulted in prompt intervention from the Office of the Secretary of Labor. Such contacts indicated, either implicitly or explicitly, that it was unwise to disrupt certain established political relationships. One of the key obstacles to more vigorous oversight of labor-management racketeering by the Department of Labor is the Department's undeniable susceptibility to political pressure from the leadership of the constituency it is supposed to oversee. (President's Commission on Organized Crime, 1986, p. 30)

Such "undeniable susceptibility to political pressure" is seen in the choice of OLMS Director, a Presidential appointee. George W. Bush appointed Don Todd, former Head of Opposition Research for the Republican National Committee (Fenyvesi, 1991). Afterwards, Barack Obama appointed Todd's most prominent critic, Labor Relations Professor John Lund. Lund had previously written "It is clear that intervention by members of the US Congress and political groups hostile to trade unions has increased the amount of government financial supervision of unions (Lund, 2009)," which I interpret as the agency's acknowledgement of Congressional influence.

There are two direct channels for Congress to influence OLMS. First, it can adjust OLMS' responsibilities. This can include restricting its authority, as when Rep. William Ford (D-MI) called OLMS investigations in his district "a fishing expedition" and demanded Congressional review of their procedures (Everett, 1991). On the other hand, it can include forcing new responsibilities on OLMS, as it did under Rep. Newt Gingrich (R-GA), when the OLMS Director resigned in protest of regulations that "would make it legitimate for the unions to feel that the portals of the Labor Department should be inscribed with Dante's famous phrase ['Abandon all hope, ye who enter'] (Guttman, 1992)."

The second channel of influence is that Congress sets OLMS' budget. This, too, is a politicized process. When the House proposed budget cuts, former DOL Chief Economist Furchtgott-Roth (2007) claimed Congressional Democrats sought to reduce OLMS audits "to protect the union bosses to preserve the flow of campaign contributions." Congressional budget pressure translates into large employment effects, seen in Figure C1. From its recent high (FY2006) to

¹²Though the PCOC was established by Republican President Reagan, its criticism was roughly bipartisan, arguably including a charge that Reagan's administration shielded the Teamsters' President Jackie Presser from investigation because he endorsed Reagan in 1984 (Jacobs, 2006, p. 43).

its recent low (FY2016), OLMS employment declined 46%. In Section 7.1.2 I show that those who benefit from OLMS indictments are more likely to support a budget increase, and those harmed are less likely (both relative to the unaffected in their party), and that Representatives elected by narrow margins are more likely to be decisive in a partian votes like OLMS' budget. Investigators, then, have an obvious incentive to consider the political consequences of indictments.

In summary, OLMS is a small, isolated agency with little oversight and an extensive history of political influence, both in its responsibilities and its funding. Below, I show that this influence affects how investigations are targeted.

3 Data

3.1 Data sources

I use three main data sources. First is the complete list of criminal actions in OLMS cases from 2001-2015. The data are created from short (2-6 sentence) press releases on the OLMS website describing indictments, convictions, and sentencing. My data include roughly 1,300 cases nearly all for embezzling union funds. The Appendix gives an example. I coded variables including the union and division, the suspect's office within the union, the amount embezzled, conviction and sentencing outcomes, the court in which the case was tried, the OLMS District Office responsible, and any other agencies involved. OLMS did not historically publish these data, but under Todd, OLMS made them available from 2001 onward to improve transparency (Lund, 2009).¹³ I believe these data include nearly every criminal charge against labor unions in the US. State and local police rarely have the capacity to investigate financial crimes so nearly all union-related cases are federal (Jacobs, 2006), and other federal agencies usually refer union-related cases to OLMS since that is its specific function.¹⁴

Second, I determine the location of unions and their local affiliates using the Labor Management (LM) Reports, annual financial filings required under the LMRDA for unions representing

¹³Many observers suggest they were published with political motives to discrediting unions. Lilly (2007) and Kaplan (2007) note the proliferation of websites and anti-union advocacy groups that published either the raw data or aggregate statistics. Moreover, some have claimed the data is intentionally misleading. In Kaplan (2007), John Lund (later OLMS Director) and Deborah Greenfield (later DOL Deputy Solicitor) suggest that OLMS intentionally disaggregated records (so that an indictment and a conviction appeared to be separate records) to exaggerate these oft-published counts. My data processing accounts for these inappropriately disaggregated records, so my counts differ from published totals.

¹⁴Two types of cases are likely to be excluded from the data: 1) cases that are part of larger organized crime investigations, and 2) cases in which an employer makes illegal payments to the union. These cases are generally investigated by the FBI, and only sometimes is OLMS involved so my coverage of these cases is incomplete.

private or federal employees.¹⁵ The reports include basic financial information on roughly 1,500 unions and 30,000 divisions of those unions and can be linked across time. I determine the locations of unions' locals using their mailing address. The LM Reports also provide (noisy) measures of membership and receipts.

Finally, I use campaign contributions from the Database on Ideology, Money, and Elections or DIME (Bonica, 2013). This includes cleaned contribution data filed with the Federal Elections Commission. I focus on contributions from organizations, and labor unions have been identified by the Center for Responsive Politics. Variables such as total spending, candidate parties, and information about primaries are also from the DIME data. Election variables (e.g., vote shares) are from Fowler and Hall (2014) and data provided by Gary Jacobson.

3.2 Data construction

Here I give a brief overview of data construction; more detail is in the Appendix. After cleaning the datasets, I merge the indictment and contribution data with the LM data. I then identify the most disaggregated division type (e.g., council, district, local) for each union in the data. For simplicity, I refer to these as locals, which they usually are.¹⁶ Based on their mailing address, I locate these locals within a Commuting Zone (CZ), collection of counties approximating local labor markets (Tolbert and Sizer, 1996).¹⁷ For each union, I then aggregate over all locals within a CZ and call this a Union-CZ.¹⁸

I merge each Union-CZ with all Congressional districts that overlap the CZ. I weight observations by the share of the district population in the CZ giving each district equal weight. This weighting scheme, also used in Autor et al. (2016), is explored below. The contribution data allows me to identify all cases where the union or one of its locals contributed to a Congressional candidate.¹⁹ The final dataset matches indictment and financial information for each union's locals within a CZ with the union's contributions to House candidates in overlapping districts. I aggregate indictments to two-year Congressional terms that start in early January following the election. Thus, a unit of observation is a Union-CZ-election, with indictments measured during the two years after the election.

¹⁵Since 2003, these reports have been filed electronically. During the George W. Bush Administration, OLMS made the data publicly available back to 2000. They are sometimes removed from its website, so I am happy to provide the data. Holmes and Walrath (2007) discuss the challenge of getting historical LM data and Thomas Holmes makes several datasets available.

¹⁶Many small unions have only a headquarters. These are included in the data (I treat that headquarters as a local, since it is the most disaggregated unit), though in practice they are rarely politically active.

¹⁷See Autor and Dorn (2013), Autor, Dorn, and Hanson (2013), or Chetty et al. (2014) for more discussion. ¹⁸Locals' offices move frequently, but rarely across CZ's. I use the modal CZ to shut off endogenous mobility.

¹⁹I treat contributions from the headquarters or locals interchangeably, though nearly all contributions come from headquarters.

3.3 Summary statistics

Appendix Table C1 presents summary statistics on cases. My sample includes 641 cases (some including multiple suspects). These cases are serious; the median theft is 21,000 (in 2015 dollars) with substantial variation (the 10^{th} and 90^{th} percentiles are 4,000 and 120,000). 87% of cases result in conviction, and 23% of convictions result in prison. Importantly, 28% of cases involve a "top" official (such as president, vice president, etc.) and 49% involve the treasurer. These likely influence public perceptions more than indictments of low-ranking officers would, and these perceptions are what matters for political candidates. As discussed above, only 10% of these cases involve another agency, underscoring OLMS' autonomy.

Table 1 presents summary statistics on unions, elections, and Commuting Zones (CZ's). The table has three columns. The first presents unions, elections, and CZ's with no union contributions. The second presents those with union contributions, but where the election is not "close" (the winner receives more than 60 percent of the two-party vote). The third presents my main estimation sample: Those with union contributions to close elections.

Panel A shows this sample includes 75 unions, each operating an average of 280 locals across 109 CZ's. The unions in my sample are a small share of all unions (5%), but they are more than 100 times larger than non-political unions in terms of membership, receipts, locals, or geographic coverage, so my sample accounts for 85% of members in the data. Unions in my sample also experience more indictments: the probability a Union-CZ experiences an indictment is three times that of non-contributing unions.²⁰ In total, 68% of unions in my sample have an official in at least one local indicted during the period.

[Table 1 about here.]

Panel B shows summary statistics for elections, 91% of which have some union contributions (Columns 2 and 3). Though not shown in the table, the average close election has 20 union contributors. Among close elections with union involvement (Column 3), 97% of Democrats receive contributions from at least one union, and Democrats get 88% of these contributions. Yet in only 61% of elections do all unions "agree" on a single candidate, while the other 39% see unions split between candidates.²¹ Total union contributions amount to \$135 thousand in the average close election (almost 5% of total spending), underscoring the political importance of unions. In non-close elections, unions contribute less (see Figure C2 for more detail), but it is a larger share of total spending. Finally, while non-close elections are three times as common as

 $^{^{20}}$ It is important to note that although the share indicted is 20 times higher for politically active unions, the membership rate is 150 times higher, making the indictment rate per member substantially lower.

 $^{^{21}}$ This is consistent with evidence in Ahlquist and Levi (2013) that different unions have different policy agendas.

close ones (N of elections), two-thirds of Districts experience at least one close election during my sample (N of districts).

Panel C presents summary statistics on Commuting Zones. 80% of CZ's include a Congressional district with a union-involved close election during the sample (Column 3), and these are much larger than the others. The average CZ in my main sample includes, on average, 2.3 Congressional Districts.

Given that many CZ's include multiple districts, how do unions choose how many and which elections to contribute to? Table 2 restricts to the set of Union-CZ's that gave to at least one close election in the year (and are thus in my main sample), and describes their contribution behavior. On average, the CZ intersects 1.9 districts where Republicans win landslide victories (more than 60% of the vote) and unions tend not to contribute to these elections (79% of such elections) or to contribute to the Republican (12%). These CZ's have an average of 1.7 close elections, and unions contribute to 90% these, typically supporting the Democrat (84%). Finally, these CZ's intersect an average of 2.8 districts in which the Democrat wins with more than 60% of the vote. Unions give to the Democrat in 70% of these, and almost never give to the Republican (<.1%).²² Thus, unions seem to balance a desire to contribute to winning candidates with a preference for Democrats. This strategic contribution behavior underscore the importance of the RD design to estimate causal effects.

[Table 2 about here.]

4 Empirical strategy

I use a regression discontinuity to estimate the causal effect of election outcomes on indictments. The estimating equation of interest is:

$$1\{\text{Any Indictment}\}_{uct} = \alpha + \beta \ UnCandWins_{udt-1} + \gamma_1 v_{udt-1} + \gamma_2 UnCandWins_{udt-1} \times v_{udt-1} + \varepsilon_{ucdt}$$
(1)

In (1), 1{Any Indictment}_{uct} is a an indicator for whether any officers of union u based in CZ c were indicted during the two-year period t (which I call an election cycle, or simply "cycle"). The key variable on the right hand side is $UnCandWins_{udt-1}$, which is an indicator for whether the candidate supported by union u running in district d (overlapping CZ c) won the prior election. I use v_{udt-1} to denote the "centered" vote share of the u-supported candidate in district d (i.e., vote share minus 1/2), which can have different slopes on either side of the discontinuity.

²²Figure C2 shows the magnitude of union contributions by Democratic vote share.

The coefficient of interest is β which captures the discontinuity in the probability of indictment when the union-supported candidate goes from barely losing (v_{udt-1} near zero and $UCWins_{udt-1}$ equal to zero) to barely winning (v_{udt-1} near zero and $UCWins_{udt-1}$ equal to one). The identifying assumption is that in very close elections, whether the union-supported candidate actually wins or loses is exogenous with respect to unobserved characteristics of the union, district, and CZ. These include pre-election responses to the ultimate outcome, so causal identification also requires the assumption that the outcome of very narrow elections was not forecastable.²³ This rules out, for instance, that a union chooses to contribute to a particular candidate because he/she is going to win (rather than lose) by an asymptotically close margin.

A single Union-CZ-cycle can appear in the data multiple times with a single indictment outcome if the Union-CZ contributed to multiple close races in districts overlapping the CZ (see Table 2). Likewise, a single election outcome and vote share can appear multiple times if multiple unions in the CZ contributed to the same candidate (on average, 20 unions contribute to each close race). This has two implications. First, it implies correlation between observations. I address this using two-way clustered standard errors (Cameron, Gelbach, and Miller, 2012), clustering at the Union-CZ and the Congressional district levels. Table C5 of the Appendix shows the results are robust to more conservative clusters. Second, it produces an implicit weighting scheme. Elections are given more weight if more unions contributed, and Union-CZ's are given more weight if they contributed to more close elections. Given the research question, this seems appropriate. Nonetheless, Table C7 shows that including only the single closest election for each Union-CZ yields nearly identical effects. Likewise, calculating indictment rates across all Union-CZ's that contributed to a single candidate in an election and doing the analysis at the election level produces similar results.²⁴

My main interest is in the effect of a union-supported Representative rather than a unionopposed one. If a union contributes to close elections in multiple districts in the same CZ, it may well get both in different elections, complicating the interpretation. For my main results, I exclude cases where the union gets both a union-friend and a union-enemy in other simultaneous elections in the CZ.²⁵ This sample is of obvious interest, and I return to it below using the model as a lens of interpretability. I also exclude the rare cases where the union contributed to both

²³I do not assume that there are no pre-election behavioral responses to the fact that the election will be close; these are allowed. The recovered estimand is a local average treatment effect for close elections, and selection into that sample does not induce a bias. Also, I am not assuming that contributions are randomly allocated or that union-supported and union-opposed candidates do not differ in other ways. This identification strategy recovers the causal effect of election outcomes, not of contributions.

²⁴This is not my preferred specification because it does not recognize correlation between a single Union-CZ that contributed to multiple close elections, and because it makes it impossible to consider heterogeneous effects by union characteristics.

 $^{^{25}}$ Because this exclusion restriction only depends on outcomes of *other* elections it is continuous across the discontinuity.

candidates in an election (1.5% of my sample), though I show my results are robust to their inclusion. Finally, my main specification uses only the 2000-2010 cycles because the 2012 contribution data is less reliable.

5 Main Results

5.1 Election outcomes and indictments

The main results are shown graphically in Figure 2, which gives the relationship between the share of the vote received by the union-supported candidate (x-axis) and the share of contributing unions that had an officer indicted in an overlapping CZ during the two-year term following the election (y-axis).²⁶ There is a sharp drop in the probability of indictment when the union-supported candidate wins the election (crosses 50%). The point estimates show a decrease in risk of nearly 40% (from just under 4% to just over 2%). To interpret Figure 2, bear in mind that a single percentage point in a Congressional election is typically between 2,000 and 3,000 votes, so each dot represents a small bandwidth of roughly 1,300 votes.

[Figure 2 about here.]

These results are based on estimates presented in Column 1 of Panel A of Table 3, which uses a first-order polynomial away from the discontinuity and all elections in the 40-60 percentage point range. The 1.6 percentage point estimated reduction is substantial, given the base rate of indictment of 3% ("DV Mean" in the table). Since the average close election has 20 union contributors, the estimated discontinuity equals one indictment in roughly every three close elections.

Column 2 adds a rich set of controls for union, commuting zone, and district characteristics (see table notes for details). These controls dramatically raise the R^2 , but the coefficient barely changes and remains statistically significant (p < .05) because the controls are continuous across the threshold (tested formally below), supporting the identification assumption.

[Table 3 about here.]

Column 3 restricts to a smaller bandwidth, based on elections in the 45-55 percentage point range (see Panel (b) of Figure C7 for the corresponding plot). The estimated discontinuity is nearly identical, still statistically significant (p < .05), and again invariant to the inclusion of controls (Column 4). Finally, Column 5 restricts to an even narrower window: elections in the

 $^{^{26}}$ Table C12 and Figure C12 show that the effects are concentrated in the second year after the election, which I interpret as reflecting that it takes time to build a case.

48-52 percentage point range. Note that the sample size is less than 20% of that in Column 1, and the standard error is roughly double (the coefficient is not statistically significant; p = .13). However, the point estimate is nearly the same (slightly larger), and is again unaffected by controls (Column 6), suggesting the 40-60 percentage point window does not overestimate the effect, but does deliver valuable precision.

Panel B uses a quadratic specification, instead of linear, for the running variable (see Panel (a) of Figure C7 for the plot corresponding to Column 1). In most cases this produces a larger point estimate which often remains or becomes statistically significant. These results are much less stable (perhaps suggesting the quadratic is over-fitting the data), so my preferred specification is linear and for most of the paper I present results for both the 40-60 and 45-55 percentage point windows.

Overall, Table 3 shows clear causal evidence that local unions' officers are less likely to be indicted following a win by their supported candidate rather than their opposed candidate. This result is substantively large and is robust to reasonable specification changes and the inclusion of relevant controls. Next, I further demonstrate its robustness before turning to a richer understanding of how this discontinuity arises.

