

RESEARCH ARTICLE

# Economic influence activities and the strategic location of investment

John M. de Figueiredo<sup>1\*</sup> and Davin Raiha<sup>2</sup> 

<sup>1</sup>Duke Law School and Fuqua School of Business, Duke University, Durham, NC 27708 and NBER and <sup>2</sup>Department of Economics & Fitzgerald Institute for Real Estate, University of Notre Dame, Notre Dame, IN 46556

\*Corresponding author: Davin Raiha, Email: [draiha@nd.edu](mailto:draiha@nd.edu)

## Abstract

This article examines the economic influence activities (EIAs) of firms. We argue that firms invest in jobs and establishments in districts of congressional committee members that have oversight over their businesses and industries. This investment increases as legislators' power rises in Congress. Our theory makes three predictions. First, EIAs by firms will be higher in congressional districts where the legislators have substantial political influence over the firm, relative to districts where legislators have little influence over the firm. Second, EIAs will increase with the legislators' power on the focal committee. Third, when a legislator exits the committee, EIAs will diminish, but previous investments in the district will remain. We test these predictions by analyzing the Trinet census of establishments, mapped into the committee structure of the US Congress, by tracking the investment and employment of firms in each industry in each congressional district over time. Using fixed-effects models, we show the predictions of the theory find substantial support in the US Senate but not the House. We explore causality by using exogenous exits of politicians by death and scandals to further complement our analysis, and discuss why EIAs may be less likely to occur and detect in the House.

**Keywords:** Economic influence activities; firm political influence; economic geography; firm investment; nonmarket strategy

## Introduction

Scholars have documented numerous ways in which firms attempt to influence government policy. The traditional mechanisms studied in the literature on firm influence include campaign contributions (through political action committees) and informational lobbying.<sup>1</sup> More recently, the literature has examined the corporate use of philanthropy,<sup>2</sup> political connections,<sup>3</sup> placement of executives in government,<sup>4</sup> and stakeholder mobilization<sup>5</sup> as tools to shape legislators' views on public policy.

One mechanism that has received less attention in the literature are corporate economic influence activities (EIAs). EIAs refer to the firm's use of its operational activities and strategy decisions to affect the economic environment (usually of the politician's home district) to influence election outcomes and/or public policy.<sup>6</sup> For instance, in early 2019 leaked internal memos revealed that tech giant Facebook had lobbied government officials in several countries, promising to locate new data centers

<sup>\*</sup>We would like to thank Daniel Blake, Zac Peskowitz, Adam Rooney, Ken Shotts, Brian Silverman, Jesper Sorensen, Mike Toffel, Hye Young You, as well as audiences at the Academy of Management (AOM) Annual Conference, Danish Research Unit for Industrial Dynamics (DRUID) Conference, Society for Institutional & Organizational Economics (SIOE) Conference, and RealPac Research Symposium.

<sup>1</sup>de Figueiredo, 2002.

<sup>2</sup>Bertrand et al., 2020.

<sup>3</sup>Acemoglu et al., 2016; Lester et al., 2008.

<sup>4</sup>Hillman et al., 1999.

<sup>5</sup>Holburn and Raiha, 2017; Walker, 2012.

<sup>6</sup>Raiha, 2018.

and employment in countries that agreed to relax their data-privacy laws.<sup>7</sup> This mechanism, though understudied in the literature, can be an important tool that firms have to influence politicians and align a politician's interests with the firm's interests.

In this article, we show how firms strategically increase employment and investment levels in politicians' home districts in ways that are consistent with EIAs. We also articulate the mechanism. We argue that congressional committee membership serves as a conduit through which legislators deliver favorable public policy to firms that are engaged in EIA in the industries that the committee oversees. Firms will be more likely to shift their operations to home districts of politicians who serve on those committees than firms in industries not covered by the same congressional committees in those same districts.

To examine this question, we develop an intertemporal theory of EIAs in a political district over time. We argue that once a politician joins a congressional committee, firms in the politician's district that are overseen, in a regulatory and legislative sense, by the committee will start to engage in EIA, creating more jobs and establishments in the district. This new entry and incumbent expansion will increase monotonically until the legislator exits the committee. At that time, the firm will no longer increase employment or investment, but will keep its current stock of employees and investment at the same level, ceasing to increment its economic presence more than other industries.

To test this theory, we use the Trinet census of establishments in the United States from 1981 to 1989 and map these establishments into Senate and House districts across the United States. This dataset contains information on employees, establishments, and sales by Standard Industrial Classification (SIC) code, and has been used previously in the economics and management literatures.<sup>8</sup> Merging data from political representation in these districts from 1947 to 1992, we can track the committees that represent each district and how long that representation has been present. Finally, utilizing previous work from the finance and political science literatures, we map each congressional committee into the SIC codes that it oversees, allowing us to connect the Trinet data to a political representation database.<sup>9</sup> Using various econometric techniques, we find empirical evidence consistent with our theory in Senate, but find minimal support in the House. We discuss the potential reasons for these differences in this article.

An issue that arises is whether the main empirical patterns that appears in the Senate can be explained by alternative mechanisms—for instance, reverse causality, committee membership selection effects, or dependent variable selection. We explore and rule out these alternative explanations. In particular, we exploit exogenous departures of Senate committee members (e.g., for reasons of death or scandal) to address reverse causality. We control for selection effects by showing that our findings are robust when the sample is restricted only to districts and legislators who have accumulated committee experience. We also examine changes in sales as an alternative measure of EIA effectiveness. Throughout all these tests our results are largely unchanged, further supporting the theoretical mechanism around EIAs.

We conclude our analysis with extensions exploring additional heterogeneity in political districts and heterogeneity across industries. We show evidence that politically safe House districts tend to have greater EIA than marginal House districts. We also find evidence that is consistent with EIAs being employed across a wide range of industries—from agriculture, natural resources, and heavy industries, to hotels, retail, and real estate. Finally, using the length of product development cycles in different industries, we show that industries that can respond quickly to political events with EIA are more likely to increase investments. These extensions are meant to be useful points of departure for future work.

This article makes a number of contributions to the literature. First, it measures the magnitude of firms' EIAs of employment and investment in political districts. Second, it develops and tests a time-series theory of how the EIAs proceed during a legislator's lifetime of political representation.

<sup>7</sup>Cadwalladr and Campbell, 2019.

<sup>8</sup>Montgomery and Wernerfelt, 1988; Teece et al., 1994; Liebeskind et al., 1996; Silverman, 1999.

<sup>9</sup>Ovtchinnikov and Pantaleoni, 2012; Roberts, 1986.

Third, it clarifies the role of congressional committee membership and allows us to further pinpoint the location and industrial scope of EIAs in a given district. Fourth, it verifies the types of industries utilizing EIAs, and the key legislators who are the most common targets. We close by discussing what the theory and empirical work mean for the industrial geography of the United States.

The next section reviews the main relevant literature. The “Theory” section develops the theory. The “Empirical Strategy” section discusses our data and our empirical strategy. The “Main Results” section presents our main statistical results. The “Robustness” section examines the robustness of our results and evaluates alternative explanations. The “Extensions” section explores extensions. The “Conclusion” follows in the last section.

## Literature

The literature on firms’ attempts to influence public policy is vast. The mainstay of this literature focuses on campaign contributions and, more recently, on lobbying. The literature on campaign contributions focuses on targets of campaign contributions<sup>10</sup> and outputs of those efforts, including legislator effort<sup>11</sup> and votes.<sup>12</sup> Likewise, the literature on informational lobbying focuses on the targets of those efforts<sup>13</sup> and the effects of lobbying on policy outcomes.<sup>14</sup>

This article examines an alternative mechanism that firms use to seek favorable public policy—EIAs. In the management literature, the idea that firms can strategically use operational activities to influence policy outcomes emanates from the work of Baron,<sup>15</sup> who introduced the idea of nonmarket strategy as a tool available to the firm to influence profitability. From a strategic management perspective, the literature has been developed by Funk and Hirschman,<sup>16</sup> who argue that a firm’s market decisions could be used for political ends.<sup>17</sup> More formally, Bonardi and Urbiztondo<sup>18</sup> develop a specific mechanism of EIAs with a theoretical model of asset freezing, where firms time their investment and employment decisions in a manner favorable to local politicians’ reelection cycles. Raiha examines the theoretical microfoundations for EIAs in modeling the informational channels through which the economic/operational decisions of firms can provide political benefits to politicians and be used as an influence tool.<sup>19</sup> The model shows how a firm’s strategy choices affects the state of the local economy and, in turn, the evaluations that voters make of the performance of an officeholder. Because of this, firms can use this capability to extract subsidies and policy favors from incumbent officeholders.

Empirically, many papers have demonstrated that firms in both developed and developing countries do seem to time their investment and employment decisions in ways that are consistent with electoral cycles to support of the firms’ favored legislators.<sup>20</sup> There is also an emerging literature on the political geography of firms as it relates to EIAs. Pang et al. examine how firms change their business strategies in response to changes in representation on the House Transportation Committee.<sup>21</sup> They find that changes in committee membership induced airlines to offer more air routes within or nearby to committee members’ districts.<sup>22</sup> Bisbee and You study the 300 largest manufacturing firms in the United

<sup>10</sup>e.g., Bonica, 2016; Snyder, 1990, 1992.

<sup>11</sup>Hall and Deardorff, 2006.

<sup>12</sup>Ansola-behere et al., 2003.

<sup>13</sup>Blanes i Vidal et al., 2012; de Figueiredo and Richter, 2014; de Figueiredo and Cameron, 2019

<sup>14</sup>de Figueiredo and Silverman, 2006; Kang, 2016.

<sup>15</sup>Baron, 1995.

<sup>16</sup>Funk and Hirschman, 2017.

<sup>17</sup>A small number of firms are able to obtain what is known as “rifle shot” clauses in legislation. A rifle shot is usually tax legislation that is written so narrowly, that it benefits one or a very small number of firms. This phenomenon is beyond the scope of this article. See Zelenak (1989) for a further discussion of rifle shots.

<sup>18</sup>Bonardi and Urbiztondo, 2013.

<sup>19</sup>Raiha, 2018.

<sup>20</sup>Carvalho, 2014; Bertrand et al., 2018; Bandeira-de Mello, 2018; Bonardi and Urbiztondo, 2011.

<sup>21</sup>Pang et al., 2020.