5.2 Identification tests and robustness checks

Lee (2008) advocates three tests of the RD identification assumptions. First, the results should not be affected by the inclusion of controls, since these should be continuous across the discontinuity. This is shown in Table 3. Second, one should directly test for discontinuities in predetermined variables. This confirms that observations on either side are comparable and supports the assumption that unobservable characteristics are continuous as well. Table C2 shows this: No pre-determined characteristics exhibit significant discontinuities. Though some point estimates are modestly large, controlling for them in Table 3 makes little difference. Further, in Figure C3, I predict the probability of indictment using these predetermined controls (and not election outcomes) and present a placebo test of whether there is a discontinuity in *predicted* indictments. There is no visible or statistical (p = .936) evidence of a discontinuity.

Third, Lee (2008) recommends testing for "manipulation" using the McCrary (2008) test for discontinuities in the density of the running variable (vote share, in my case). As shown in Figure C4, there is no such discontinuity: union supported candidates are not more likely to narrowly win than narrowly lose. Figure C4 does, however, shows far greater density of elections where the union candidate dramatically wins (with, say, 70 percent of the vote) than dramatically loses (with, say, 30 percent). This is because unions often contribute to candidates who are sure bets to win, and this strategic contribution behavior underscores the importance of an RD design to estimate causal effects.

Even using an RD, if unions could perfectly predict the outcome of a close election then they might strategically adjust their contribution behavior in advance in ways that might not be detected by the McCrary test or discontinuous observable characteristics. To assess this risk, I turn to a large sample of polling data obtained from RealClearPolitics.²⁷ Two results suggest that unions could not perfectly predict close election outcomes when making contributions. First, Table 4 shows that nearly all contributions are made before polls are available. Polling occurs very near the election: 70% of all polls are done within 30 days, and in less than half of races is any poll conducted more than a month before election day (only 10% more than 3 months before). On the other hand, union contributions began more than a month ahead in 93% of cases (more than 3 months ahead in 83%; more than 6 months ahead in 71%). Thus, union political involvement is normally determined well before polls are available. Polls occur at the end of campaigns (when most predictive), and contributions occur early (to fund the campaign).

[Table 4 about here.]

Second, even the most accurate polls (conducted closest to the election) are imperfect. Figure C5 shows the relationship between Democratic share in the election and the Democratic share in the last poll before it (90% of which were within a month of the election).²⁸ The polls are obviously predictive, but imperfect ($R^2 = .64$).²⁹ Results in Table C3 show that the standard deviation of the "poll error" (the difference between the poll results and the election results) is around 3.7 percentage points. It also shows that polls predict the wrong winner in 40% of elections won by four or fewer percentage points (20% won by 4-12 percentage points).³⁰ Moreover, there were no polls at all for 20% of elections won by four points or less (33% won by 4-8; 70% won by 8-12).³¹ Thus, even for contributions made late in the election cycle, outcomes cannot be perfectly predicted.

²⁷Polls are available for 2002 and 2006-2010. I believe RealClearPolitics has the universe of publicly available Congressional polls, but there is no way to verify this. Polls are not available in all elections, but are available for most close elections (see Table C3 for more). See the Data Appendix for more detail on this data.

 $^{^{28}}$ Figure C5 is intended to show how polls vary around election outcomes, not to test whether they are continuous across election outcomes (though they are; see Figure C6). In addition to being variable, the polls are also biased (results not shown). The slope is significantly less than one (suggesting that polls systematically predict closer elections than actually occur) and the distribution is slightly up-shifted (suggesting that polls overestimate Democratic performance). These cast further doubt on the ability to perfect forecast outcomes using polls.

²⁹Polling sample sizes are not always available. When they are, the median has 500 respondents (mean: 575).

 $^{^{30}}$ Note an election where the winner receives 52% of the vote is won by 4 percentage points.

³¹Because polls are available for most close elections, a regression discontinuity using the sample of elections without a poll yields a very imprecise estimate, in which the standard error increases by 80% and coefficient is not statistically distinguishable from zero or my baseline estimates.

Importantly, the RD identification assumption is *not* that all election outcomes in the 40-60 range are a "coin flip." Identification only requires that there is a range near 50% where the outcome is exogenous (which does require outcomes are unpredictable in this range). Elections further from 50% are used to estimate the how indictments change smoothly across the vote share, which can improve the precision of the estimated discontinuous change immediately across the 50% threshold. Table 4 shows unions rarely have information to forecast election outcomes when choosing contributions, and Table C3 shows that even with the best forecasts, elections near 50% have outcomes that are very difficult to predict. Because the estimated discontinuity in indictments varies little when changing the bandwidth or functional form (Table 3), there is little concern that using less close elections (whose outcomes could reasonably be predicted) to improve precision biases my estimates.

I also present a number of robustness checks. Table C4 and the plots in Figure C8 show that the main results are smaller but still statistically significant (p < .05) when excluding weights, which are discussed in the next section. Table C5 shows the results are robust to more conservative clustering. The discontinuity in both of my preferred specifications remains significant at the 5% level even when allowing for correlation between all unions in the same CZ and all districts in the same state.³² The results even remain significant (p < .10) when allowing for correlation between all locals of the same union.³³

Table C6 shows that the results are not simply the effect of a Democratic win. There is no effect of a Democrat winning an election the union did not contribute to. I also restrict to elections where different unions contributed to different candidates and include an election fixed effect. The point estimate is nearly identical though not statistically significant (p = .149) because this is only one quarter of the sample.³⁴

Table C7 shows the results are robust to including cases where a union contributed to both candidates,³⁵ using only the Union-CZ's closest election (this approach drops much of the data from 40-45 and 55-60 so I prefer the 45-55 percentage point specification), dropping cities with historic mafia presence, including 2012 data, and using logit instead of a linear probability model. Finally Table C8 shows the results are robust to the Calonico, Cattaneo, and Titiunik (2014) choice of bandwidth and standard errors.³⁶

³²Note that a single CZ is not always contained within a single state.

³³Many of the dimensions of heterogeneity discussed below yield a larger and more precisely estimated discontinuity. Such specifications become highly significant, even with these conservative clusters.

³⁴The sample where the union contributed to a primary candidate but no general election candidate is too small to be of use.

 $^{^{35}}$ I define the union-supported candidate as the one receiving the majority of the union's contributions.

³⁶This is not my preferred approach because the bandwidth is recalculated for each change of dependent variable or sample, making comparison across results difficult. Moreover, it does not allow for two-way clustered standard errors or population weights. Finally, note that the Calonico et al. (2014) correction is meant to reverse the bias created by using cross-validation to choose the bandwidth. Rather than use cross-validation, I prefer to

5.3 Heterogeneity

I interpret the results as evidence of political influence over investigations. In Figure 3, I show that the places, unions, and elections that drive the results support that interpretation.³⁷ First, the incentive for Representatives to influence union investigations comes from unions' ability to sway voters in their area (including but not limited to members). When that area is a trivial share of all voters, there is little incentive for Representatives to invest costly effort to affect investigations.³⁸ Panels (a) and (b) of Figure 3 display unweighted scatterplots showing the results are entirely driven by observations where the CZ is a substantial portion of the district population (10% is the threshold used in the figure).

[Figure 3 about here.]

Similarly, Representatives should be more willing to invest effort when the union is more visible, politically relevant, or locally influential. Panels (c) and (d), based on Union-CZ's with above and below median membership, show the results are concentrated large unions. Finally, the incentive to influence investigations should be stronger when the election is more consequential. While the relative "importance" of elections is difficult to observe, a useful proxy is total spending in the election, which should be larger in "high-stakes" elections when an important seat is at stake. Panel (e) and (f) of Figure 3 show the discontinuity is much more stark in high-stakes elections.

6 Theory

I have shown that indictments of union officers respond to election outcomes. To better understand the mechanisms behind this effect, I model the interactions between unions, Representatives, and OLMS. For brevity, the complete model is in the Appendix and here I provide only an overview. Section 6.3 summarizes the assumptions and implications of the model that are empirically tested in Section 7.

choose the bandwidth on the basis of past literature and extant evidence, and to present results using multiple bandwidth choices (the Calonico et al. (2014) bandwidths are always smaller than my 40-60 and larger than my 45-55 range). In this case, there is no bias to "undo."

³⁷Figure 3's notes point to the Appendix tables with the underlying regression results.

 $^{^{38}}$ For instance, in 2006 the IBEW gave \$5,000 to Gary Trauner, running for Wyoming's single district, who lost with 49.7% of the vote. One of the 12 commuting zones in Wyoming is centered around Rawlins (a town of 15,000) and accounts for 3% of the district's population. The IBEW local there has about 23 members, none of whom were not indicted.

6.1 Environment

There are K Congressional districts, each with one election per period and one union. The election is between two candidates, one of which is the incumbent. Before the election, the challenger announces a platform, while the incumbent must maintain her previous platform.³⁹ I assume that once in office, Representatives faithfully execute their campaign platform, and all Representatives seek reelection. Election outcomes are determined by a simple probabilistic voting model where some portion of voters voters are "impressionable" and can be influenced by campaign activities.

In my model, unions seek to maximize next period membership. This membership depends partly on the policies Representatives implement (e.g., card-check rules, NLRB composition, right-to-work laws, etc.), so unions campaign to influence impressionable voters and affect election outcomes. However, public opinion data finds widespread criticism of union political activity, even among union households, because it's seen as crowding out resources for providing benefits to members (e.g., training, collective bargaining, strike support).⁴⁰ Thus, I assume that unions pay a cost for the share of their resources devoted to campaigning. Finally, I assume that indictments weaken unions and reduce available resources, either material resources (such as membership or dues collected, as shown in 7.1.1) or non-material resources like public support.

I model OLMS as intrinsically motivated to maximize the discounted sum of indictments, assuming that it has no political objectives of its own. This assumption serves as a check against political bias.⁴¹ While OLMS may have a political agenda, the model shows that a political bias can emerge even without it.

OLMS receives a budget of investigatory resources from Congress and chooses how to allocate these investigations across districts. Within each district, indictments are a concave function of investigations, and so OLMS would like to equalize indictments across all districts (which I call a "politically unbiased" allocation).⁴² However, it internalizes Representatives'

³⁹In other words, I assume politicians who switch positions are penalized for being "low character." Kartik and McAfee (2007) explore the equilibrium implications of this assumption. Carlson and Dolan (1985), Doherty, Dowling, and Miller (2015), Hoffman and Carver (1984), and Tomz and Van Houweling (2012) show that voters perceive candidates who switch positions (particularly on ideologically-driven issues) as less trustworth, decisive, and honest. McCaul et al. (1995) survey North Dakota state legislators and find that they believe voters care more about the consistency of their views than how close their views are to the voters'. Fedaseyeu, Gilje, and Strahan (2015) study the exploitation of shale oil (which caused a dramatic increase in voters' conservative preferences) and find extremely small responses in incumbents' voting behavior (especially for those with more experience).

⁴⁰For instance, a 2011 Harris Poll reported 72% of Americans (60% in union households) believe unions are too involved in politics (CBS, 2011).

⁴¹If investigators simply sought to maximize the budget (Niskanen, 1968, 1975), there would be no countervailing pressure against political bias and it would be even larger.

⁴²It is more realistic that *expected* indictments or the probability of an indictment would be concave function of investigations. For simplicity, I abstract from random variation in whether indictments are actually realized.

responses to the investigations, and will be willing to deviate from this unbiased allocation if it increases the number of total indictments.⁴³

When in office, Representatives vote on the policies that affect unions and negotiate over OLMS' budget.⁴⁴ Each period, the President proposes a budget and Representatives negotiate an adjustment. Each Representative can invest effort to raise or lower the budget, which has quadratic utility costs. The ultimate adjustment depends on *net* effort: If there is more effort to raise it than lower it then the ultimate budget will be higher than the President's proposal, if there is more effort to lower it than raise it the ultimate budget will be lower.

The timing of the model is as follows. First, Representatives vote on policy and negotiate to set OLMS' budget. Second, OLMS allocates investigations and reveals indictments. Third, Representatives' challengers are announced, unions choose how to campaign, election outcomes are realized, and successful Representatives receive their payoff. My model has no asymmetric information, all agents are fully rational, and challengers' intrinsic policy preference are drawn from a martingale (while their policy positions are endogenous choices) so that a Representative supported by the union last election rationally expects to be supported by the union this election.

6.2 Equilibrium

6.2.1 One-period stage game

To begin, consider the equilibrium of the one-period stage game.

Theorem 1 The Subgame Perfect Nash Equilibrium of the one-period stage game

- 1. does not feature a political bias in investigations.
- 2. features strictly positive wasted effort from both union-supported and union-opposed politicians.

The proof is in Section A.2.2 of the appendix, but a brief sketch provides the intuition. The equilibrium can be solved for using backwards induction. In the third sub-period, the union will

Since I assume budgets are set before investigations and indictments, only the expected number of indictments matters anyway.

⁴³An alternative choice would be to model US Attorneys (federal prosecutors). There are three main differences. First, US Attorneys typically serve only four years, while OLMS investigators anecdotally have much longer careers. Second, 93 US Attorneys operate roughly independently within their own districts, making it difficult to induce reallocation across districts. Third, US Attorneys are responsible for all types of federal prosecutions, while OLMS' responsibilities only include union investigations. All three of these make it easier to exert influence over OLMS than prosecutors. Additionally, Section C.5.3 provides empirical evidence that OLMS seems to be the relevant actor.

 $^{^{44}}$ Because OLMS' budget is small (0.35% of the DOL's FY2017 request), I assume it is determined independently from other spending priorities.

employ its campaign strategy (solved for in the appendix). In the second sub-period, OLMS (unaffected by the union's decision) will maximize indictments by equalizing investigations across districts (Part 1 of the Theorem). Knowing this, in the first sub-period Representatives decide how much negotiating effort to spend on OLMS' budget.

Investigations are equalized, so a Δ change in the budget translates into a Δ/K change in investigations in each district. Effort always has some effect on the budget, so the appendix shows that all union-supported Representatives best respond to other Representatives by exerting some effort to lower the budget, and all union-opposed Representatives best respond with some effort to raise it. But because *net* effort determines the amount of the adjustment, one unit of effort to raise the budget cancels out one unit of the effort to lower it. This equilibrium involves wasted effort because a union-supported and union-opposed Representative could each decrease negotiating effort by ε , saving the utility costs of this effort without the budget changing.

In this one-period game, OLMS could choose to politically bias investigations to make these Representatives better off in exchange for a larger budget of total investigations. However, when the second sub-period arrives, OLMS would deviate from this commitment and maximize its one-period utility by equalizing investigations.

6.2.2 Repeated game

OLMS' deviation is possible because it has no consequences. As is standard in game theory, if all parties are sufficiently patient then they can sustain a mutually beneficial improvement over the one-period stage game equilibrium. This is seem in Theorem 2.

Theorem 2 For a sufficiently high OLMS discount factor, there exists a Subgame Perfect Nash Equilibrium of the repeated game that

- 1. involves a political bias in investigations.
- 2. is weakly better than the stage game SPNE for all agents.

The full proof is in Section A.2.3 of the appendix, but the intuition is straightforward. As stated above, if investigations are not politically biased, both union-supported and unionopposed Representatives invest effort to adjust the budget, and some effort to raise it cancels some effort to lower it. If union-supported Representatives stop investing effort to lower the budget, then the budget rises. If OLMS spends all of the additional investigations in the union-opposed Representatives' districts, then OLMS is strictly better off (more indictments than in an unbiased equilibrium), union-opposed Representatives are strictly better off (more indictments for the same effort costs), and union-supported Representatives are strictly better off (the same indictments with lower effort costs).⁴⁵ This improvement can be sustained using a standard grim trigger strategy.

In the equilibrium constructed in the proof, indictments increase in union-opposed Representatives' districts (an "aggression" effect), but do not fall in union-supported Representatives' districts (no "protection" effects). This shows that it is always possible to sustain a mutually beneficial improvement through an equilibrium with a bias, but in general, there will be many equilibria of this game. Some of these may involve "protection" if OLMS is willing to trade off some indictments in the union-supported Representatives' districts for more indictments in those of union-opposed Representatives. The feasibility of these equilibria depend on the curvature of the indictment-investigation function. For instance, it is roughly linear in the region of 1/K, then OLMS is happy to accept one fewer investigation in one district for one more in another because they produce roughly the same number of indictments. In this case the political bias can be extreme. If this function is sufficiently concave, however, OLMS may hesitate to shift investigations across districts because they will produce fewer indictments in a union-opposed Representative's district (where investigations are already higher). The curvature provides a guard against the bias.

6.2.3 Candidates' policy positions

Because unions get involved in politics to influence policy, the extent of their campaigning depends on the distance between candidates' platforms. If both candidates have similar platforms, unions don't find it worthwhile to get involved. I model a negative shock to incumbent popularity as some predictable voters who would have deterministically voted for the incumbent becoming impressionable voters, now open to being convinced to vote for the challenger. Because campaigning only affects impressionable voters, this raises the returns to union political activity.

I show that this pulls the challenger towards unions' preferred policy, regardless of whether the union supports the challenger or the incumbent. That is, if the union opposes the incumbent, the union-supported challenger caters to the union's preferences in order to win more support. If the union supports the incumbent, the union-opposed challenger also caters to union preferences to offset some of their support for the incumbent. As a result, if the union supports the challenger, it will be far more responsive to incumbent popularity shocks because the increased returns to campaigning and the added catering of policy positions unions work in the same direction. If the union supports the incumbent, on the other hand, the increased

 $^{^{45}}$ The theorem notes that all agents are *weakly* better off. Representatives who unions neither support nor oppose do not invest costly effort and are unaffected by indictments. They are indifferent between biased and unbiased allocations.

return to contributions will be partially offset by the union-opposed candidate's catering, and the contribution response will be smaller.