<sup>22</sup>This is sometimes called the “Trent Lott effect” when Southwest started offering flights to Jackson, MS, when Senator Lott was the US majority leader, allegedly in the hopes that Lott would “squell a proposed change in the federal airline ticket tax that would hurt Southwest” (see Southwest takes mid-sized city experiment to Mississippi. *Tampa Bay Times*, 31 October, 1997). This

States and found that such firms open subsidiaries in congressional districts that are electorally competitive.<sup>23</sup> Barber and Blake find that firms locate new establishments in districts that are politically similar to areas where the firm currently operates.<sup>24</sup>

In this article, we extend this literature on EIAs to examine a particular supply side mechanism for public policy—the legislative committee structure of the United States—and how EIAs can utilize committee membership in the US House and Senate to obtain public policy. Our article complements and extends previous work by focusing on the committee structure in Congress and developing a directional, causal, and dynamic theory of firm investments in congressional districts over time.

The literature on committees in the US Congress is also quite extensive.<sup>25</sup> Here, we focus on the dynamics of firms' investments in different geographies. It has long been known that firms locate in districts of committee members who are influential. Bingham and Mier<sup>26</sup> note merely one example:<sup>27</sup>

[S]ome firms that do significant work for the government may choose to locate a facility in a state or congressional district that is represented by a legislator with particular influence over that company's business. For instance, a defense contractor may find it useful to locate a facility in the district of a member of the Armed Services Committee. Thus, if the contractor needs help in dealing with the defense bureaucracy, it might be advantageous to be a constituent of a member of Congress with influence among Defense Department officials. (p. 14)

Stories such as this one have been told across a number of heavy industries.<sup>28</sup>

Despite this work, most studies of the relationship between committees and firms are confined to a single industry, or one slice of the economy. This limits our understanding of the scope of firm influence.

Moreover, the current literature, while making a substantial contribution to new and expansion of investment in various political geographies, does not address the dynamics of EIA. Previous papers usually show a positive relationship between committee representation and firm investment in a district, but usually does not describe the evolution of that investment over time, especially if the legislator exits the committee. Finally, while papers examining investment or employment decisions of firms in committee member districts show strong correlation between the economic and political variables, identifying directional effects of the congressional representation and firm investment in a district is often difficult.<sup>29</sup>

We attempt to address these shortcomings in the following theoretical and empirical sections of this article by developing a dynamic theory of EIAs, across the entire US economy, with a specific emphasis on industry entry, exit, expansion, and contraction in a focal geography, as it relates to a committee member's entry, seniority, and exit from a congressional committee. Moreover, as we describe later

---

effect has been well documented across many airlines with routes to powerful legislators' rural cities (see US airlines catering to politicians. *Associated Press*, 29 October, 1998).

<sup>23</sup>Bisbee and You, 2020.

<sup>24</sup>Barber and Blake, 2019.

<sup>25</sup>Scholars have found a relationship between district employment and committee membership (Weingast and Moran 1983; Shepsle 1978). In the area of campaign contributions, there is an extensive literature examining the targeting of campaign contributions to legislators on specific committees (e.g., Stratmann, 2005; Grier and Munger, 1991; Romer and Snyder, 1994; Kroszner and Stratmann, 1998).

<sup>26</sup>Bingham and Mier, 1993.

<sup>27</sup>Sorenson (1995, 48) describes the naked strategy of firms to gain favorable contracts:

Contractors ... understand the game and purposely locate defense plants in the districts of key Congressional committee members. When Oklahoma's Senator Robert Kerr, Chairman of the Senate Finance Committee, asked North American Aviation what Oklahoma would receive for his support, North American responded with two factories, one in Kerr's home town of Tulsa and one in the district represented by House Majority Leader Carl Albert.

<sup>28</sup>Sorenson, 1995; Hansen et al., 2011. The patterns we describe here are not unique to the United States. Similar analyses can be found for other countries (e.g., Blake and Moschieri, 2017 and Bandeira-de Mello, 2018).

<sup>29</sup>Canayaz (2018), for example, has examined whether the seniority on committees affect stock market valuations of companies in those representatives' districts.

in this article, we use natural experiments to help our identification and rule out alternative mechanisms.

## Theory

In this section we develop an intertemporal framework of EIAs and draw testable predictions for the mechanisms regarding the relationship between congressional committee membership and firm activity (employment and establishments). We use a bit of notation that will later be useful in describing the empirical model. We begin by assuming two types of actors: firms and politicians. One can think of these politicians as US senators or representatives. Each politician is assumed to represent a unique political district  $d$ , and serve on at least one committee  $j$ . The committee is assumed to have “oversight” or regulatory jurisdiction over at least one industry  $\iota$ . Thus, each legislator can be characterized by a unique  $(d, j, \iota)$  triplet. What is particularly important is that a legislator who serves on committee  $j$  is uniquely positioned to provide favorable legislation or regulation to firms in industry  $\iota$ . The legislator is also assumed to be particularly concerned about reelection (or promotion in the political hierarchy). Each firm  $f$  that participates in industry  $\iota$ , can choose to locate in one or more districts  $d$ . Firms are assumed to seek long-term profits; they can forgo short-term profits to pursue long-term favorable regulatory environments. With these assumptions, we now turn to understanding the mechanism for EIAs.

At each in point in time  $t$ , the firm makes a decision to expand its operations. It can choose to locate or expand in the most profitable district from an operational standpoint, or the firm can choose to locate or expand in a district that is less profitable from an operational standpoint, but in a location that offers long-term political gains that will result in higher long-term profit. The political gains we envision is the ability to influence the political environment for the industry. The way in which the firm attempts to influence the political environment is to locate its new facility or expand its incumbent facility in the district of a politician who has oversight of the industry. This location decision increases the employment (and in the case of new investment, establishments) of industry  $\iota$  within district  $d$ .