6.3 Testing the model

The model predicts that the same district will have more investigations and indictments when a union-opposed Representatives wins than when a union-supported one does (all else equal). This casual effect is shown by the regression discontinuity in Section 5.

The model relies heavily on two assumptions. First, indictments weaken unions. In the appendix, I show that the model predicts an indictment reduces next period membership, union campaigning, the union-supported candidate's election probability. In Section 7.1.1, I show empirical results that mirror these effects. The second assumption, which allows a biased equilibrium to be sustained, is that Representatives can condition their budget negotiation effort on OLMS' past performance, and OLMS can condition its allocation of investigations on Representatives' effort. In Section 7.1.2, I test whether indictments predict voting on the OLMS budget, which might reflect votes conditioned on indictments or indictments conditioned on votes.⁴⁶

In the model, reallocation is possible because it is mutually beneficial. I present two tests for the importance of this mechanism. First, Section 7.2.1 tests whether a political bias exists when Representatives covering the same local area have different incentives (some are unionsupported and some are union-opposed), since neither more nor fewer investigations would mutually benefit those Representatives. Second, Section 7.2.2 tests whether there is evidence for both "protection" (union-supported Representatives receiving lower investigations) and "aggression" (union-opposed Representatives receiving more investigations), and find evidence for both. Finally, Section 7.3 implements the test based on incumbent popularity shocks, described in Section 6.2.3, for whether entering challengers cater their policy positions to that of the union.

⁴⁶Strictly speaking, this should not happen in the model. Deterrence should cause OLMS to avoid "inappropriate" indictments and Representatives from voting "inappropriately." I believe that the out-of-equilibrium behavior resulted from the combination of unusual shocks: the Democrats taking control of the House for the first time in 12 years and President Bush proposing a very large budget increase after he had already allowed the budget to decline (under a Republican Congress). As a result, one of the actors behaved "inappropriately" and the equilibrium punishments were invoked.

7 Testing model assumptions and predictions

7.1 Testing assumptions

7.1.1 Effects of indictments

In the model, indictments are meaningful because they reduce unions' ability to campaign. Here, I estimate the effect of indictments on union resources, political activity, and votes for the union-supported party. I use an event study specification:⁴⁷

$$Y_{uct} = \alpha_{uc} + \delta_t + \gamma_{uc}t + \sum_{\tau = -k}^k 1\{\tau \neq -1\}\beta_k Indict_{uc,t-\tau} + \varepsilon_{uct}$$
(2)

In (2), α_{uc} is a Union-CZ fixed effect (for vote share, I use Union-district instead), δ_t is a year effect, and $\gamma_{uc}t$ is a Union-CZ specific time trend. The β coefficients trace the level of some outcome Y, relative to other Union-CZ's, during the years before and after the indictment.⁴⁸ Regression results are given in Appendix Table C10; here I graphically show coefficient estimates and confidence intervals.

Figure 4 shows indictments reduce union resources (measured as membership) and political activity (measured as campaign contributions). These effects are large – an indictment reduces membership by 17% over the next four years and Congressional campaign contributions by 47% over the next three elections.⁴⁹ In Table C10 I show that indictments also reduce dues collected and the number of local affiliates.⁵⁰ I also show contribution reductions are even larger for close elections, with the effect on total contributions somewhat offset by *increased* contributions to landslide elections.

[Figure 4 about here.]

 $^{^{47}}$ One could instrument for indictments using close election outcomes. But election outcomes might not be a relevant instrument – my *t*-statistics are around 3 (*F*-statistic: 9), short of conventional standards to avoid weak instruments – or a valid one – political representation may affect public attitudes in more ways than through indictments (Campbell, 2012; Carlsson, Dahl, and Rooth, 2015; Lenz, 2012).

⁴⁸For ease of interpretation, I 1) use only the Union-CZ's first indictment, and 2) normalize all dependent variables by the Union-CZ specific mean. This means coefficients can be interpreted as percent changes, but unlike taking the log, zeros need not be excluded. I also restrict to the sample ever experiencing an indictment. Empirically, restricting the sample and including Union-CZ trends both help address pre-trends.

⁴⁹There is some evidence of pre-trends outcomes I consider. This is unsurprising; I have already shown that indictments are endogenous. The modest pre-trends suggest unions were getting stronger and union-supported candidates doing better before the indictments, and this progress was dramatically reversed. There is no evidence that the post-indictment changes were a continuation of a secular decline.

⁵⁰There is suggestive evidence of a reduction in new unionizations, as well, though the effects are not statistically significant. This may be because unionization elections are not particularly common within a Union-CZ, or because NLRB election data is only available 2000-2009.

In light of evidence discussed earlier on the effects of unions on elections and politics (Ahlquist, 2016; Feigenbaum, 2015; Flavin and Hartney, 2015; Stanfield and Tumarkin, 2015), these effects on union resources and political activity are meaningful, and Representatives have good cause to take them seriously (either as a harm or a benefit). Directly estimating the electoral effects of indictments is difficult since I have shown that indictments are endogenous with respect to electoral outcomes. Nonetheless, I use the event study in (2) to estimate effects on union-supported candidates' vote share. For each Union-district, I identify the union-supported party in the election immediately preceding the indictment, and calculate that party's vote share in contested elections before and after the indictment.⁵¹ Figure 5 shows the results, which suggest that the union-supported party loses 2% of the vote. This is a large effect. Lee (2008) estimates the one-period incumbency advantage to be 7.7% of the vote. I estimate the oneperiod indictment effect as 1.3% of the vote, and that an indictment is subject to political manipulation in one out of three close elections. This means that the biased reallocation of indictments explains 5.6% of the incumbency advantage. Column 9 of Table C10 shows effects on the union-supported party's win probability, which falls by 5.3 percentage points in the first year (implying reallocation of indictments explain 4.9% of Lee's incumbency advantage estimate), and 8 percentage points thereafter.

[Figure 5 about here.]

In sum, Figures 4 and 5 and Table C10 show that indictments are politically costly. They decrease membership, financial resources, local presence, and campaign activity. For candidates the union campaigns against, these are obviously benefits, while the opposite is true for union-supported candidates. Thus, legislators have an incentive to affect the indictment process *if they can*, an issue I turn to next.

7.1.2 Contingent transfers

How might Representatives influence OLMS' resources allocation? If indictments of supporters and opponents affect support for OLMS' budget, it may internalize these effects in allocating investigations. OLMS' funding is normally determined in a single resolution that includes dozens agencies. To isolate OLMS, I focus on the Congress elected in 2006, when the Democrats won control of the House for the first time since 1994. President Bush's FY2008 budget proposal (during summer 2007) included a 20% budget increase for OLMS, while the House proposed a 5% decrease. Rep. John Kline (R-MN) proposed an Amendment to restore

 $^{^{51}}$ As shown in Table C10, the effects are somewhat larger when including non-contested elections, but the pre-trends are larger as well.

OLMS' budget to the previous year's level, effectively an increase.⁵² This amendment *only* included OLMS funding, allowing me to isolate support for an OLMS budget increase from other voting motives, and I test how OLMS indictments relate to votes to increase its budget.

This exercise is not causal. In my model's equilibrium, a correlation might reflect OLMS indictments as punishments/rewards for Representatives' votes, or Representatives' votes as punishments or rewards for OLMS' indictments. The value of the exercise is to demonstrate that no institutional or political barriers prevent these types of action-contingent strategies from being used.

Table C11 shows regressions predicting support for the budget increase using union support/opposition, indictments, and controls, but the data is best represented by Figure 6. Panel (a) shows support for the budget increase by party (red squares for Republicans, blue diamonds for Democrats) and election closeness (Democratic vote share, so that dots closer to the center indicate narrower elections). While the vote is highly partian, it is not universally so. Importantly, only Representatives who won close elections were willing to break from the party line (true for Democrats and Republicans). Thus, the Representatives driving identification in the RD are more likely to be decisive in OLMS budget decisions.

[Figure 6 about here.]

Panel (b) of Figure 6 then splits Representatives into three groups: Significantly unionsupported candidates where one of those supporters was indicted, significantly union-opposed candidates with an opponent indicted, and the remainder (candidates without supporters or opponents indicted).⁵³ The deviations from the party line are largely explained by indictments. Those with a supporter indicted are substantially less likely to support a budget increase, and those with an opponent indicted are marginally more likely (though the base rate is already high).

Table C11 shows econometric results that mirror the figure, controlling for party, district ideology, election closeness, and their interactions. Union-supported Representatives are significantly less likely to support the budget increase (p < .01), with double the effect when a supporter was indicted. Union-opposed Representatives are significantly more likely to support

⁵²Kline was Ranking Minority Member of the Subcommittee on Health, Employment, Labor, and Pensions. The amendment failed in a largely partian vote (186 - Yes; 237 - No; 13 - Non-voting).

⁵³I use contributions to the 2006 election and indictments in the current Congressional term (2007-2008). One might use leading or lagging indictments, but without strong assumptions about timing, such an exercise is no more causal. Also, to eliminate instances where unions contribute a trivial sum of money to a candidate, I focus on candidates where "net" support (union contributions to the candidate minus union contributions to his/her electoral opponent) is greater than \$10,000 (for "significant support") or less than -\$10,000 (for "significant opposition"). Note that the median union contribution is \$5,000. Other ways of operationalizing union support yield similar results.

the increase (p < .05), with the effect 50% larger for those with an opponent indicted. Overall, support for an OLMS budget increase is significantly related to indictments of supporters and opponents, and it is plausible for investigators to recognize this when allocating resources.

7.2 Testing the mutual benefit mechanism

7.2.1 Commuting zones where mutual benefit is not possible

As discussed above, models of many allocation problems (e.g., spending) can yield a political bias depending on the conditions of legislative interactions and bargaining power. Since indictments of union officers, though, are good for some legislators and bad for others, *mutually beneficial* reallocations are possible and a political bias can persist under much more general conditions. What if the reallocation is not mutually beneficial? I answer this by focusing on cases where a single Commuting Zone includes multiple districts and a union contributes to three or more of those (for reasons discussed shortly). I test whether there is any effect of an election win vs. loss in one district when Representatives in the other districts are split regardless.

If a CZ has both union-supported and union-opposed Representatives, these Representatives have opposing objectives for OLMS: the union-supported Representatives want fewer investigations in the area and the union-opposed Representatives want more. No reallocation can be mutually beneficial. If mutual benefits are important, it would suggest that the elections that have the biggest effect on indictments are those that are "pivotal" in that they either determine whether the CZ is entirely pro-union or they determine whether it is entirely anti-union (since these are the two cases where mutual benefit is possible). I estimate the regression discontinuity, equation (1), for different subsamples defined by outcomes in *other* simultaneous close elections. I use this to test whether a marginal win has a different effect on indictments when it is in a pivotal election.⁵⁴

Table 5 contains the results. To compare piovtal and non-pivotal elections, it is necessary to focus on cases where a union contributed to three or more close elections in the same CZ,

⁵⁴It might be the case that union-supported/union-opposed Representatives matter even if their election was not close. I tested for this by looking for heterogeneity depending on outcomes of other elections (irrespective of closeness). Because many Union-CZ's contribute to landslide election winners, this reduces the size of the "lost all" sample (used in Column 2), shifting many to the "split outcomes" sample (used in Column 4). Estimates are qualitatively similar, but less precise and less robust to sensible specification changes. I interpret this as evidence that the only winners that matter are those who won close elections, and that using a noisy but correlated measure (winners of all elections) reduces the precision of the test. In my model, Representatives' incentive to interfere with investigations is larger when they won a close election, since the next election is likely to be close and union influence will matter more. Empirically, election closeness is fairly persistent (the within-district autocorrelation in winner's vote share is .68), so those elected in landslide elections may not have a reason to care about union indictments.

since at least two *other* elections are necessary for a Union-CZ's outcomes to be split in them. Because this is a relatively small sample, I improve precision by using the indictment count and restricting to cases where the CZ is a significant share of the district population.⁵⁵ Column 1 estimates the effects of one type of pivotal election: Those where union-supported candidates *won* all other close elections in the CZ during the same year. Elections like these are pivotal since if the union-supported candidate wins this election as well, OLMS can mutually benefit all local Representatives by decreasing investigations and indictments. In these pivotal elections, a win has a large (though non-significant) effect, lowering the expected number of indictments by .096 per Union-CZ. Column 2 focuses on the other set of pivotal elections (those where the union *lost* all its other close elections in the CZ) and shows a similar result (large and non-significant).

[Table 5 about here.]

Column 3 pools the samples from Columns 1 and 2 to estimate the effect of election outcomes for the full sample of pivotal elections. The discontinuity is large and statistically significant (p < .05), suggesting that narrowly winning a pivotal election reduces the expected number of indictments by .077, or one indictment per 13 unions. Column 4 focuses on the complement of this sample: the set of non-pivotal elections.⁵⁶ No matter the outcome of these elections, OLMS will not be able to mutually benefit all local Representatives. The effect of these election outcomes is small (less than half the size of Column 3) and not significantly different from zero. Importantly, the Column 4 sample size is bigger, and the standard error smaller, than in Column 3. Thus, Column 4 is not simply underpowered to detect an effect. Rather, pivotal elections have a significantly (p = .057) more negative effect than non-pivotal ones.

One concern is that unions, elections, or commuting zones that appear in the pivotal election sample might be different in other ways from those in the non-pivotal sample. Appendix Table C14 tests for differences in a number of characteristics, and finds most are small and not statistically significant. When there are differences, they are exactly as would be expected: the non-pivotal sample has slightly larger unions which are in CZ's with more Congressional districts and therefore contributed to more races.⁵⁷ Importantly, the results in Section 5.3 show

 $^{^{55}}$ The results are similar, but less precise and conclusive, without the population restriction and using a binary indictment indicator. Table C13 shows my main specification using the indictment count as the dependent variable, and Figure 3 and Table C4 show that the results are concentrated where the CZ is 10% or more of the district population (the threshold I use here).

 $^{^{56}}$ If a Union-CZ only contributes to one or two close elections then the *other* districts cannot be split (since there are only zero or one other districts). Thus, elections where the Union-CZ only contributed to one or two close elections are always pivotal. The discontinuity estimated for this sample of elections is also negative and statistically significant (results available upon request).

⁵⁷This is expected because a Union-CZ that "flips more coins" is more likely to realize mismatched outcomes.

these characteristics would imply a *larger* (more negative) discontinuity, whereas Table 5 finds a *smaller* discontinuity in non-pivotal elections. I estimate the probability of being a pivotal district using these three characteristics and reweight both the pivotal and non-pivotal samples by propensity scores. After reweighting the samples, Columns 5 and 6 show an even larger and more significant (p = .044) difference in discontinuities between pivotal and non-pivotal elections.

In conclusion, the elections that drive the discontinuity in indictments are those that are pivotal in determining whether a political bias can be mutually beneficial. In the next section, I further test for the importance of mutual benefits by decomposing the discontinuity into pro-union and anti-union components.

7.2.2 Decomposing the discontinuity into pro- and anti-union components

The RD in Section 5 shows there are fewer indictments under a union-supported Representative (a union-friend) than a union-opposed one (a union-enemy). This gap includes any "protection" the union-friend brings (lowering indictments) and any "aggression" the unionenemy brings (raising indictments). If is it important for the equilibrium that both types benefit from the political bias, then both the protection and aggression components should be positive. To test this, I need a "control" group to calculate what the indictment rate *should* be in the absence of political interference. With this, I could evaluate whether indictments are lower under a union-friend than they would otherwise be (a benefit to that Representative) and higher under a union-enemy than they would be (a benefit to that Representative).

Above, Section 7.2.1 shows that unions with split outcomes appear not to experience political interference because OLMS cannot mutually benefit all Representatives. With exogenous variation in whether or not a union has split outcomes, then, these can constitute a control group.⁵⁸ To do so, I use Union-CZ's that contributed to two or more close elections (roughly half the sample). Among union-supported candidates in close elections, I calculate the average vote share of winners (v_{uct}^+) and losers (v_{uct}^-) .⁵⁹

I then study the indictment rate of unions with all winners, those with all losers, and those with split outcomes, as their candidates' vote shares asymptotically approach 50%. For intuition, imagine these unions each flipped two coins (one in each district) and their candidate wins when the coin is heads and loses when it is tails. Then unions with two heads are randomly assigned all winners (the "protection" treatment), unions with two tails are assigned all losers (the "aggression" treatment), and unions with split outcomes give OLMS ambiguous incentives

⁵⁸The sample of unions that did not contribute are a poor control group because they differ in many observable ways (that predict indictments) from the unions that do contribute.

⁵⁹Alternative specifications using only the vote share from the closest election or using only Union-CZ's that contributed to exactly two close elections produce similar point estimates, but they are less precise.

and experience no political interference (they are randomly assigned to "control"). I reproduce this intuition using an RD in the joint outcomes of multiple elections. Formally, I estimate:

$$1\{\text{Any Indictment}\}_{uct} = \alpha + \beta_W \text{AllWins}_{uct} + \beta_L \text{AllLosses}_{uct} + \gamma_1 v_{uct}^+ + \gamma_2 v_{uct}^- + \gamma_3 (\text{AllWins}_{uct} \times v_{uct}^+) + \gamma_4 (\text{AllLosses}_{uct} \times v_{uct}^-) + \varepsilon_{uct}$$
(3)

In (3), AllWins_{uct} and AllLosses_{uct} are indicators that the Union-CZ won and lost all of its close elections, respectively. The linear trend away from the 50% threshold is allowed to differ for the sample with split outcomes. The constant term (α) is the probability of indictment for a Union-CZ with split outcomes in very close elections ($v_{uct}^+ = v_{uct}^- = 0$). This captures the counterfactual indictment rate for a quasi-random control group (which experienced split election outcomes). If union-friends benefit by seeing a lower indictment rate then β_W should be significantly negative, indicating that for the sample that won all election OLMS yielded mutual benefit by lowering indictments. Likewise, if union-enemies benefit from more indictments, then β_L should be significantly positive.