Recall the example in the “Literature” section. A defense contractor has to decide where to locate a factory to make avionics. In the absence of any political motive, the firm would locate its facility in California—California being the most efficient location for the facility for a variety of economic reasons (e.g., labor force). However, assume that a senator on the Armed Services Committee represents Kansas. The advantage to locating in Kansas is that the firm has a chance to influence the Kansas senator on defense policy. That policy will affect not only the Kansas facility but also the firm’s facilities throughout the country. The firm is influential because it has created jobs and revenue in the senator’s district. Hence the firm, in making the location decision, weighs the utility from locating in the most efficient location in the country against the gains from locating in a suboptimal location from an operational perspective, but gaining influence over a legislator with policy-making power over the entire industry by virtue the legislator’s position on the Armed Services Committee.

Banking call centers provide another example. It may be most efficient to locate a banking call center in South Dakota because of the state’s labor force, land costs, and geographic proximity to both coasts. However, in the 1980s, many new banking call centers were relocated to San Antonio, Texas. Although the location was inferior to South Dakota on many dimensions, the call centers were located in the district of Henry Gonzalez, the Chairman of the House Banking Committee. The facilities, and the numerous jobs they created in Gonzalez’s House district, gave the banks access and influence to a powerful political figure, access that was not granted to these banks before.<sup>30</sup>

It is useful to point out that firms may face a collective action problem. While it might be collectively rational for firms in an industry to invest in a district, it may not be individually rational for those firms to ramp up investment unless there is an individual positive net benefit. As the call center example highlights, firms and industries do seem to overcome that collective action problem. Indeed, we often observe examples where the largest firms with the highest benefits from favorable industry legislation enter the politician’s district first.

<sup>30</sup>This story was relayed to us by the CEO of a very large US bank.

The aerospace industry's growth in Alabama is an example where multiple firms within the same industry have overcome the collective action problem at an industry level to increase employment and their economic footprint to gain political capital. While Alabama has had an aerospace sector for decades, recent major growth began with the entry of European aerospace titan Airbus in 2013, which constructed a new major assembly plant in Mobile.<sup>31</sup> It was acknowledged that the move by Airbus to build an assembly plant well outside its traditional operational geography was to gain political allies in the United States even at the expense of operational efficiency. Since the initial Airbus plant announcement in 2012, other American industry players such as GE Aviation, Lockheed Martin, Northrop Grumman, and Raytheon Technologies have expanded or located production or operations in Alabama.<sup>32</sup> It is notable that US senator, Richard Shelby, has served on the Senate Appropriations Committee for more than a decade, as well as on the Appropriations Defense Subcommittee.

Like the campaign contributions literature, our theory of EIAs does not take a stand as to whether these investments are requested by the politician—colloquially known in the literature as threats or “shakedowns”—or whether a firm initiates the investment to contemporaneously or subsequently influence the legislator. The theory only notes that at least some component of the investment is driven by political considerations.

What makes EIAs different from campaign contributions, though, is when a legislator exits a position of power (or retires from congress) campaign contributions cease from the interest group. However, it is extremely uneconomic for a firm to close a facility when there is turnover in Congress, given the fixed and sunk cost of setup and operation. This sunk cost raises the cost of exit; we argue that the firm will not close its current facilities, but it will cease to increase investment and expansion in that district, shifting its future expansion to districts of new powerful legislators.

From a research perspective, how we measure campaign contributions and EIAs is also quite different. Campaign contributions are, by definition, a *flow* variable. By contrast EIAs, measured by employment or establishments are, by definition, *stock* variables. This difference also yields different expected patterns in the relationship between committee membership and firm political influence activities, namely because stocks accumulate over time while flows do not.

To illustrate our theoretical framework, and contrast it to other forms of political influence, we present figures 1 and 2. The intertemporal predictions for campaign contributions are illustrated in [figure 1](#). Before the legislator joins the powerful committee (region A), campaign contributions are set at some level. While on the committee, the legislator will receive an increasing amount of contributions as she rises in the committee hierarchy (region B). However, when the legislator exits the committee, the campaign contributions revert to a lower level (region C).

Our theory of EIAs, however, has different predictions that are described in [figure 2](#). Legislators who are not on the committee should expect to see firm investment in the industrial sectors governed by the committee to be standardized at some constant level (or macroeconomically trending level) (region A). However, in districts where members join the committee, the amount of investment and employment in those industries overseen by the committee will rise as the seniority of the legislator rises on the committee (region B). The increase in employment may come from a firm creating a new establishment in the district, or from redistributing its current employees from facilities outside the district into facilities inside the district. Note, in industries which are not overseen by the industry, the level of investment and employment in the industry will not rise from the trending level (bottom, no committee line). As noted earlier, unlike the campaign contribution theory of political influence, our theory of EIAs predicts that when the legislator exits the committee, the number of jobs and amount of investment in the district will stay roughly constant (region C). The firm will not exit the district, but will instead keep the current levels of jobs.

<sup>31</sup>Farren and DeHaven, 2019.

<sup>32</sup>Underwood, 2016.

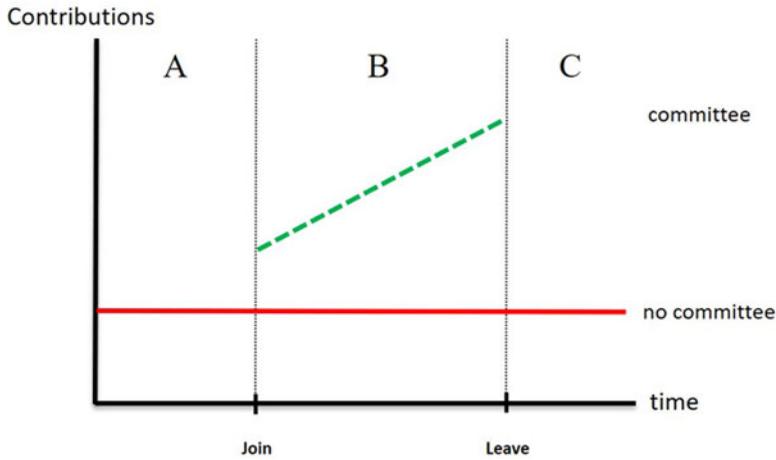


Figure 1: Committee service and contributions.

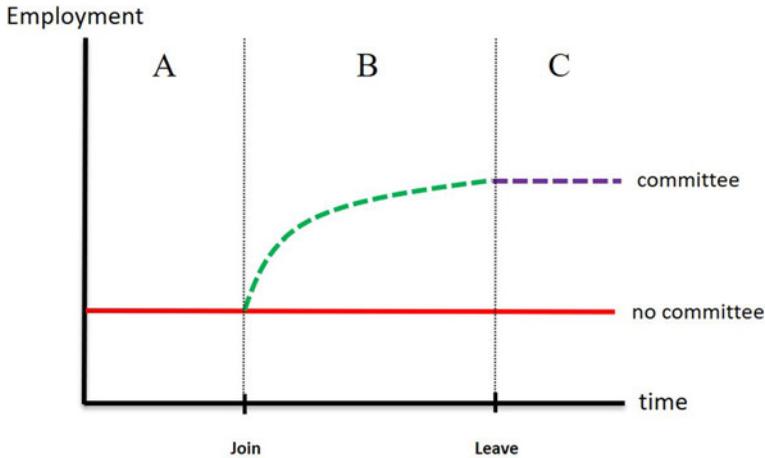


Figure 2: Committee service and employment.

In addition to the increasing relationship between accumulated committee service and industry employment, [figure 2](#) also depicts this relationship as concave—that is, accumulated committee service is associated with increasing employment, but at a decreasing rate. There are two primary theoretical reasons that suggest concavity may arise, emanating from work of Bonardi and Urbiztondo<sup>33</sup> and Raiha.<sup>34</sup> First, the electoral benefits of EIAs diminish as they grow. Initial boosts to the local economy and employment improve the electoral popularity of the incumbent, but as employment grows the incumbent’s electoral fortunes become more certain—thus incremental increases in employment carry smaller political benefits. Second, once there is a critical mass of employment within an industry, the incumbent’s interests become aligned with the interests of the firm. This is because voters are increasingly stakeholders of the firm—either directly as employees, or indirectly through economic multipliers. As stakeholders with an economic dependence on the firm, their view of the politician will depend on how well the firm is treated by policy makers. Thus, once employment rises sufficiently, the incumbent politician is incentivized to have the interests of the firm in mind, even without

<sup>33</sup>Bonardi and Urbiztondo, 2013.

<sup>34</sup>Raiha, 2018.

subsequent firm investment. Relatedly, empirical work finds a curvilinear relationship in the related area of employment and campaign contributions,<sup>35</sup> which further informs our theory.<sup>36</sup>

Overall, our theory of EIAs argues that firms make operational decisions that consider not only the economic efficiency of the operations but also their opportunity to gain political influence. Firms will locate some of their facilities to optimize their operational and political value. This will manifest itself in the location or expansion of facilities and employment in districts of congressional committee members who have oversight of the firm's industry. Figure 2 encompasses the theoretical predictions. Later in the section "Robustness" we consider the possibility of reverse causation and other alternative explanations.

## Empirical Strategy

### Data

To examine changes in industrial activity at the congressional district level, we aggregate a firm-level database to the industrial level in each congressional district and analyze how industrial investment and employment responds to a politician's committee membership over time. We begin by using the Trinet Inc. *Large Establishment Database*—a biennial census of establishments in the United States from 1981 to 1989—which we will henceforth refer to as the Trinet data. The Trinet data cover more than 80 percent of all establishments as well as 95 percent of establishments owned by public firms in the United States and has been used by scholars of economics and strategic management.<sup>37</sup> Because the Trinet data provide addresses for each establishment we are able to map the congressional district of every establishment in the dataset. Unfortunately, the Trinet data does not include unique establishment identifiers that are consistent across years, so we are unable to identify changes in employment by individual establishments. To address this shortcoming in the data, we sum over the establishments in a given district to determine the total employment, establishments, and sales for a given SIC industry within each federal congressional district for each of the four survey periods in the Trinet data. This allows us to observe aggregate firm behavior in industries in congressional districts. We believe this aggregation, though not a perfect measurement of each identifiable firm activity over time, still undergirds a useful test of the theory as it encompasses both new entry and expansion by incumbents. Moreover, as the call center and aerospace examples indicate, collective action issues at the industry level, though certainly present, should not eliminate the observable effects at the industry level.