The results are given in Table 6. The constant in Column 1 shows a 5.5% chance of indictment for a union contributing to multiple very close elections that happened to have split outcomes.⁶⁰ For Union-CZ's with similar vote shares, those that barely won all close elections have a .067 lower probability of indictment (p < .01), eliminating virtually all risk of indictment (not statistically different from -.055). Those that narrowly lost all elections have an indictment rate that is .038 (or 70%) higher than those with split outcomes (p < .10). Thus, both union-supported and union-opposed Representatives benefit from political bias in equilibrium.

[Table 6 about here.]

The results in Table 6 also allow for a decomposition of the total political bias (defined as the difference between barely winning all and barely losing all) into protection and aggression. The share of the total discontinuity that is due to protection is simply the effect of winning divided by the total effect: $|\beta_W|/(|\beta_W| + |\beta_L|)$. The lower panel shows that 64% of the discontinuity is protection, and I can reject the null that there is no protection (p < .01) and that there is no aggression (p < .05), confirming the bias is mutually beneficial. I cannot reject the null that the discontinuity is 50% protection and 50% aggression (i.e., that protection and aggression effects are equal).

 $^{^{60}\}mathrm{This}$ is large because this sample gave to multiple close elections and more politically active unions have more indictments.

Columns 2 and 3 replicate the same exercise for the George W. Bush and Barack Obama administrations. For both, there is a large discontinuity (9.5 and 12.3 percentage points, respectively). The point estimates suggest the protection share of the discontinuity is slightly smaller during the Bush Administration (58%) and slightly larger during the Obama Administration (78%), consistent with OLMS (an executive agency) sympathizing with its co-partisans, but the estimates are not significantly different from each other or from 50%. In conclusion, I find evidence for both aggression and protection effects, confirming that the equilibrium discontinuity benefits both pro- and anti-union Representatives.

7.3 Do politicians cater positions?

Having supported the model's main assumptions (indictments are politically relevant and agents can use action-contingent strategies) and mechanism (the mutually beneficial nature of reallocation), I turn to the model's test of whether politicians cater to union policy positions.

The intuition for the test is given in Section 6.2.3 above. Candidates will cater policy positions towards unions when union contributions are likely to be particularly effective, which is likely to hold when the incumbent is weakened. Since voters constrain incumbents to adhere to past policy positions, challengers will be more responsive to shocks to union effectiveness. Thus, a negative shock to a union-opposed incumbent will bring the union-supported challenger closer to the unions' position and the challenger contribution response will be large. Conversely, when a union-supported incumbent receives a negative shock, he/she has limited ability to adjust further towards unions. At the same time, the union-opposed challenger can freely shift to become less anti-union in order to erode the union's incentive to support the incumbent. This implies that union contributions to challengers will be more responsive to incumbent popularity shocks than contributions to incumbents will be.

To test this, I develop a shift-share (Bartik-style) instrument for incumbent popularity. The idea is to capture natural swings in public opinion that often cause voters to lash out against incumbents depending on their party and how extreme or moderate they are. I calculate within-party quartiles of DW-Nominate scores, a standard measure of ideology based on roll-call votes (Poole and Rosenthal, 1997). I instrument for the change in popularity of an incumbent using the average change in vote share (from last election to the current) of Representatives in the same party and ideology quartile but a different state. The identifying assumption is that changes in ideologically similar Representatives' vote shares are driven by broad swings in public opinion (e.g., frustration with the war in Iraq) rather shifts in union contribution strategy. Appendix Section C.6.1 explores the variation in this instrument in detail, and suggests that this is the case.

I study how contributions respond to a change in ideologically similar Representatives' popularity. My preferred specification uses the Davis-Haltiwanger First-Difference (the first difference normalized by the mean), rather than the difference in the natural logarithm, because it does not require the exclusion of zeros (see Section C.6.1 for further discussion). I also present changes in levels, though they are noisier.

The results are presented in Table 7. Column 1 shows how contributions to the current incumbent's party change in response to a change in the incumbent's predicted vote share. Consistent with the predicted response to an increase in contribution effectiveness, union contributions significantly increase when incumbent popularity falls (p < .05). The magnitude implies that a 10 percentage point decrease in the incumbent's expected vote share (roughly a move from a "normal" to a close election) increases contributions by 9.7%. Columns 2 and 3 show this effect is unchanged when controlling for lagged incumbency (which strongly predicts lagged contributions), party, and district fixed effects (since the specification is in first-differences, fixed effects allow for district-specific trends in union contributions).

[Table 7 about here.]

Columns 3-6 repeat the same exercise for contributions to the current challenger's party. The estimated coefficients show the challenger contribution response is three times the incumbent contribution response. A 10 percentage point decline in the incumbent's expected vote share implies a 30% increase in contributions, a statistically significantly larger response than seen in incumbent contributions. In the model, this effect is larger because challengers are better able to cater their policy positions to the union.

Panel B shows that this conclusion holds when using the difference in levels. It also holds for different numbers of quantiles (not shown), and Figure C12 plots the residuals to show that it is not simply a different non-linear effect. Instead, union contributions to challengers are systematically more responsive to incumbent popularity shocks that contributions to incumbents. The model gives one lens to interpret this fact.

8 Discussion

I have shown that Representatives manipulate OLMS to influence the spatial allocation of union officer indictments. This political bias appears to be roughly equal parts increases in union-enemies' districts and decreases in union-friends' districts. If the effects are simply a redistribution of investigative resources, do they have any implications for welfare?⁶¹

 $^{^{61}}$ I find no evidence that indictments in the union-enemies' district are any less serious. Thus, at least to a first-order approximation, the results suggest a redistribution with no effects on the average "quality" of a

Section 7.1.1 estimates that an indictment reduces union-supported candidates' vote share by roughly 2 percentage points. Thus, preventing indictments keeps union-supported Representatives safer, and spurring indictments keeps the union-opposed safer. The effect of this bias in shielding Representatives from competition may be more important for welfare than any direct distortion in investigative activity.

To illustrate the potential importance of this channel, Table 8 presents the results of several recent studies of the effects of political competition (measured as the winner's vote share). For each, I calculate the implied effect of a two percentage point reduction in competition (the effect of one indictment, which I estimate is subject to manipulation in roughly one out of three close elections). The results are drawn from a range of countries and offices and should not be taken literally. Nonetheless, they roughly suggest the magnitudes at stake. The reduced competition implies a decrease in candidate quality (the share with prior political experience falls by 10 percentage points) and effort (absence rises by 3 percentage points), higher taxes and lower growth (between a 1% and 6% decrease in income), and more political rent capture (16% higher outside earnings, 4% more special interest concessions, and 3% more public funding for political parties).

[Table 8 about here.]

Again, the results are drawn from various countries and offices and should not be taken literally. However, they illustrate both the diverse range and important magnitude of the modest effects on political competition. The first order welfare implications, then, are likely in how a political bias in union officer indictments undermines healthy, competitive elections and subsequent policy.

9 Conclusion

I have shown that indictments of union officers causally decline when the candidate they support wins, relative to if the candidate they opposed had won. These indictments have large effects on union resources, political activity, and electoral outcomes. Representatives who benefit from them are more likely to vote to increase the investigator's budget, and those who are harmed are less likely, and this is particularly true for Representatives who won a close election. These are effects are concentrated in cases where reallocating investigations can mutually benefit all locally-based Representatives, and a decomposition of the discontinuity

case. This is consistent with the fact that, for most of my sample, OLMS did not use data-driven methods for identifying high-risk cases (OIG, 2012).

shows evidence of both reductions in indictments from the union-supported candidate's win *and* increased indictments from that candidate's loss.

These results show that politicians use their powers to pressure bureaucracies to enforce laws in ways that reduce electoral competition and make them more difficult to challenge, behavior with potentially important effects on policy and rent capture. This has important implications for the design of political and government institutions. Influencing union investigations is likely easier because that they are mostly concentrated in a single, relatively obscure agency which is only responsible for investigations like these. Such risks should be taken into account when developing rules for political oversight of bureaucracies, choosing the range of powers a single bureaucracy should have, and deciding the appropriate discretion to allow bureaucrats in implementing politically contentious policies.



Figure 1: Union political and labor market relevance

Source: Author's calculations based on DIME contribution data (Bonica, 2013) and Hirsch and Macpherson (2003) union membership data. Contributions are summed to the four-year political cycle to smooth over fluctuations between years with and without a Presidential election. OOver the period, total federal contributions increased by 250%, slightly less than the union increase.





Binned scatter plot. Fitted values and confidence intervals are based on Table 3 Panel A Column 1. "Union candidate" is that to which the union contributed, "vote share" is share of two-party vote.


Figure 3: Heterogeneity in political relevance

Binned scatter plot. Fitted values and confidence intervals are based on Table C4 Columns 3 and 4 (Panels (a) and (b)) and Table C9 Columns 1 and 2 (Panels (c) and (d)) and Columns 5 and 6 (Panels (e) and (f)). Panels (c)-(f) are based on above-/below-median splits. "Union candidate" is that to which the union contributed, "vote share" is share of two-party vote. CZ is Commuting Zone. High-/Low-stakes elections based on total spending in race. Threshold used for CZ being "large" share of District population is 10%.



Figure 4: The effect of an indictments on unions

Event study estimates of membership and contributions before and after a Union-CZ's first indictment. Both variables normalized by Union-CZ mean, and estimates include year effects and Union-CZ-specific trends. See Table C10 Columns 1 and 4 for estimates, and (2) for the estimating equation. CZ is Commuting Zone.



Figure 5: The effect of an indictments on elections

Event study coefficients. A unit of observation is a Union-district. Election "0" corresponds to the first election after the indictment. "Union candidate vote share" is the vote share in the district that went to the party the union supported in the election immediately preceding its indictment (union candidate win probability is similarly defined). See Table C10 Columns 8 and 9 for estimates, and (2) for the estimating equation.



Figure 6: Voting on OLMS budget increase

Based on voting on July 2007 Kline (R-MN) amendment to House Budget Resolution. The resolution called for reducing OLMS funding by 5%, and the amendment proposed fixing it at the previous year's level. Thus, the amendment was an increase in OLMS funding, which ultimately failed. Union-supported and union-opposed candidates are identified by net campaign contributions from union (union contributions to union candidate minus contributions to opponent) exceeding \$10,000. Indictments refer to those unsealed during the same Congressional term (2007-2008).

	No union contributions	Contributions, no close elections	Contributions, close elections		
	Panel A : Union characteristics				
Annual membership	1.1	107	166		
(in thousands)	(7.2)	(273)	(284)		
Annual receipts	.75	5.0^{-1}	108		
(in millions)	(7.4)	(7.3)	(199)		
Number of locals	2.1	16.5	282		
	(10)	(41)	(422)		
Number of commuting	1.7	8.6	109		
zones	(5.7)	(20)	(125)		
Share of CZ's with		.242	.571		
contributions		(.142)	(.319)		
Share of districts with contrib.		.274	.463		
(conditional on giving within CZ)		(.171)	(.189)		
Indictments per cycle	.009	.061	1.82		
x v	(.062)	(.162)	(2.84)		
Share of CZ-cycles	.005	.001	.014		
with indictment	(.037)	(.002)	(.024)		
Ever indicted	.03	.14	.68		
N of Union-CZ-cycles	12,396	38,523	19,067		
N of unions	1,314	7	75		
	Panel B: Election characteristics				
Democratic incumbent	.09	.59	.41		
Democrat wins	.04	.58	.43		
1+ union donates to Dem.		.79	.97		
Dem. share of contribs.		.73	.88		
All unions agree		.87	.61		
Union contributions		69.9	135		
(in thousands)		(64.5)	(115)		
Union contributions		.080	.046		
(as share of total)		(.08)	(.039)		
N of elections	281	2,010	754		
N of districts	3	163	293		
	Panel C: Co	ommuting zone (CZ)	characteristics		
2000 Population (in thousands)	28.4	143	1,404		
Congressional Districts	1.1	1.3	2.3		
Ν	37	58	605		

Table 1: Summary Statistics

"Close elections" are those where the winner receives less than 60 percent of the vote.

	(1)	(2)	(3)
Democratic vote share:	<40%	40%-60%	>60%
Share where Union			
gives to Democrat	.094	.844	.70
gives to Republican	.117	.051	0
does not contribute	.789	.105	.30
Average number	1.93	1.70	2.78

Table 2: Contribution behavior of politically active Union-CZ's

Cells correspond to the probability a union contributes to Democrat, Republican, or not at all (rows 1-3), conditional on contributing to at least one close election in the CZ during the cycle (and thus being in my main sample), separately by Democratic share of the vote.

$DV: 1{Indictment}$	(1)	(2)	(3)	(4)	(5)	(6)
			Panel A	: Linear		
Union cand. wins	-0.016^{**}	-0.013**	-0.018**	-0.017^{**}	-0.022	-0.018
	(0.007)	(0.000)	(0.009)	(0.008)	(0.013)	(0.013)
DV Mean	0.030	0.030	0.029	0.029	0.032	0.032
R^2	0.001	0.024	0.002	0.025	0.003	0.042
Ν	20688	20549	10264	10201	3989	3961
N of union-CZ's	6153	6129	4808	4772	2882	2861
N of Districts	269	269	168	168	96	96
N of elections	620	615	289	287	117	116
]	Panel B: (Quadratic		
Union cand. wins	-0.018*	-0.012	-0.028**	-0.026**	-0.023	-0.030*
	(0.009)	(0.008)	(0.013)	(0.011)	(0.015)	(0.016)
DV Mean	0.030	0.030	0.029	0.029	0.032	0.032
R^2	0.001	0.024	0.002	0.025	0.004	0.043
Ν	20688	20549	10264	10201	3989	3961
N of union-CZ's	6153	6129	4808	4772	2882	2861
N of Districts	269	267	168	166	96	95
N of elections	620	615	289	287	117	116
Range	[.40,	.60]	[.45,	.55]	[.48,	.52]
Controls	No	Yes	No	Yes	No	Yes

Table 3: Main results

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. Twoway clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. Controls include lagged membership, the logged amount of the contribution, the number of CD's in the CZ, the share of the district that voted Republican in the previous election, whether the union-supported candidate was a Democrat, whether the union-supported candidate was the incumbent, the log of total spending in the election, the number of races the Union-CZ contributed to, and fixed effects for year and the number of close elections the Union-CZ contributed to. Estimates based on main sample. See text for details.

Days to election	(1)	(2)	(3)
Percent within	All polls	First poll	First contribution
14 days	32%	14%	3.3%
30 days	69	53	6.8
60 days	87	77	14
90 days	93	90	17
180 days	97	94	29
365 days	100	100	49

Table 4: Share of polling and union contributions by days until election

Table shows the distribution of days before the election for polling (both earliest and latest) and each union's first contribution to a candidate.

DV: Indict. count	(1)	(2)	(3)	(4)	(5)	(6)
	Pivotal	Pivotal	Pivotal	Non-pivotal	Pivotal	Non-pivotal
Other close elect. outcomes	Won all	Lost all	Won all or lost all	Won some, lost some	Won all or lost all	Won some, lost some
Union cand. wins	-0.096 (0.066)	-0.050 (0.039)	-0.077^{**} (0.037)	$0.037 \\ (0.032)$	-0.081^{**} (0.038)	$0.050 \\ (0.036)$
p for H_0 : $\beta_{piv} = \beta_{non}$			0.	.057	0.0)44
DV Mean	0.072	0.063	0.068	0.068	0.063	0.070
R^2	0.003	0.006	0.003	0.001	0.004	0.001
Ν	1144	789	1933	2391	1933	2391
N of union-CZ's	525	355	738	681	738	681
N of Districts	104	72	124	121	124	121
Weights	None	None	None	None	$\Pr(\operatorname{Pivotal})$	$\Pr(\text{Pivotal})$

 Table 5: The Importance of Mutual Benefits

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. "Pivotal" indicates the given election outcome either determines whether the CZ is represented by all pro-union or determines whether it is all anti-union Representatives. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. All specifications based on linear polynomials using elections in which the union candidate received 40-60 percent of the two-party vote ("close elections" in other districts is defined analogously). All conditioning is based on the outcomes of *other* close elections in the CZ that the union contributed to, and these outcomes are continuous across the 50% threshold in the current election. Sample restricted to cases where the CZ makes up 10% or more of the district population, and the Union-CZ contributes to three or more close elections in the district. Columns 5 and 6 use propensity scores weights based on the probability of being pivotal, estimated using the three significant characteristics given in Table C14.