We combine these economic data with information on congressional districts' characteristics and, in particular, information on congressional committee membership from 1947 to 1992.<sup>38</sup> As described in the previous section, we hypothesize membership on any given committee is not necessarily valuable to a particular industry—only those committees that oversee the particular industry. For instance, membership on an energy committee will be more relevant to firms in the energy industry, but less so for firms in the financial industry. To match SIC industries to the congressional committees that are relevant to them we use the mappings provided by Ovtchinnikov and Pantaleoni<sup>39</sup> and Roberts<sup>40</sup> who map House and Senate committees to SIC industries at the four-digit and two-digit levels, respectively.

Our unit of observation is a (four-digit) SIC code-congressional district in a given year (SIC-CD-Y). Our data spans the last four survey periods of the Trinet data—1983, 1985, 1987, and 1989, which

<sup>35</sup>e.g., Bombardini and Trebbi, 2011.

<sup>36</sup>Although we argue that concavity is predicted, one might believe there is a linear or even convex relationship to EIA. The logic is that as a legislator becomes more senior in the committee, she becomes more powerful, and thus a more attractive target for favors from firms. We leave it to an empirical analysis to determine if our proposed hypothesis or the alternative posited in this footnote carries more weight in the data.

<sup>37</sup>Montgomery and Wernerfelt, 1988; Teece et al., 1994; Liebeskind et al., 1996; Silverman, 1999.

<sup>38</sup>Nelson, Garrison. "Committees in the US Congress, 1947–1992," obtained from Charles Stewart III's website ([http://web.mit.edu/17.251/www/data\\_page.html](http://web.mit.edu/17.251/www/data_page.html)), accessed May 15, 2018.

<sup>39</sup>Ovtchinnikov and Pantaleoni, 2012.

<sup>40</sup>Roberts, 1986.

yields an unbalanced panel of approximately 440,000 observations. The sample spans 1,195 different SIC industries and 431 different congressional districts.<sup>41</sup>

## Variables

Our main dependent variables are the number of people employed, and the number of establishments, aggregated by SIC industry within a congressional district, in a given year. These variables measure a particular industry's economic presence and footprint within a congressional district.

As mentioned in the "Theory" section, there are three predictions of our theory, each corresponding to a region in [figure 2](#). To distinguish between these regions we require two different types of independent variables that capture the time accrued after a particular event has occurred. Because these variables measure time accrued and are, as a consequence, (monotonically) nondecreasing we call these measures *duration clocks*.

Our main independent variable is a duration clock of the number of two-year terms a particular congressional district's representatives have accumulated on congressional committees of relevance to the given SIC industry. For example, consider the four-digit SIC industry 5144—Poultry and Poultry Products—for whom the House Agriculture Committee and Senate Agriculture, Nutrition, and Forestry Committee are the only relevant committees.<sup>42</sup> Also consider two particular congressional districts. Prior to 1983, in Illinois's 17th district, no House representative had served on the House Agriculture committee (dating back to 1947), until Rep. Lane Evans served three terms on the committee between 1982–88. As a result the relevant House duration clock for SIC 5144 in Illinois's 17th district begins the sample period with a value of 1 (in 1983), rises to 3 (in 1987), and remains at 3 (in 1989). By contrast, by 1983, Washington's 5th district Rep. Tom Foley had accumulated ten terms of service on the House Agriculture Committee (even serving as chair from 1975 to 1981). So the House relevance duration clock for SIC 5144 in Washington's 5th district begins the sample period with a value of 10 (in 1983), rises to 11 (in 1985), and remains constant once Foley left the committee. Because this particular duration clock measures the accumulated time a district's representative has spent while in a committee relevant to the SIC industry, we will refer to this variable as *DClockIn*.

However, because we also need to capture any different patterns in employment after a district's representative has left all committees of relevance, we need a second duration clock. This variable, which we will refer to as *DClockOut*, measures the number of terms that have transpired since a particular district's representative served on a committee of relevance to the industry. This variable allows us to separately identify the portion of the committee curve in region C of [figure 2](#), as distinct from the committee curve in region B, and the noncommittee curve in region C.

Like with the variable *DClockIn*, this second duration clock is also nondecreasing—even if the district's representative subsequently joins a committee of relevance, *DClockOut* simply remains constant, and does not increase. Moreover, *DClockOut* does not begin to increase until a district's representative has left all committees of relevance—so districts whose representatives have never served on a committee relevant to a particular SIC (i.e., those whose *DClockIn* = 0) have a *DClockOut* equal to zero. Like the variable *DClockIn*, *DClockOut* accounts for time transpired since departing relevant committees incurred from before the sample period (dating back to 1947). For instance, if a district had a representative on the House Agriculture committee until 1977 (but not after), then the *DClockOut* for SIC 5144 in that district would be 3 in 1983, as it would have been three terms since the industry had representation on a relevant committee in that district.

[Table 1](#) presents basic descriptive statistics. Because our unit of observation is a four-digit SIC-congressional district-year (SIC-CD-Y), the average numbers of employees, establishments, and

<sup>41</sup>The Trinet data does not include an observation for every four-digit SIC-congressional district combination because many industries are not present in every congressional district. The observations, therefore, generally have positive employment to be present in the sample. The sample is unbalanced in part due to incomplete surveying by Trinet Inc., and some establishments crossing the threshold for inclusion in the survey (i.e., minimum of 20 employees).

<sup>42</sup>A notable company in this SIC code would be Tyson Foods Inc.

**Table 1:** Descriptive statistics and sample comparison.

Variable	Means		St. Dev.		
Employees	303.76		1056.20		
Establishments	3.26		5.68		
Sales (000s dollars)	405.67		1691.46		
House Committee Member	0.142		0.349		
Senate Committee Member	0.388		0.487		
House Duration-Clock In	1.539		2.959		
House Duration-Clock Out	1.717		3.729		
Senate Duration-Clock In	2.902		3.903		
Senate Duration-Clock Out	0.903		1.994		

Variable	Means		St. Dev.		t-Test
	No	Yes	No	Yes	
House Committee Member					
Employees	291.91	368.10	1008.47	1332.61	13.52***
Establishments	3.24	3.38	5.65	5.81	5.47***
Sales	399.27	440.31	1660.72	1900.60	5.03***
Observations	370 283	61 169			

Variable	Means		St. Dev.		t-Test
	No	Yes	No	Yes	
Senate Committee Member					
Employees	267.52	361.48	848.65	1335.28	25.99***
Establishments	3.11	3.50	5.30	6.21	21.86***
Sales	366.40	467.63	1407.97	2059.48	17.87***
Observations	270 419	171 352			

Confidence levels: \* = 10%; \*\* = 5%; \*\*\* = 1%.

Note: This table reports the descriptive statistics and comparison for the full sample of SIC-CD-Y observations. In the top portion of the table, the first column reports the mean value of each key variable, while the second column provides the standard deviations. The middle portion compares the employment, establishments, and sales of the sample between SIC-CD-Ys whose representative is a House Committee member (on a relevant committee) or not, and the bottom portion between SIC-CD-Ys either of whose senators is a Senate Committee member (on a relevant committee) or not. In the middle and bottom portions, the first two columns compare means, the second two columns compare standard deviations, while the third column is the T-statistic from a test comparing the equality of means between the groups.

sales are quite small, though the standard deviations are quite high. An average SIC-CD-Y has just more than 300 employees, 3.26 establishments, and approximately \$400,000 in sales.<sup>43</sup>

We see that for about 14 percent of the SIC-CD-Ys the local House member is on a committee of relevance, while for about 39 percent of the SIC-CD-Ys at least one of the state’s senators is on a committee of relevance.<sup>44</sup> As was mentioned, both duration clocks account for accumulated time spend on/off committees of relevance from before the sample period, dating back to 1947. This is why the variables *DClockIn* and *DClockOut* range from zero to twenty-two.

Table 1 presents a comparison of SIC-CD-Ys whose representative(s) are on committees of relevance and those who are not. Though this simple comparison involves no control variables, we see

<sup>43</sup>The SIC-CD with the highest employment (averaged over the sample period) was SIC 8062 (General Medical and Surgical Hospitals) in Illinois’ 3rd district. The SIC-CD with the highest establishments was SIC 5812 (Eating Places) in California’s 40th district.

<sup>44</sup>The percentage is expected to be higher for Senate committees given that there are two senators for each state, and if a senator is on a committee of relevance to an industry then the senator is relevant for all the congressional districts in their state.

that there is a statistically significant difference in the level of employment, establishments, and sales between the two groups. Quite clearly, SIC-CD-Ys whose representative(s) are on either a House or Senate committee of relevance, feature 26.1 percent higher employment, 4.3 percent more establishments, and 10.3 percent higher sales than those who are not.

### Empirical Strategy

Table 1 shows greater economic activity in industries whose representatives are on committees of relevance to the industry. Thus, we follow the literature that uses variation in congressional committee membership as a means of empirical identification (e.g., Bertrand et al., 2020; Fourinaies and Hall, 2018; Powell and Grimmer, 2016). However, we would like to see whether the relationship holds controlling for factors that affect the local level of economic activity, and whether or not greater accumulated committee service is a predictor of economic activity.

To do this, we estimate the following regression specification:

$$\begin{aligned} \ln(y_{idt}) = & \beta_0 + \beta_1 DClockIn_{idt} + \beta_2 DClockIn_{idt}^2 \\ & + \beta_3 DClockOut_{idt} + \beta_4 DClockOut_{idt}^2 \\ & + \alpha_1 \iota + \alpha_2 \delta + \alpha_3 \tau + \epsilon \end{aligned} \quad (1)$$

where  $y_{idt}$  is the number of employees or establishments in industry  $i$  in district  $d$  in year  $t$ , while  $\iota$ ,  $\delta$ , and  $\tau$  are industry, district, and year fixed effects, respectively.<sup>45</sup>

This equation not only distinguishes between the sections of the curves in figure 2, but allows for nonlinearity in the sections. Given our hypothesized relationship, we expect employment to be increasing in  $DClockIn$  but at a decreasing rate—thus we expect  $\beta_1$  to be positive and  $\beta_2$  to be negative (but smaller in magnitude). The theory predicts firms do not systematically alter employment or cease to make further investments once a representative has departed committees of relevance, thus we expect the coefficients on  $DClockOut$ ,  $\beta_3$  and  $\beta_4$  to be statistically insignificant.