	(1)	(2)	(3)
	Coeffi	icient esti	mates
Constant	.055***	.036**	.077***
	(.012)	(.016)	(.022)
All Union cand.'s win	067***	054**	096**
	(.018)	(.024)	(.027)
All Union cand.'s lose	.038*	.040	.028
	(.027)	(.037)	(.045)
Sample:	Full	Bush	Obama
Ν	4,673	$2,\!359$	2,314
	Hype	othesis te	sting
Discontinuity	106***	095**	123***
	(.029)	(.038)	(.043)
Protection share	.635	.576	.776
	(.182)	(.274)	(.307)
p for H_0 : No protection	.000	.036	.012
p for H_0 : No aggression	.045	.122	.466
p for H_0 : 50/50 prot./agg.	.458	.781	.369

Table 6: Decomposing Aggression and Protection

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-cycle. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. Standard errors of protection share calculated by delta method. Sample based on unions contributing to two or more elections in the 40-60 percentage point range (close elections). Thus, the constant reflects the indictment rate of Union-CZ's with both a win and a loss. See (3) for estimating equation.

DV: Change in	(1)	(2)	(3)	(4)	(5)	(6)
contributions to	current	current incumbent's party current challenger's party				s party
		Panel A	: Davis-Ha	altiwanger Fi	rst-Difference	2
Change in incum.	-1.320**	-1.195**	-1.136**	-4.080***	-4.217***	-4.099***
vote share	(0.560)	(0.558)	(0.557)	(0.718)	(0.694)	(0.669)
Ν	2956	2956	2944	2956	2956	2944
\mathbb{R}^2	0.294	0.342	0.402	0.111	0.115	0.172
First stage F -stat.	135	130	129	135	130	129
		Pa	nel B: Firs	t-Difference of	of Levels	
Change in incum.	-6.868	-5.897	-5.037	-28.154***	-29.502***	-27.465***
vote share	(5.951)	(5.929)	(5.468)	(5.888)	(5.612)	(5.386)
Ν	2956	2956	2944	2956	2956	2944
R^2	0.121	0.134	0.218	0.066	0.077	0.162
First stage F -stat.	135	130	129	135	130	129
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	Yes	No	Yes	Yes
District FE	No	No	Yes	No	No	Yes

Table 7: Union contribution responses to shock to incumbent popularity

* p < .10, ** p < .05, *** p < .01. Standard errors clustered at the state level included in parentheses. Both panels based on instrumental variables, instrumenting for the change in incumbent vote share using the shift-share (Bartik-style) instrument: the change in vote share for ideologically similar incumbents in other states (see Section C.6.1 for more detail). Controls include party and lagged incumbency status of the current incumbent. Panel A is in units of Davis-Haltiwanger first-difference (see (14)). Panel B is in tens of thousands of dollars. See (13) for estimating equation.

Study	Setting	Outcome	Effect of indictment manipulation
Galasso and Nannicini (2011)	Italian Parliament	Entrant has political experience	9.6 pp. decrease
Bernecker (2014)	German Parliament	Absence rate	2.8 pp. increase
Besley, Persson, and Sturm (2010)	US States (average of all elections)	Tax revenue as share of income Income per capita	11.7% increase 1% decrease
Padovano and Ricciuti (2009)	Italian Municipalities	Income per capita	6% decrease
Becker, Peichl, and Rincke (2009)	German Parliament	Outside earnings	16% increase
Solé-Ollé and Viladecans-Marsal (2012)	Spanish Municipalities	Land development concessions to special interests	4.1% of a standard deviation increase
Svaleryd and Vlachos (2009)	Swedish Municipalities	Public funding for political parties Politician's wage	2.8% increase 0.8% increase
As shown in Table C10 and Figure 5, Table displays calculations of policy ef that use winners' share of the vote. "pl is a percent, not percentage point, incr	an indictment reduces union fects based on applying thi p." denotes percentage poin case (off of a base of 5.7%)	n candidate's subsequent vote share h s effect to from a sample of studies o it. The 11.7% increase in "tax revenu".	y 2 percentage points. If political competition e as a share of income"

interference
f political
effects of
Implied
Table 8:

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A Theory

Here, I develop a model of strategic interaction between unions, Representatives, and OLMS to explore that question. The model primarily focuses on the key strategic tension: the investigators and the Representatives. The investigators are intrinsically motivated to maximize indictments, and have no political objectives of their own. Representatives, however, have reelection incentives and recognize that indictments affect the ability of unions to campaign for or against them in the future.

The model yields two main insights. First, a political bias in OLMS indictments (skewed towards districts represented by union-enemies and away from those of union-friends) creates a surplus because both types of Representatives benefit. Union-friends want fewer investigations, and union-enemies want more. Second, because Representatives set the budget, they can transfer part of the surplus created by the bias back to the investigator. Thus, even an intrinsically motivated investigator will be willing to trade off indictments in one district for more indictments in another.

These insights are formalized below. Throughout the model, with few exceptions, Greek letters are used for exogenous parameters, lower case letters are used for choice variables, and upper case letters are used for equilibrium outcomes.

A.1 Environment

A.1.1 Voters

Each election has two candidates: H and L (for high and low policy positions; explained below). Each district has a single measure of voters made up of three types.

There is a share ϕ_P of predictable voters. These voters may vote on the basis of policy positions, incumbency status, candidate quality, etc., but their positions are perfectly predictable and cannot be influenced by campaign spending.⁶² A share $\xi_H \in [0, 1]$ will vote for candidate H.

There is a share ϕ_I of impressionable voters who can be persuaded by campaign activities. Let ω_J be the total campaign support (including contributions) for candidate J from nonunion sources. This support will be determined outside of the model. Let c_J be endogenously determined union campaign support for J. Then the share of impressionable voters who will vote for candidate H will be $(\omega_H + c_H)/(\omega_H + c_H + \omega_L + c_L)$, the standard contest function commonly used in the literature.

⁶²These are sometimes called policy-oriented voters or informed voters.

There is a share ϕ_R of completely random voters, whose views cannot be predicted or influenced. A share $u \sim U[0, 1]$ of these voters will vote for candidate L (and 1 - u vote for H).

Thus, the total of votes cast for H will be:

$$v_H = \phi_P \xi_H + \phi_I \left(\frac{\omega_H + c_H}{\omega_H + c_H + \omega_L + c_L} \right) + \phi_R (1 - u)$$

and the probability H wins can be written as $Pr(H \text{ wins}) = Pr(v_H - v_L > 0)$.

Because of the uniform distribution (Pr(u < x) = x), this probability denoted V_H can be rewritten as:

$$V_H \equiv Pr(H \text{ wins}) = \frac{1}{2} + \alpha + \beta \left(\frac{\omega_H + c_H - \omega_L - c_L}{\omega_H + c_H + \omega_L + c_L}\right)$$
(4)

where $\alpha = \frac{\phi_P}{2\phi_R}(2\xi_H - 1)$ is the predictable voters' *net* bias towards H (which may be negative), $^{63}\beta = \frac{\phi_I}{2\phi_R}$ is the importance of impressionable voters, and $\frac{\omega_H + c_H - \omega_L - c_L}{\omega_H + c_H + \omega_L + c_L}$ is the normalized campaigning advantage of candidate H.

Equation (4) shows that the probability candidate H wins is affine in his or her normalized campaigning advantage. Figure A1 shows this is a reasonable approximation of the data. Restricting to Congressional elections 2000-2012 with incumbent spending between 10% and 90% of the total, the figure presents a binned scatter plot based on 10 deciles of the normalized incumbent spending advantage and incumbent win probability. The linear fit clearly represents the data well, and the empirical analog to α and β are labeled.

[Figure A1 about here.]

A.1.2 Unions

An exogenous measure of homogenous workers is employed by a monopsonist covered by a union contract. Each worker produces μ units of surplus, which is captured by the union if the worker belongs to the union and the firm otherwise. Let U_t be the measure of workers who are unionized at time t.

Each period, the union's objective function is to maximize next period's expected union membership.⁶⁴ This membership depends on the policies in place at the time, P_{t+1} , reflecting the fact that many of the policies that unions most intensively lobby for and against are policies

⁶³Note that if H is the incumbent, then $\phi_P \xi_H$ votes will vote for the incumbent regardless of campaigning. Later, I will model a shock to incumbent popularity by shifting a portion of these predictable voters who will vote for H to become impressionable (subject to campaigning influence).

⁶⁴Unions invest tremendous resources in unionizing workers. Critics claim this is because they are greedy and are maximizing power and dues. Supporters claim it is because they are altruistically trying to help as many workers as possible organize. This reduced form remains agnostic as to which of these fundamental forces might be at work. I choose to focus only on next period's membership because adding a long-run player would complicate the model and yield little additional intuition.

that directly affect their ability to unionize new members (e.g., right-to-work laws, public sector unionization, whether elections can be conducted through card-checks, the composition of the NLRB).

Unions invest in political campaigns in order to influence the policies implemented. However, unions are penalized for the share of resources devoted to politics. This is based on public opinion polling data that regularly finds widespread criticism of union political activity. A 2011 Harris Poll reported that 72% of Americans (60% in union households) believe unions are too involved in politics (CBS, 2011). One explanation is that union resources devoted to political activity crowd out resources devoted to providing benefits to members, such as training, collective bargaining, or strike support. Unions that devote a large share of their resources to political activities will deter new members from joining. (ζ is a parameter governing this effect.)

The union's total resources available at time t depends on the surplus collected from unionized workers μU_t and on the support it enjoys among the public (S_t) . The more public support a union has, the more effective a campaign endorsement, organized strike, or public boycott will be. Thus, support improves the effectiveness of both campaigning and membership activities, and I model this public support as increasing total union resources. Letting $c = c_H + c_L$ be campaign activity, next period's expected union membership is given by:

$$E[U_{t+1}] = E[P_{t+1}] - \zeta \frac{c}{\mu S_t U_t}$$
(5)

A.1.3 The investigator

OLMS acts as a singular infinitely-lived entity.⁶⁵ The choice to model the agency as infinitely lived reflects the fact that many bureaucrats serve their entire careers within the bureaucracy.⁶⁶ In a period t OLMS has a budget of B_t units of investigatory resources which can be allocated across K districts. Investigative effort i_k in district k turns into indictments I_k through the decreasing returns technology $I_k = i_k^{\sigma}$ with $0 < \sigma < 1$, and OLMS' objective is to maximize the present discounted number of indictments, solving:

⁶⁵The choice to model the agency as singular abstracts from the types of principle-agent problems faced by bureaucracies around the world. See Besley and Ghatak (2005), Hirsch (2016), and Prendergast (2007) for discussion.

⁶⁶Serving as the Director of Research at Americans for Limited Government after stepping down as Director of OLMS during the George W. Bush Administration, Todd (2014) describes in detail the challenges faced in firing an employee. After "approximately a year of going through the process which took up a large part of my time" in an effort to fire one employee, that employee retired. Todd reports that the employee was advised to retire "because if they were fired from the federal government they would never get another job since no one would believe anyone could be bad enough to get fired from the federal government." In his eight years directing OLMS, Todd never fired an employee. Reflecting on his attempt, he says "I had no idea what I was getting into."

$$\max_{i_k} \sum_{\tau=0}^{\infty} \delta_o^t \sum_{k=1}^K i_{\tau,k}^{\sigma} \quad s.t. \quad \sum_{k=1}^K i_{\tau,k} \le B_{\tau} \text{ for each } \tau$$

where δ_o is OLMS' discount rate.

Note that as investigations go to zero, the marginal return to investigating district $k (\sigma i_k^{-\sigma})$ goes to infinity. Thus, in equilibrium, there will never be a district without investigations (equivalently, without indictments). Therefore, I model the effect of indictments on public support for the union as:

$$S_t = \Phi/I_t = \Phi i_t^{-\sigma}$$

where Φ is an exogenously defined upper bound of potential support.

A.1.4 Politicians

Representatives are citizen-candidates with reelection motives who debate separately about OLMS' budget and the policy P affecting unions. The Representative from district k has a bliss point of π_k in the policy dimension and campaigns on policy position p_k . Representatives dislike advancing positions they do not believe in, and each has quadratic loss in the distance between their bliss point and their advocated policy. The ultimate policy is an average of the policy positions of the various Representatives:⁶⁷

$$P = \frac{1}{K} \sum_{k} p_k \tag{6}$$

I assume that Representatives announce their position p_k during their first campaign and cannot change this policy position later or they will be punished for having low character.^{68,69}

⁶⁷This formulation implies that policy is linear in each Representative's position, giving equal weight to all Representatives. It is hard to know whether this is realistic. One model would allow Representatives to exert costly effort to influence policy, and the most extreme Representatives (furthest from the center) would have the most influence. This would imply that the policy effect of a marginal shift in policy preferences would be largest for the most extreme Representatives. Another model would assume that implemented policies would be determined by the Representatives at or near the median. This would imply that the policy effect of a marginal shift in policy preferences would be the largest for the least extreme Representatives. Both models seem plausible, so I choose to give equal weight to any marginal shift in policy preferences, which has the added benefit of tractability.

⁶⁸This is similar to the key assumption in Kartik and McAfee (2007). It is supported by empirical evidence that voters perceive candidates who switch positions as less trustworthy, decisive, and honest (Carlson and Dolan, 1985; Hoffman and Carver, 1984; Tomz and Van Houweling, 2012), particularly when it is a switch on an ideologically-driven issue (Doherty, Dowling, and Miller, 2015). McCaul et al. (1995) survey North Dakota state legislators and find that they believe voters care more about the consistency of their views than how close their views are to the voters'.

⁶⁹This is an infinite penalty for changing one's position. A finite penalty would not change the results, but would complicate all expressions.

Independently from the bargaining process over the policy P, politicians also bargain over OLMS funding.⁷⁰ As in reality, each year the President proposes an OLMS budget Θ_t . Representatives take this proposal and negotiate over adjustments by investing costly effort. Denote by r_k and ℓ_k the effort the District k Representative invests to raise and lower, respectively, the budget. Let this effort affect next period's budget according to:

$$B = \Theta + \sum_{k=1}^{K} r_k - \sum_{k=1}^{K} \ell_k \tag{7}$$

Note that if there is the same degree of support for increasing as decreasing the budget, then the President's budget will pass unadjusted.

Finally, all Representatives seek reelection. Let R be the probability the incumbent is reelected and η the utility of winning the election. The decision problem for an entering politician (running for the first time) is:⁷¹

$$\max_{p_k} -\Upsilon(p_k - \pi_k)^2 + \eta(1 - R)$$

and the problem a Representative in office faces is:

$$\max_{r,\ell} \quad -\Upsilon(p_k - \pi_k)^2 + \eta R - r_k^2 - \ell_k^2$$

where $\Upsilon \geq 0$ captures the disutility of deviating from their true policy bliss point.

I do not model candidate entry, but assume that both parties put forth a candidate through a stochastic process in which the challenger's type (bliss point, exogenous campaign support, and appeal among predictable voters) is a martingale. This means that last period's challenger is the optimal forecast of next period's challenger.

A.1.5 Timing of the stage game

The stage game in each period is composed of three sub-periods. First, Representatives take office and pass policies and a budget for OLMS. Second, OLMS conducts investigations and announces indictments. Third, Representatives' challengers and their platforms are announced. Exogenous campaign support is realized and the predictable voters preferences are observed. With this information, unions decide whether to campaign and how much. After all campaign activities, election outcomes and payoffs are realized.

 $^{^{70}}$ Note that the OLMS request for FY2017 was \$45 million, just 0.35% of the DOL's total request. Thus, I treat the OLMS funding decision as not crowding out other priorities.

⁷¹Note that 1 - R is the probability that the challenger wins office over the incumbent.

A.2 Equilibrium

A.2.1 Union contributions

H denotes the "high" policy type candidate, defined as the index i such that $p_i > p_{-i}$. It is straightforward to see that the union will only support the candidate advancing the higher policy position, denoted H, if any candidate at all. The first order condition from the union's problem yields the following optimal contribution rule:⁷²

$$c_H = \max\left\{\psi\left[\beta S_t\right]^{1/2}\sqrt{p_H - p_L} - (\omega_H + \omega_L), \quad 0\right\}$$
(8)

where $\psi = \sqrt{\frac{2\omega_L \mu U_t}{\zeta K}}$ is a positive constant function of exogenous parameters and predetermined resources that captures the benefits of contributions relative to their costs.

The expression (8) provides important intuition. First, note that the union will only choose to contribute if the contributions will be effective (ψ and β are large), it has sufficient resources available (S_t is large), the gain from a candidate winning is large enough (the distance in policy positions $\sqrt{p_H - p_L}$ is large), and the existing campaign activity is small enough (since union campaigning will be less effective when there is already a large amount of campaigning). If the union decides to contribute, these same factors affect how much it contributes.

The key incentive for politicians to interfere with the investigatory process is because indictments reduce support for unions, which reduces their campaign activities. It is helpful to derive this effect. First, note that the c_H expression is not discontinuous anywhere (it has a kink, but no jumps). Next, we can substitute $(\Phi i^{-\sigma})^{1/2}$ for $S^{1/2}$ and solve:

$$\frac{\partial c_H}{\partial i} = -\frac{\sigma}{2} i^{(-\sigma-2)/2} \psi \left[\beta \Phi\right]^{1/2} \sqrt{p_H - p_L} < 0 \tag{9}$$

or zero, after the union crosses the threshold of no longer contributing. Thus, indictments reduce union contributions.

A.2.2 Equilibrium in the stage game

First, consider the one-period stage game, with Theorem 1 restated below.

Theorem 1 The Subgame Perfect Nash Equilibrium of the one-period stage game

1. does not involve a political bias in investigations.

⁷²This derivation is simplified by the fact that policy is linear in Representatives' positions and union membership is linear in policy. This separability means the effect of the local Representative on membership is invariant to election outcomes in other districts.

2. features strictly positive wasted effort from both union-supported and union-opposed politicians.

Proof. The Subgame Perfect Nash Equilibrium can be found using backwards induction. In the third sub-period, union contributions will be allocated according to (8).

In the second sub-period, OLMS will "consumption smooth" by equalizing investigations across the K districts. This proves Part 1 of the theorem

In the first sub-period, Representatives take OLMS' allocation as fixed. Let $f \in \{1, 2, ..., K\}$ index a district represented by a union friend and $e \in \{1, 2, ..., K\}$ be one represented by a union enemy. Then the first order condition of the politician's problem yields the optimal effort to raise (in the case of an *e*-type district) or lower (for an *f*-type) OLMS' budget, in terms of its political consequences:

$$r_{e} = \frac{\eta}{2} \frac{\partial V_{L}}{\partial c_{H}} \frac{\partial c_{H}}{\partial i} \frac{\partial i}{\partial B} \frac{\partial B}{\partial r_{e}}$$

$$= \frac{\eta}{2K} \frac{\partial V_{L}}{\partial c_{H}} \frac{\partial c_{H}}{\partial i}$$

$$\ell_{f} = \frac{\eta}{2} \frac{\partial V_{H}}{\partial c_{H}} \frac{\partial c_{H}}{\partial i} \frac{\partial i}{\partial B} \frac{\partial B}{\partial \ell_{f}}$$
(10)

$$= -\frac{\eta}{2K} \frac{\partial V_H}{\partial c_H} \frac{\partial c_H}{\partial i}$$
(11)

If unions are not politically active (the political activity condition in (8) is not met), then $\partial c_H/\partial i = 0$ and there is no incentive to invest costly effort in affecting OLMS budget. Otherwise, since $\partial V_H/\partial c_H > 0$ and $\partial V_L/\partial c_H < 0$ and $\partial c_H/\partial i < 0$ (shown above) a Nash equilibrium among Representatives will always involve both types exerting strictly positive effort to affect OLMS' budget. Since the expression (7) shows that it is *net* effort that changes the budget, the two types of effort cancel each other out and this is clearly inefficient. Some of this costly effort, specifically $2 \min\{\sum r, \sum \ell\}$ units, is wasted as both types of politicians ineffectually try to change the budget. This proves Part 2 of the theorem.

A.2.3 Equilibrium in the repeated game

Theorem 1 shows that the equilibrium of the one-period stage game is inefficient. This inefficiency creates an opportunity for a reallocation of investigations to produce mutual gain (for OLMS and both politician types), formalized in Theorem 2 restated here.

Theorem 2 For a sufficiently high OLMS discount factor, there exists a Subgame Perfect Nash Equilibrium of the repeated game that

- 1. involves a political bias in investigations.
- 2. is weakly better than the stage game SPNE for all agents.

Proof. Again, let $f \in \{1, 2, ..., K\}$ index a district represented by a union friend and $e \in \{1, 2, ..., K\}$ be one represented by a union enemy. Let K_f denote the number of f-type districts and K_e denote the number of e-type districts. Consider the following adjustments to agents' actions (which will make them all weakly better off than the simple Subgame Perfect Nash Equilibrium being played period after period):

- 1. f-type Representatives reduce effort to lower the budget by ε
- 2. OLMS allocates the new $K_f \varepsilon$ investigations to *e*-type districts

f-type Representatives are strictly better off because they have the same indictments and reelection probabilities with less costly effort. e-type Representatives are strictly better off because they have more indictments and better reelection probabilities with the same effort. OLMS is strictly better off because it has more indictments. Finally, Representatives from districts without politically active unions (non-f- and non-e-type Representatives) are no better or worse off because they are unaffected by indictments and do not invest effort. Thus, they are indifferent, and have no incentive to deviate from this equilibrium (a deviation would require effort costs with no benefit).

This equilibrium can be sustained through a grim trigger strategy. If Representatives do not act appropriately on the budget, OLMS can harm them by strategically increasing or decreasing investigations in their district. (This can occur in the same period, because Representatives move before OLMS moves, within the period.) Likewise, if OLMS investigations are inappropriately allocated, Representatives can punish it through the budget during the next period.

In the equilibrium described in the proof, the gains to f-type Representatives comes solely through reduced bargaining effort. It is also possible that OLMS can reduce investigations in their districts, targeting those investigations, instead, towards e-type districts. Its willingness to do this, however, depends on relative the number of f-type and e-type districts and the curvature of $I_k = i_k^{\sigma}$ at $i_k = B/K$. Thus, there are other ways that a political bias might emerge, but the important insight illustrated in the proof is that the repeated nature of the game means it is always possible to sustain a politically biased equilibrium that is strictly better than an unbiased on for union-supported and union-opposed politicians, as well as the investigator.

A.2.4 Endogenous political positions

In what has been done so far, I have taken the policy positions of politicians as given. However, the position taken by a policy entrant will cater to the availability and usefulness of union campaign resources. (Recall that I assume that a politician cannot change their policy position because of credibility costs; thus the only relevant choice is that of the entrant.) Recalling that R denotes the probability the incumbent is reelected (so 1 - R is the probability the challenger wins), the election challenger's choice problem is given by:

$$\max_{p} -\Upsilon(p-\pi)^{2} + (1-R)\eta$$

From the first order condition, this yields:

$$p = \pi - \frac{\eta}{2\Upsilon} \frac{\partial R}{\partial p} = \pi - \frac{\eta}{2\Upsilon} \frac{\partial R}{\partial c_H} \frac{\partial c_H}{\partial p}$$

To the extent that choosing a higher p (closer to the union's desires) reduces the probability of incumbent reelection (increasing the challenger's chances) the challenger will raise their proposed policy above their bliss point. This is true whether the challenger chooses to become an H-type or an L-type; union political power influences the policies of both types of candidates.

Note that if the challenger chooses a p higher than the incumbent, then they become p_H (the incumbent becomes p_L), R is replaced by V_L , and $\frac{\partial R}{\partial c_H} < 0$ and $\frac{\partial c_H}{\partial p} \ge 0$. If, on the other hand, the challengers is an L type, then $\frac{\partial R}{\partial c_H} > 0$ but $\frac{\partial c_H}{\partial p} \le 0$ because the union is less likely to campaign when the ideological gap is small. Thus, in either case $\frac{\partial R}{\partial p} \le 0$ and the challenger's position will be weakly higher than their bliss point. Again letting V_H be the probability of H winning and V_L be the probability of L winning, we can rewrite this expression as:⁷³

$$p_H = \pi_H + \frac{\eta}{2\Upsilon} \frac{\partial V_H}{\partial c_H} \frac{\partial c_H}{\partial p_H} \quad \text{if challenger is } H \text{ type}$$
$$p_L = \pi_L + \frac{\eta}{2\Upsilon} \frac{\partial V_L}{\partial c_H} \frac{\partial c_H}{\partial p_L} \quad \text{if challenger is } L \text{ type}$$

With this in mind, it is helpful to consider how union contributions respond to a shock to incumbent popularity, such as frustration with the war in Iraq, Congressional gridlock, budget deficits, the economic recovery, etc. I model a decline in incumbent popularity by shifting some of the $\phi_P \xi_J$ predictable voters who would have deterministically voted for the incumbent politician J to become impressionable voters. These voters previously affected only $\alpha = \frac{\phi_P}{2\phi_R} (2\xi_H - 1)$, but now they increase $\beta = \frac{\phi_I}{2\phi_R}$, the importance of impressionable voters.

⁷³Obviously, if the union is not politically active, then $\partial c_H / \partial p_H = 0$ and $p_J = \pi_J$ because the candidate has no incentive to shift positions to cater to the union.

Two things are worth noting about this modeling strategy. First, in becoming impressionable voters, these citizens are still open to voting for the incumbent. Indeed, since incumbents often have a financial advantage over challengers (Figure A1), the majority of them will. Rather than becoming staunchly anti-incumbent, these voters are now more open to voting against the incumbent than they otherwise would be. Second and relatedly, it is also possible that some predictable voters shift from voting deterministically for the incumbent to deterministically against the incumbent. This would affect α and I am not ruling it out. Rather, I am assuming that there are some voters who, instead of perfectly turning against the incumbent, simply become open to voting against the incumbent.

As a result of a negative shock to incumbent popularity, β will increase. By increasing the return to union contributions (their effectiveness), this increases the incentive of entrants to cater to unions' policy position, which increases the policy position that they propose. To see this, note:

$$\frac{\partial p_H}{\partial \beta} = \frac{\eta}{2\Upsilon} \left[\frac{\partial^2 V_H}{\partial c_H \partial \beta} \frac{\partial c_H}{\partial p_H} + \frac{\partial V_H}{\partial c_H} \frac{\partial^2 c_H}{\partial p_H \partial \beta} \right]$$
 if challenger is H type

with a similar expression for $\partial p_L/\partial \beta$. Each term is positive. (In the case of $\partial p_L/\partial \beta$, all terms are negative. Since the product of two negative numbers is positive, again the expression as a whole is positive.) $\frac{\partial^2 V_H}{\partial c_H \partial \beta}$ is positive because β raises the return to all contributions, including union contributions, and $\frac{\partial^2 c_H}{\partial p_H \partial \beta}$ is positive because there is a complementarity between higher marginal value of contributions and higher policy positions.

Thus, a negative shock to incumbent popularity raises the value of union contributions and, as a result, raises the degree to which challenger politicians are willing to cater to unions' policy positions in exchange for more campaign support. These endogenous shifts in challenger policy positions can either amplify or dampen the response of campaign activities to an increase in their return, as seen by the following:

$$\frac{\partial c_H}{\partial \beta} = \psi \sqrt{\frac{S(p_H - p_L)}{\beta}} + \psi \sqrt{\frac{\beta S}{p_H - p_L}} \frac{\partial p_H}{\partial \beta} \text{ if incumbent is } L \text{ type}$$
$$\frac{\partial c_H}{\partial \beta} = \psi \sqrt{\frac{S(p_H - p_L)}{\beta}} - \psi \sqrt{\frac{\beta S}{p_H - p_L}} \frac{\partial p_L}{\partial \beta} \text{ if incumbent is } H \text{ type}$$

Recalling that $\partial p_H/\partial\beta$ and $\partial p_L/\partial\beta$ are both positive, this shows that an increase in the effectiveness of contributions will unambiguously increase contributions to the challenger (against

an *L*-type incumbent). This is because the added adaptation of the *H*-type challenger amplifies the added return to contributions. On the other hand, the effect on contributions to incumbents cannot be unambiguously signed. It can be shown that the sign of $\partial c_H / \partial \beta$ when the incumbent is an *H*-type is the same as the sign of:

$$1 - \frac{\eta}{\Upsilon} \frac{\beta}{(p_H - p_L)^2} \frac{\omega_L}{\omega_H + c_H + \omega_L}$$

This term cannot be signed. If it is positive, then campaigning on behalf of the incumbent will increase when their popularity falls. If it is negative, then the adjustment of the challenger towards less anti-union policies proved sufficient to disincentivize union support for the incumbent. This is likely to happen when the challengers' benefits from holding office are high relative to the ideological costs (η/Υ) is large), the ideological distance is small $((p_H - p_L)^2)$ is small), and the challenger already has a large share of the impressionable voters $(\omega_L/(\omega_H + c_H + \omega_L))$ is large) since this is the case when campaigning in favor of H has the largest returns (a property of diminishing returns to campaigning in the contest function).

An increase in β essentially has both income and substitution effects. It increases the total possible policy effect that a union can have, given any level of campaign activity (with a given level of cost), which is an increase in the union's effective income. Because it increases their influence, it then causes the challenger to further align with the union's preferences. For a challenger that the union already prefers (an *H*-type), these income and substitution effects both go in the same direction, and the union campaigns more for a candidate that it likes more. For a challenger the union does not like (an *L*-type), these effects go in opposite directions. The union campaign more with less incurred costs, but the *L*-type challenger's movement gives it less of a desire to do so. If the *L*-type moves enough, the union may actually reduce campaigning, as its not worth the (even lower) cost to avoid an *L*-type candidate whose policy positions aren't so bad.

Finally, it is worth noting that the fact that campaign contributions respond differently to incumbent popularity shocks differently depending on whether the union supports or opposes the incumbent is entirely driven by the assumption that challengers can adapt ideology while incumbents cannot. To see this, note that if the costs of ideological deviations went to infinity $(\Upsilon \to \infty)$ then $\partial p/\partial \beta$ would be zero, and challengers would not shift their ideology either. In this case, the effect of a change in β would be the same regardless of who is in office. Thus, differential contribution responses to incumbent popularity shocks is a test for whether endogenous policy positions are important.



Figure A1: Incumbent Spending Advantage and Win Probability

Binned scatter plot, linear fit, and theoretical interpretation of incumbent spending advantage (normalized by total spending) and incumbent win probability from Congressional elections 2000-2012 in which incumbent spending was between 10% and 90% of total spending.

B Data

I collected all the press releases from OLMS' website. Most of the time, a single case has three records (one for the indictment, one for the conviction, and one for the sentencing). Below are three examples from one real case, where I have censored the defendant's name (the actual name is reported in the press releases). The structure of records for this case is typical.

Indictment record:

On April 15, 2009, in the United States District Court for the Western District of Michigan, [DEFENDANT NAME], former President of Communications Workers Local 84-415 (located in Grand Rapids, Mich.), was indicted on one count of embezzling union funds in the amount of \$10,988.86 and one count of falsifying union records. The indictment follows an investigation by the OLMS Detroit District Office.

Conviction record:

On June 10, 2009, in the United States District Court for the Western District of Michigan, [DEFENDANT NAME], former President of Communications Workers Local 84-415 (located in Grand Rapids, Mich.), pled guilty to one count of embezzling union funds in the amount of \$10,988.86 and one count of falsifying union records. The plea follows an investigation by the OLMS Detroit District Office.

Sentencing record:

On October 26, 2009, in the United States District Court for the Western District of Michigan, [DEFENDANT NAME], former President of Communications Workers (CWA) Local 84-415 (located in Grand Rapids, Mich.), was sentenced to six months in prison and one year of supervised release, ordered to pay the remaining amount of restitution owed (\$9,991.86) within 30 days of the judgment and pay a \$125 special assessment. On June 10, 2009, [DEFENDANT NAME] had pled guilty to one count of embezzling union funds in the amount of \$10,988.86 and one count of falsifying union records. The sentencing follows an investigation by the OLMS Detroit District Office.

For each, I coded the date of indictment, the court in which it was filed, the defendant, his/her position (President),⁷⁴ the union (Communications Workers of America), the local,

⁷⁴I used six classifications for positions: "Top" officer (including president, vice president, executive director,

its location, the amount embezzled, and the OLMS District Office responsible, the conviction status (guilty), the sentence (6 months prison, 1 year probation/parole, and a fine). I then aggregate all cases involving the same union local during the same year into one. These was done through a combination of algorithms and manual coding. I excluded a small number of diversionary programs (because there is no information about the defendant or union) and cases where the union was the victim of fraud (e.g., financial holdings companies stealing from the union, where no union officer was indicted with the company).

Next, I turned to the LM data, also obtained from OLMS' website. Each entity (e.g., union headquarters, district, and local are separate entities) has a unique filing number that enables longitudinal merging. I cleaned this data and merged it with the criminal action data using the name of the union, the local, and (where necessary) the location of the local reported in the criminal action data combined with the mailing address from the LM data. The results of this merge are shown in Table C1.

I then determined the modal city and state for the mailing address (reported annually) for each filing number. I merged these to counties, and then commuting zones.

Then, I identified the most disaggregated class "type" of entity for each union. That is, each filing number reports a "type" (e.g., district, council, lodge, etc.). For each union, I determined which type (in each year) was reported by the largest number of filing entities. This is the most disaggregated type, and I call it a local (which it usually is). I then aggregated up to the Union-CZ-cycle, as stated in the text.

Next, I turned to the contribution level data from the DIME campaign contribution database. I used contributions to House elections, dropped contributions from an individual (as opposed to an organization), and used contributions where the Center for Responsive Politics had coded the organization's industry as a labor union (Contributor Category starts with "L"). I exclude transactions of type 24A ("independent expenditure against") because they normally have an identical record of type 24E ("independent expenditure for") in the opponent's data. I also exclude negative contributions, which are refunds that a campaign gives the contributor (often, these are a retiring candidate giving back unspent contributions from campaigns in earlier, past election cycles).

I merged each contributor's contribution totals (within a district-cycle) to the LM data. Finally, I combined union contributions to a district (from either headquarters or any local of the union) with the Union-CZ LM and criminal action data.

To match counties and Congressional districts, I use MABLE/GEOCORR, which has dis-

or national director), treasurer (including comptroller), accountant (including dues clerks and bookkeepers), political officers (including legislative directors, though these are extremely rare in the data), "other" officer (including general secretary, trustees, etc.), and "rank-and-file" (also very rare). In a reasonable number of cases, no position is reported.

tricts for every year and includes the share of the district (resp., county) population in the overlapping county (resp., district).

I also use polling data for several identification tests. This data is from RealClearPolitics, which seeks to aggregate the universe of publicly available opinion polls leading up to elections. I use data from my main sample of elections: 2000-2010, except no data is available for 2000 and 2004. Polls are not available for all elections. Of the 1,740 Congressional elections during these years, I have 789 polls for 287 elections.⁷⁵ Polls are disproportionately conducted for close elections (see Table C3). For "Democratic share of poll respondents," I use the Democratic share of the two-party respondents (that is, Democratic share of respondents who chose from the two available candidates, removing those who pledged to vote for a third party candidate from both the numerator and denominator). This is to maintain consistency of measurement with the election data.

 $^{^{75}}$ For graphical simplicity, Figure C5 excludes two outliers: One where the Democrat received 100% of the vote (and 56% of the poll) and one where the Democrat received 70% of the vote (and 72% of the poll).

C Additional Results

C.1 Background and summary statistics

[Figure C1 about here.]

[Table C1 about here.]

[Figure C2 about here.]

C.2 Tests

[Table C2 about here.]
[Figure C3 about here.]
[Figure C4 about here.]
[Figure C5 about here.]
[Table C3 about here.]

C.3 Robustness

[Figure C7 about here.]
[Table C4 about here.]
[Figure C8 about here.]
[Table C5 about here.]
[Table C6 about here.]
[Table C7 about here.]
[Table C8 about here.]

C.4 Heterogeneity

[Table C9 about here.]
C.5 Extensions

C.5.1 Effects of indictments

[Table C10 about here.]

C.5.2 Kline Amendment voting

[Table C11 about here.]

C.5.3 OLMS vs. Prosecutors

I have emphasized the potential for pressures on OLMS to create political bias in indictment rates. However, indictments must be filed with the Department of Justice, and the decision to indict and prosecute is ultimately made by the US Attorney. These 93 US Attorneys are political appointees, and it may well be the case that political bias emerges from their actions, rather than OLMS'.

I provide four pieces of evidence which I argue justifies my emphasis on OLMS. First, the main results are driven by indictment effects occuring at a 1-2 year lag, with almost no instantaneous effects. Table C12 presents the effect of a near-win on indictments during each of the following four years (see Figure C10 for the corresponding plots). The effects are driven by indictments unsealed during the second and third year after the election, with almost no effects during the first year. This suggests that the main results are best explained by actions of OLMS which must spend time investigating unions in order to produce a case. They are less consistent with a story in which the relevant margin is the US Attorney's decision to accept a case, which would likely produce an instantaneous effect on indictments.

[Table C12 about here.]

Similarly, Table C13 shows effects on several other outcomes, including convictions (Column 3). The effects on the number of convictions is nearly identical, not larger, to the effect on indictments. (Another way to appreciate the same fact is that 90-95% of indictments on either side of the discontinuity result in a conviction, with no significant difference in that rate.) If it were US Attorneys who were responsible for the indictment effect, one might expect even larger effects on convictions, which are almost completely within their control. There is no evidence of this.

[Table C13 about here.]

The third piece of evidence is effects on the probability OLMS audits a union, the starting point of many investigations. Columns 4 and 5 of Table C13 present these estimates, which are modestly large, but somewhat imprecise. This is in part due to the fact that half of the audits are random and my data does not allow me to distinguish random and targeted audits. My preferred specification is Column 5, which uses a quadratic, and estimates a 7.7 percentage point reduction in the probability of an audit following a union-supported candidate's win (p = .067), off of a base rate of 60%. This result is shown in Figure C9, which presents moderately compelling visual evidence that OLMS behavior is responding to Congressional election outcomes.⁷⁶

[Figure C9 about here.]

The final piece of evidence builds on the institutions of US Attorneys, which are generally appointed every four years, coinciding with presidential elections. Anecdotally, Congressmen and women have some sway over who is appointed within their District. Thus, if the effects operated through US Attorneys, one would expect larger effects during presidential election years, where the appointment process could be affected. I do not present separate estimates by year because they become extremely imprecise, but I find no evidence that the discontinuity is larger during presidential election years. If anything the point estimates suggest larger effects during non-presidential election years, though the differences are not statistically significant.

Considering this evidence collectively along with anecdotal evidence in Section 2, I conclude that political bias emerges primarily through pressures exerted on DOL investigators. While none of this evidence decisively rejects US Attorneys' involvement, the totality of evidence suggests they play little role in the political bias of indictments.

[Figure C10 about here.]

C.6 Pivotal and non-pivotal elections

[Table C14 about here.]

⁷⁶It is worth discussing the magnitude of this effect. One out of every 31 audits results in an indictment. Assuming politically-manipulated audits had the same conversion rate, the point estimate (upper end of the 95% confidence interval) of the audit effect can explain 15% (31%) of the 1.6 percentage point indictment effect. Given the numerous discretion points in the OLMS case process, the rest is likely accounted for by the decision to continue pursuing a case. The discontinuity in indictments, conditional on having been audited, is large, statistically significant, and visually clear (results not shown).

C.6.1 Policy position catering

To implement the shift-share (Bartik-style) instrument, I divide all Representatives within each party into four quartiles based on their DW-Nominate score (a standard measure of ideology). I then calculate the change in vote share from last election to the current election, and average over all incumbents within the same within-party quartile but in a different state. Formally, let v_{it} be the share of the two-party vote received by incumbent *i* who belongs to party p(i) and represents state s(i) at during two-year term following the year-*t* election. I take the *DWNominate_{it}* scores for each party p(i) and period *t*, and (within party) divide them into four quartiles, denoted $q_{pt}(i) = 1, 2, 3, 4$.⁷⁷ Then the shift-share instrument for the popularity of incumbent *i* is given by the mean change in vote share for those of the same party, quartile, and year, but different states:

$$\hat{\Delta}v_{it} = \frac{\sum_{j=1}^{435} 1\{p(j) = p(i); q_{pt}(j) = q_{pt}(i); s(j) \neq s(i)\}(v_{it} - v_{it-1})}{\sum_{j=1}^{435} 1\{p(j) = p(i); q_{pt}(j) = q_{pt}(i); s(j) \neq s(i)\}}$$
(12)

where $1\{\cdot\}$ is an indicator function.

To better understand this instrument, consider Figure C11. Panel (a) demonstrates a single year: 2008. On the x-axis are the means for the four party-specific DW-Nominate quartiles, and on the y-axis is the average change in vote share received by the incumbent party, relative to the same party's vote share in the last election (along with the 95% confidence interval). The most moderate Democrats saw a large increase in the share of the vote they received, relative to the previous year, while the most moderate Republicans saw a decrease. This was the year that Barack Obama defeated John McCain, a moderate Republican. Much of this effect is likely due to Obama's campaigning and appeal, which primarily won over moderate Republicans but had little sway on more extreme Republicans. In other words, this is precisely the sort of predictable variation in incumbent's reelection chances that unions might respond to.

[Figure C11 about here.]

Panel (b) presents a more systematic representation of the variation captured by the instrument over the full time period. The figure plots the predicted change for each party-specific quartile in each year. Gray diamonds represent a decrease in vote share received, and blue circles represent an increase. For both, the size of the shape captures the magnitude of the change (with larger shapes being larger changes).

⁷⁷The results are unchanged when using other numbers of quantiles.

The figure shows that Republicans saw broad decreases in vote share during 2000, while the most liberal Democrats saw large increases. This was the same year that Al Gore captured the majority of the popular vote, and the Green Party's Ralph Nader captured a significant share as well. Thus, it's broadly consistent with a left-leaning swing in public opinion. These very liberal Democrats then saw their vote share fall the next year. 2004 was the year of a divisive presidential election (Kerry vs. Bush) and moderates from both parties saw falling vote share while the extremes saw rising popularity. In 2006, largely because of frustration with the wars in Iraq and Afghanistan, all Democrats saw gains and all Republicans saw losses. 2008 is discussed above. In 2010, due to frustration with the slow economic recovery from the Great Recession and widespread concerns about the Affordable Care Act (Obamacare), all Democrats saw losses and all Republicans saw gains. In 2012, many of these Republican gains were reversed (partly, perhaps, due to the unpopular Presidential candidate Mitt Romney), while the surviving Democrats saw little change in vote share. In short, the instrument seems broadly consistent with intuition about US politics over the period, and seems to be primarily capturing public opinion swings due to broad events rather than union campaigning strategy.

Finally, I am interested in how union contributions to the party of the incumbent and the party of the challenger respond to these shocks. I estimate:

$$\Delta UnContr_{dpt}^{levels} = \delta_t + \beta \hat{\Delta} v_{dp(incum)t} + X'_{dpt} \gamma \varepsilon_{dpt}$$
(13)

where $\Delta UnContr_{dpt}^{levels}$ is the one-period change in union contributions to party p in District dat time t, $\hat{\Delta}v_{dp(incum)t}$ is the predicted change in vote share (as described above) for the District d incumbent,⁷⁸ and X_{dpt} is a vector of controls. I estimate the model separately for p (on the left-hand side) being the incumbent's party, and p being the challenger's party.

Note that since the estimating equation is in first differences, it already removes timeinvariant sources of heterogeneity like higher levels of union contributions in one district than in another, or differences in average fundraising levels between the two parties.

While I present both specifications, my preferred specification does not use the change in contributions in levels because it produces imprecise estimates. I do not wish to take log contributions because I do not want to lose the zeros. Instead, I prefer to use the Davis and Haltiwanger (1990, 1992) approach, and take the first-difference and normalize by the mean of consecutive observations:

$$\Delta UnContr_{dpt}^{DH} \equiv \frac{UnContr_{dpt} - UnContr_{dpt-1}}{(UnContr_{dpt} + UnContr_{dpt-1})/2}$$
(14)

⁷⁸I prefer to estimate the reduced form, instead of the IV, because the units are not particularly interpretable anyway. Regressing the change in the incumbent's vote share on $\hat{\Delta}v_{dp(incum)t}$ yields a coefficient of .73 and an *F*-statistic of over 150, so the shock is certainly relevant.

where I interpret 0/0 as 0. The resulting normalized first difference has exactly the same interpretation as a log-difference (a one unit change in x results in a β percent change in Y), but it does not lose the zeros.

Table 7 presents the results. Panel B shows that they are not an artifact of the Davis-Haltiwanger normalization. Note that the same set of shocks are used for both dependent variables, so the difference is not driven by different samples. It is not an artifact of the linear model, either. Figure C12 presents a binned scatter plot of the residualized change in contributions and incumbent vote share (based on Columns 3 and 6, with the district fixed effects).

[Figure C12 about here.]



Figure C1: OLMS budget over time

Source: Various annual reports. OLMS budget (in 2015 dollars), FTE employment, and reported indictments by fiscal year, all normalized by FY2002 levels. Note that the budget for Fiscal Year t is passed in calendar year t-1 by the Administration and Congress in control at the time. Bars at the bottom indicate partisan control of the Presidency and the House. Indictment counts are based on on numbers reported in annual reports, which may or may not be subject to double-counting (see Kaplan (2007) for a discussion). OLMS did not release annual reports between 1978 and 2003 (Lund and Roovers, 2008).

Figure C2: Union contributions and race competitiveness



Figure displays union contributions across the Democratic share of the two-party vote, a measure of the competitiveness of the election.



Figure C3: Placebo test for discontinuity in fitted values

Binned scatter plot of fitted values for *predicted* indictments, based on predetermined characteristics (not including election outcomes). Discontinuity in fitted value is not statistically significant (p = .936). Controls used for fitted values include lagged membership, the logged amount of the contribution, the number of CD's in the CZ, the share of the district that voted Republican in the previous election, whether the union-supported candidate was a Democrat, whether the union-supported candidate was the incumbent, the log of total spending in the election, the number of races the Union-CZ contributed to, and fixed effects for year and the number of close elections the Union-CZ contributed to.





Figure displays density of vote share received by each union-supported candidate. Density, fitted values, and confidence intervals are based on McCrary (2008).



Figure C5: Poll-predicted results and actual election outcomes

Figure is based on 285 elections showing the Democratic share in the last poll before the election (88% of which were within a month of election day and 59% of which were within two weeks) against the Democratic share in the actual election. See the Data Appendix for discussion of polling data. $R^2 = .64$

Figure C6: Testing for discontinuous poll results



(a) Discontinuity in Democratic share in poll

(b) Discontinuity in Democratic lead in poll

Both estimates based on 253 elections with Democratic vote share between 40 and 60 percent. Neither discontinuity is statistically significant: p = .560 in (a) and p = .587 in (b). Panel (a) uses linear controls for Democratic vote share (quadratic controls yield p = .276) and Panel (b) uses quadratic controls for Democratic vote share (linear controls yield p = .161). See Data Appendix for discussion of polling data.



Figure C7: Robustness to polynomial and bandwidth selection

Binned scatter plot. Fitted values and confidence intervals are based on Table 3 Panel B Column 1 (a) and Panel A Column 3 (b). "Union candidate" is that to which the union contributed, "vote share" is share of two-party vote.

Figure C8: Unweighted graphs



Binned scatter plot. Fitted values and confidence intervals are based on Table C4 Panel A Column 2 (a) and Panel B Column 2 (b). "Union candidate" is that to which the union contributed, "vote share" is share of two-party vote.



Binned scatter plot. Fitted values and confidence intervals are based on Table C13 Panel A Column 5. "Union candidate" is that to which the union contributed, "vote share" is share of two-party vote.



Figure C10: Indictment effects over time

Binned scatter plot. Fitted values and confidence intervals are based on Table C13 Panel A Column 5 (a) and Column 6 (b). "Union candidate" is that to which the union contributed, "vote share" is share of two-party vote.



Figure C11: Instrument for swings in public opinion

Panel (a): Change between 2006 and 2008 in the share of the vote received by the 2006 winning party, separately by within-party quartile of the DW-Nominate distribution. Panel (b): Representation of changes in vote share, by within-party DW-Nominate quartile, over time. Blue circles represent increases in received vote share; gray diamonds represent decreases. Size of shapes based on magnitude of increase/decrease.



Figure C12: Non-parametric strategic contribution response

Binned scatter plot of residualized union contributions and predicted change in incumbent vote share. Based on specifications in Table 7 Columns 3 and 6.

	(1)	(2)	(3)	(4)
Sample:	Main	No campaign	Aggregate	Could not
	sampic	contributions	011151011	merge
Embezzlement amount				
(thousands of 2015 doll. $)$				
10^{th} percentile	4.2	4.0	5.1	2.2
25^{th} percentile	9.4	8.8	14	5.8
50^{th} percentile	21.1	19.6	35.3	15.1
75^{th} percentile	55.1	57.5	78.1	42.6
90^{th} percentile	118.6	175.1	260	89.4
Conviction	87%	91	82	88
Prison	23%	25	30	13
Involves				
Top official	28%	32	20	38
Treasurer	49%	67	30	56
Other agency involved	10%	6.3	24	7.6
Ν	641	379	104	144

Table C1: Indictment summary statistics

Characteristics of OLMS cases. A single case/indictment might include multiple defendants. Defendants and cases are de-duplicated so counts may differ from published totals. Column 1 sample: locals of unions that make campaign contributions. Column 2 sample: locals of unions that do not make campaign contributions. Column 3 sample: "aggregate divisions" (e.g., national headquarters or regional councils) of unions that make campaign contributions. Column 4 sample: indictments that could not be merged with the LM data (11% of indictments). This is for one of three reasons. First, the union does not represent private or federal employees and did not file LM reports. Second, the local named in the press releases is not in the LM data (errors in the local's reported name are very common in press releases) and the press release does not contain the local's location (commonly reported in later years but not earlier ones). Nothing can be done about these two issues. The third reason is that many locals shut down after a corruption case. This closure often shortly after (or even just before) the indictment, so no LM report is filed. To maintain data integrity, I did not merge indictments with earlier LM Reports. I have experimented with merging indictments up to one year ahead (e.g., merge a 2011 indictment with a 2010 LM report that was filed, under the assumption that the investigation went public in 2010 and the union closed that year). This includes 20 additional indictments in the main sample, and the results become larger (more negative) and more statistically significant than the results I report in the paper.

	(1)	(2)	(3)	(4)	(5)	(9)	(2)
DV:	*Union	*Log	*Log	*Indict-	Contrib.	Share of	UC is
(*Lagged)	presence	members	receipts	ment	amt. (log)	races	incum.
			Pan	el A: [.40,	[09.		
Union cand. wins	0.058	-0.159	-0.271	-0.003	0.041	0.005	0.090
	(0.042)	(0.196)	(0.238)	(0.009)	(0.059)	(0.026)	(0.093)
DV Mean	0.965	6.828	12.884	0.031	8.378	0.641	0.552
R^2	0.007	0.001	0.003	0.000	0.008	0.007	0.219
Ν	16999	15766	15629	16022	20688	20688	20584
N of union-CZ's	5565	5282	5229	5412	6153	6153	6148
N of Districts	249	247	247	247	269	269	268
N of elections	526	519	519	519	620	620	616
			Pan	el B: [.45,	.55]		
Union cand. wins	0.066	-0.202	-0.388	0.001	0.092	0.015	0.009
	(0.065)	(0.229)	(0.278)	(0.012)	(0.095)	(0.035)	(0.131)
DV Mean	0.961	6.768	12.831	0.033		0.631	0.499
R^2	0.018	0.003	0.005	0.000	0.001	0.002	0.115
Ν	8475	7774	7721	7931	10264	10264	10236
N of union-CZ's	4241	3970	3935	4067	4808	4808	4792
N of Districts	149	147	147	147	168	168	167
N of elections	247	243	243	243	289	289	288
* $p < .10, ** p$	< .05, ***	p < .01. U	nit of obse	rvation is l	Jnion-CZ-elee	ction. Two-	way clus-
tered standard en	rors, at the	Union-CZ ar	nd Congress	sional Distr	ict level, are	shown in pa	rentheses.
Note that the $spectrum of the spectrum of th$	ecifications	(polynomial,	standard	error cluste	ers, etc.) are	identical to	my main

specifications, except where lags make force additional sample restrictions.

Table C2: Smoothness of predetermined characteristics

	(1)	(2)	(3)
	Panel A: Poll	ing variation, by e	lection outcomes
Dem. vote share	Poll unavailable	SD of poll error	Pr(Poll is wrong)
40-44	70%	3.4 pp	3.1%
44-48	36	3.5	21
48-52	18	3.4	40
52-56	30	3.5	19
56-60	73	4.1	10
40-60	45%	3.7 pp	23%
	Panel B: Elec	ction outcome varia	ation, by polling
Dem. poll share		SD of poll error	Pr(Poll is wrong)
40-44		3.3 pp	0%
44-48		3.5	16
48-52		3.7	40
52-56		3.7	24
56-60		4.1	7.4
40-60		3.7 pp	23%

Table C3: Variation in election outcomes and poll results

"SD" denotes standard deviation, "poll error" denotes difference between Democratic share of ultimate electoral vote and Democratic share of poll respondents, "pp" denotes percentage points, and Pr(Poll is wrong) denotes that the winner of the poll did not win the election.

$DV: 1{Indict}$	(1)	(2)	(3)	(4)
		Pane	el A: [.40, .60]	
Union cand. wins	-0.016**	-0.010**	-0.015***	0.002
	(0.007)	(0.004)	(0.005)	(0.005)
DV Mean	0.030	0.022	0.026	0.011
R^2	0.001	0.000	0.001	0.000
Ν	20688	20688	15166	5522
N of union-CZ's	6153	6153	4757	2653
N of Districts	269	269	269	146
N of elections	620	620	619	308
		Pane	el B : [.45, .55]	
Union cand. wins	-0.018**	-0.012**	-0.016***	0.004
	(0.009)	(0.005)	(0.006)	(0.009)
DV Mean	0.020	0.029	0.024	0.008
R^2	0.002	0.001	0.001	0.001
Ν	10264	10264	7659	2605
N of union-CZ's	4808	4808	3649	1657
N of Districts	168	168	168	92
N of elections	289	289	288	144
Weights	Yes	No	No	No
Sample	Full	Full	${\geq}10\%$ of CD	${<}10\%$ of CD
Dampie			pop in CZ	pop in CZ

Table C4: The role of weights

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZelection. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. Weights are the share of the Congressional District (CD) population that lives in the Commuting Zone (CZ).

$\overline{DV:1{Indict}}$	(1)	(2)	(3)	(4)
		Panel A	A: [.40, .60]	
Union cand. wins	-0.0160**	-0.0160**	-0.0160**	-0.0160*
	(0.0075)	(0.0062)	(0.0068)	(0.0093)
	[0.033]	[0.010]	[0.018]	[0.086]
R^2	0.001	0.001	0.001	0.001
Ν	20688	20688	20688	20688
		Panel E	B : [.45, .55]	
Union cand. wins	-0.0179**	-0.0179**	-0.0179**	-0.0179
	(0.0089)	(0.0083)	(0.0088)	(0.0136)
	[0.046]	[0.031]	[0.042]	[0.190]
R^2	0.002	0.002	0.002	0.002
Ν	10264	10264	10264	10264
Clusters	Un-CZ, Dist	CZ, Dist	CZ, State	Un, CZ, State

Table C5: Main results with alternative clustering

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZelection. Standard errors in parentheses; p-values in brackets. CZ is Commuting Zone.

$DV: 1{Indict}$	(1)	(2)	(3)	(4)
		Panel	A : [.40, .60]	
Union cand. wins	-0.016**			-0.015
	(0.007)			(0.011)
Democrat wins		-0.001	-0.001	
		(0.005)	(0.008)	
DV Mean	0.030	0.018	0.021	0.029
R^2	0.001	0.000	0.000	0.063
Ν	20688	16989	7170	4689
N of union-CZ's	6153	4998	3109	2458
N of Districts	269	297	259	
N of elections	620	738	586	183
		Panel	B : $[.45, .55]$	
Union cand. wins	-0.018**			-0.020
	(0.009)			(0.013)
Democrat wins		-0.006	-0.008	
		(0.008)	(0.012)	
DV Mean	0.029	0.016	0.018	0.028
R^2	0.002	0.000	0.001	0.065
Ν	10264	6507	2569	2257
N of union-CZ's	4808	3036	1626	1593
N of Districts	168	189	157	
N of elections	289	333	266	78
		Un-CZ's	Un-CZ-Cycles	Union
Sample	Main	with contrib.,	with contrib.,	disagreement
		elct. without	elct. without	(elct. FE)

Table C6: The role of the Democratic party

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. CZ is Commuting Zone.

	(1)	(2)	(3)	(4)	(5)
		Panel A:	[.40, .60]		
Union cand. wins	-0.015*	-0.012	-0.014*	-0.012*	-0.541**
	(0.008)	(0.008)	(0.008)	(0.007)	(0.253)
DV Mean	0.030	0.026	0.020	0.030	0.030
R^2	0.000	0.001	0.001	0.000	
Ν	21125	15941	17156	23711	20688
N of union-CZ's	6174	6142	5468	6356	6153
N of Districts	269	257	225	293	269
N of elections	620	585	517	749	620
		Panel B:	[.45, .55]		
Union cand. wins	-0.016*	-0.019**	-0.017	-0.015*	-0.545*
	(0.009)	(0.009)	(0.010)	(0.008)	(0.281)
DV Mean	0.028	0.026	0.020	0.028	0.029
R^2	0.002	0.003	0.001	0.001	
Ν	10601	8995	8598	11874	10264
N of union-CZ's	4886	4792	4204	5102	4808
N of Districts	168	167	144	193	168
N of elections	289	287	251	349	289
	Including	Closest	No	Including	т
	split cand.	only	mob	2012	Logit

Table C7: Additional robustness

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. CZ is Commuting Zone.

$DV: 1{Indict}$	(1)	(2)	(3)	(4)	(5)
Union cand. wins	015***	013**	013**	013**	013**
se $(2-way)$	(.005)				
se $(Un-CZ)$	(.005)	(.006)		(.005)	(.006)
se (Cong Dist)	(.005)		(.006)		
Ν	15166	13968	13403	12447	10533
Weights	None	Triangular	Triangular	None	Triangular
Bandwidth	[.4,.6]	[.409, .591]	[.413, .587]	[.4,.6]	[.421, .579]
Sample	$\geq 10\%$	$\geq 10\%$	$\geq 10\%$	$\geq 10\%$ of	$\geq 10\%$ of
	of CD	of CD	of CD	CD, Closest	CD, Closest
	pop	pop	pop	only	only

Table C8: Robustness to CCT optimal bandwidth selection

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. Standard errors in parentheses; *p*-values in brackets. Optimal bandwidth selection performed via Calonico, Cattaneo, and Titiunik (2014). "se" refers to the standard error clustered at the level described in parentheses. CZ is Commuting Zone.

$\overline{DV:1{Indict}}$	(1)	(2)	(3)	(4)	(5)	(6)
			Panel A	A : [.40, .6	[C	
Union cand. wins	-0.004	-0.021*	-0.016	-0.017*	-0.010	-0.020**
	(0.004)	(0.011)	(0.013)	(0.009)	(0.014)	(0.008)
DV Mean	0.009	0.041	0.027	0.033	0.033	0.029
R^2	0.000	0.001	0.001	0.001	0.001	0.002
Ν	10341	10347	8393	12295	10126	10562
N of union-CZ's	3964	2639	4155	4323	4784	4560
N of Districts	258	267	268	257	202	159
N of elections	584	613	615	576	319	301
			Panel 1	B : [.45, .5	5]	
Union cand. wins	-0.006	-0.021*	-0.025	-0.014	0.002	-0.024**
	(0.009)	(0.013)	(0.018)	(0.011)	(0.018)	(0.010)
DV Mean	0.008	0.039	0.026	0.030	0.027	0.029
R^2	0.000	0.003	0.004	0.001	0.002	0.003
Ν	5192	5072	3823	6441	3636	6628
N of union-CZ's	2906	2135	2514	3311	2620	3746
N of Districts	162	168	168	163	84	118
N of elections	278	287	287	279	106	183
Hotorogonaity by	Unio	n size	Contri	b. size	Race lev	vel contribs.
Dy	Small	Large	Small	Large	Small	Large

Table C9: Heterogeneity by union and election characteristics

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. All sample splits are based on the yearspecific median for the main [.40, .60] sample. The number of observations in each group is not always equal because there is often point mass on the median volume (e.g., a contribution of \$5,000, which is the median in most years). CZ is Commuting Zone.

	(1)	(2)	(3)	(4)	(2)	(9)	(2)	(8)	(6)
	Local t	union capac	ity	Pc	olitical act	ivity		Political com	petition
DV:	Membership	Receipts	Locals	Camp	aign contr	ibutions	UC v	ote share	Un. cand. wins
Ind_{t+4}	017	058	023						
	(.031)	(.040)	(.023)						
Ind_{t-3}	018	053	023	.161	079	760.	023**	014	025
	(.026)	(.040)	(.019)	(.114)	(.142)	(.167)	(.011)	(600.)	(.031)
Ind_{t-2}	042*	077**	037**	.111	044	.170	006	004	.013
	(.022)	(.032)	(.018)	(.074)	(.100)	(.108)	(.006)	(.004)	(.015)
Ind_t	047	052	034	$.303^{***}$.282***	$.368^{***}$	019***	013***	053***
	(.034)	(.036)	(.029)	(620)	(.103)	(860.)	(.006)	(.004)	(.017)
Ind_{t-1}	075**	101***	051*	044	092	$.280^{*}$	026***	018**	075***
	(.035)	(.039)	(.031)	(.116)	(.140)	(.153)	(600.)	(.007)	(.027)
Ind_{t-2}	068	132***	090**	192	072	.119	030**	022**	084**
	(.045)	(.047)	(.036)	(.166)	(.200)	(.215)	(.013)	(.011)	(.039)
Ind_{t-3}	109^{**}	189***	121***	467**	516*	.510	025	021	067
	(.047)	(.050)	(.039)	(.238)	(.307)	(.319)	(.017)	(.014)	(.050)
Ind_{t-4}	165^{***}	232***	166***						
	(.058)	(090.)	(.046)						
R^{2}	.500	.480	.634	.270	.260	.223	.812	.881	.778
Ν	12,255	12,255	12,255	8,617	7,602	7,455	10,881	9,833	9,833
F Stat (pre)	1.57	2.53	1.68	1.27	0.74	1.50	2.46	1.58	3.09
p-value	0.195	0.056	0.169	0.282	0.476	0.223	.087	.207	.047
F Stat (post)	2.63	4.33	4.65	2.88	3.10	4.17	5.54	3.12	4.01
p-value	0.033	0.002	0.001	0.035	0.026	0.006	.001	.026	.008
Elections				All	Close	Non-close	All	Contested	Contested
* $p < .10, **$	p < .05, *** p <	.01. Columr	is 1-3: A ur	uit is a Unic	on-CZ and	the data is \mathbf{v}	early from 2	2001-2014. Col	umns 4-6: A unit is
a Union-CZ a	ind the data is bi	ennial from	2000-2012.	Columns 7-	-9: A unit i	s a Union-dis	strict and th	ie data is bienr	iial from 2000-2014.
Standard erre	ors (in parenthese	s) are cluster	red at the U	Inion-CZ in	1-6 and th	e district leve	el in 7-9. Al	l columns inclu	ide unit fixed effects
and trends an nercent change	nd year fixed effe re) Sample inclu	cts. Depende des only uni	ent variable ts evnerien	in 1-6 is nc ing an ind	ormalized t ictment du	y the unit-sp ring the wind	ecific mean low For ea	(coefficients ca se of internrets	an be interpreted as ation table is based
only on a Un	ion-CZ's first inc	lictment. In	columns 1-	$-3 Ind_{t+4}$ a	and Ind_{t-4}	also include	leads and]	ags beyond for	ur. In columns 4-9,
Ind_{t+3} and I .	nd_{t-3} also includ	e leads and l	ags beyond	three. In co	olumns 4-9	Ind_t corresp	onds to the	first election a	fter the indictment.
See (2) for es	timating equation	n.)						

$DV: 1{Vote Yes}$	(1)	(2)	(3)	(4)
Union-supported	-0.124***	-0.092		
	(0.038)	(0.059)		
Union-supp. and supporter indicted		-0.091***		
		(0.031)		
Union-opposed			0.078**	0.064
			(0.039)	(0.045)
Union-opp. and opponent indicted				0.037
				(0.061)
Ν	431	431	431	431
R^2	0.757	0.763	0.754	0.754

Table C11: Voting on Kline (R-MN) Amendment to increase OLMS funding

* p < .10, ** p < .05, *** p < .01. Controls include indicator for Republican, margin of victory in previous election, share of district that voted Republican in last presidential election (Bush '04), and the interaction of Republican with victory margin and Bush '04 share. Results represent voting on July 2007 Kline (R-MN) amendment to House Budget Resolution. The resolution called for reducing OLMS funding by 5%, and the amendment proposed fixing it at the previous year's level. Thus, the amendment was an increase in OLMS funding, which ultimately failed. Union-supported and union-opposed candidates are identified by net campaign contributions from union (union contributions to union candidate minus contributions to opponent) exceeding \$10,000. Indictments refer to those occurring during the same Congressional term (2007-2008).

$DV: 1{Indict}$	(1)	(2)	(3)	(4)
Years after election	1	2	3	4
		Panel A:	[.40, .60]	
Union cand. wins	-0.003	-0.014**	-0.012*	-0.006
	(0.005)	(0.006)	(0.006)	(0.005)
DV Mean	0.015	0.017	0.015	0.017
R^2	0.000	0.001	0.001	0.000
Ν	20688	20688	20263	20263
N of union-CZ's	6153	6153	6020	6020
N of Districts	269	269	269	269
		Panel B:	[.45, .55]	
Union cand. wins	-0.006	-0.013*	-0.010	-0.003
	(0.006)	(0.007)	(0.009)	(0.006)
DV Mean	0.014	0.016	0.014	0.017
R^2	0.000	0.002	0.002	0.000
Ν	10264	10264	10060	10060
N of union-CZ's	4808	4808	4714	4714
N of Districts	168	168	168	168

Table C12: Indictment effects over time

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. Column 1, for instance, estimates the effect of a close election in the 2010 electoral cycle (November, 2010) on indictments unsealed during 2011.

	(1)	(2)	(3)	(4)	(5)					
	Panel A : [.40, .60]									
Union cand. wins	-0.016**	-0.020**	-0.014**	-0.032	-0.077*					
	(0.007)	(0.009)	(0.007)	(0.032)	(0.042)					
DV Mean	0.030	0.034	0.026	0.600	0.600					
R^2	0.001	0.001	0.001	0.001	0.001					
Ν	20688	20688	20688	20688	20688					
N of union-CZ's	6153	6153	6153	6153	6153					
N of Districts	269	269	269	269	269					
	Panel B: [.45, .55]									
Union cand. wins	-0.018**	-0.021**	-0.018**	-0.058	-0.042					
	(0.009)	(0.010)	(0.008)	(0.041)	(0.054)					
DV Mean	0.029	0.032	0.026	0.598	0.598					
R^2	0.002	0.001	0.002	0.002	0.002					
Ν	10264	10264	10264	10264	10264					
N of union-CZ's	4808	6153	4808	4808	4808					
N of Districts	168	269	168	168	168					
DV:	$1{Indict}$	Indictments	$1{Convict}$	$1{Audit}$	$1{Audit}$					
Polynomial	Linear	Linear	Linear	Linear	Quadratic					

Table C13: Outcomes to distinguish between OLMS and US Attorneys

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses. CZ is Commuting Zone.

Variable	Non-pivotal		Pivotal		Difference	
Variable	Mean	St. Dev.	Mean	St. Dev.	Diff.	St. Err.
Log union membership (lag)	7.82	(1.91)	7.49	(1.91)	0.33**	(0.13)
Log CZ pop.	16.23	(1.41)	16.04	(1.38)	0.20	(0.13)
R. share in last pres. elec.	0.484	(0.051)	0.484	(0.052)	0.000	(0.006)
N. of CD's in the CZ	10.2	(6.28)	8.92	(5.25)	1.28^{**}	(0.52)
Share of races with cont.	0.772	(0.181)	0.776	(0.189)	-0.004	(0.016)
N. of close races with cont.	3.7	(0.88)	3.38	(0.77)	0.33***	(.09)
Win margin in prev. elec.	0.101	(0.096)	0.114	(0.123)	-0.013	(0.014)
Log spending in race	14.98	(0.61)	15.05	(0.55)	-0.069	(0.056)
Log contribution amt.	8.56	(0.87)	8.58	(0.88)	-0.01	(0.04)
Un. Cand. is Dem.	0.906	(0.292)	0.898	(0.303)	0.008	(0.022)
Un. Cand. is Incum.	0.616	(0.487)	0.623	(0.485)	-0.008	(0.049)
N	2391		1933			

Table C14: Differences between pivotal and non-pivotal elections

* p < .10, ** p < .05, *** p < .01. Unit of observation is Union-CZ-election. "Pivotal" indicates the given election outcome either determines whether the CZ is represented by all pro-union or determines whether it is all anti-union Representatives. Two-way clustered standard errors, at the Union-CZ and Congressional District level, are shown in parentheses.