### Main Results

Our main results are contained in tables 2 and 3. In each table, models A through D as well as models E through H present four different regression specifications, each leading up to the full specification from equation 1. Models A and E have  $DClockIn$  and  $DClockOut$  as the independent variables. Models B and F include both the linear and quadratic  $DClockIn$  variables. Models C and G presents estimates from the full regression equation (1). All the specifications include congressional district, four-digit-SIC industry, and year fixed-effects. Models D and H further include control variables for the Democratic Party vote share, from the most recent presidential election, within the congressional district, as well as the state unemployment rate. Models A through D have the log of industry employment as the dependent variable, while models E through H have the log of industry establishments as the dependent variable. Table 2 examines the impact of Senate committees—that is, both  $DClockIn$  and  $DClockOut$  measure accumulated service time on (and off) Senate committees. Table 3 examines the impact of House committees—both  $DClockIn$  and  $DClockOut$  measure accumulated service time on (and off) House committees. T-statistics are reported in parentheses. Throughout we use standard errors clustered at the industry-state level.<sup>46</sup>

Table 2 presents regression results on the impact of Senate committee membership on employment. The estimates reported in model A show that accumulated service on Senate committees of relevance is associated with higher industry employment—each additional (two-year) term of committee service translates into an increase in employment of about 0.84 percent. Model A also shows a modest increase

<sup>45</sup>There are a total of approximately 1,620 fixed effects.

<sup>46</sup>This clustering is similar to that in Bertrand et al. (2020), examining the impact of congressional committee membership on corporate philanthropy.

**Table 2:** Full sample regressions—employees/establishments and Senate committees.

DV	ln(Employment)				ln(Establishments)			
	A	B	C	D	E	F	G	H
DClockIn	0.0084*** (4.89)	0.0153*** (5.23)	0.0151*** (5.13)	0.0116*** (3.77)	0.0046*** (4.28)	0.0075*** (3.98)	0.0074*** (3.93)	0.0049** (2.46)
DClockIn-squared.		-0.0006*** (-3.20)	-0.0005*** (-2.78)	-0.0003 (-1.49)		-0.0003** (-2.22)	-0.0002** (-1.99)	-0.0001 (-0.65)
DClockOut	0.0044** (1.98)		0.0026 0.65	0.0027 (0.67)	0.0021 (1.61)		0.0037 (1.48)	0.0034 (1.34)
DClockOut-squared.			-0.0000 (-0.02)	-0.0001 (-0.19)			-0.0003 (-1.26)	-0.0003 (-1.26)
Pres. Democrat Vote Share				-0.0013*** (-4.35)				-0.0009*** (-5.00)
State Unemployment				0.0062** (2.07)				-0.0001 (-0.05)
District FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-statistic	12.24	15.51	8.01	7.50	9.34	9.97	5.80	6.64
Observations	441,756	441,756	441,756	371,316	441,756	441,756	441,756	371,316

Confidence levels: \* = 10%; \*\* = 5%; \*\*\* = 1% (t-values).

Note: This table presents estimates of eight regression models, of accumulated committee service in the Senate on relevant industry employment and establishments, using the full sample. In specifications A–D the dependent variable is the log of industry employment, while in specifications E–H the dependent variable is the log of industry establishments. All specifications include industry, district, and year fixed effects. The F-statistic of the test of the joint significance of all explanatory variables, is reported below each column. T-statistics are reported in parentheses. Standard errors are clustered at the four-digit SIC-state level.

**Table 3:** Full sample regressions—employees/establishments and House committees.

DV	ln(Employment)				ln(Establishments)			
	A	B	C	D	E	F	G	H
DClockIn	0.0009 (0.90)	0.0007 (0.30)	0.0031 (1.25)	0.0038 (1.40)	0.0004 (0.76)	-0.0034*** (-2.76)	-0.0025* (-1.82)	-0.0024 (-1.64)
DClockIn-squared.		-0.0000 (-0.02)	-0.0001 (-0.78)	-0.0002 (-0.86)		0.0003 (3.22)	0.0002** (2.40)	0.0002** (2.19)
DClockOut	-0.0010 (-1.31)		-0.0043* (-1.86)	-0.0047* (-1.90)	-0.0013*** (-3.02)		-0.0006 (-0.49)	-0.0005 (-0.34)
DClockOut-squared.			0.0002 (1.48)	0.0003 (1.56)			-0.0000 (-0.24)	-0.0000 (-0.18)
Pres. Democrat Vote Share				-0.0012*** (-3.92)				-0.0008*** (-4.36)
State Unemployment				0.0051* (1.68)				-0.0009 (-0.41)
District FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-statistic	1.06	0.20	1.10	3.86	4.59	5.21	3.67	4.96
Observations	431,437	431,437	431,437	363,211	431,437	431,437	431,437	363,211

Confidence levels: \* = 10%, \*\* = 5%, \*\*\* = 1% (t-values)

Note: This table presents estimates of eight regression models, of accumulated committee service in the House of Representatives on relevant industry employment and establishments, using the full sample. In specifications A–D the dependent variable is the log of industry employment, while in specifications E–H the dependent variable is the log of industry establishments. All specifications include industry, district, and year fixed effects. The F-statistic of the test of the joint significance of all explanatory variables, is reported below each column. T-statistics are reported in parentheses. Standard errors are clustered at the four-digit SIC-state level.

in employment following the departure of a relevant Senate committee member. Model B shows that there appears to be a nonlinearity in the relationship between committee service and employment. The coefficient on *DClockIn* is positive and statistically significant, while the coefficient on *DClockIn*-squared is of much smaller magnitude, negative, and statistically significant. This indicates that Senate committee service is associated with increasing employment, but at a decreasing rate—as hypothesized.<sup>47</sup> The magnitudes of the coefficients indicate that employment would peak after thirteen terms of accumulated Senate committee service. In contrast to model A, the statistical significance of the coefficient on *DClockOut* vanishes in models C and D where we account for nonlinearity in the relationship between our independent variables and employment. The coefficients on *DClockIn* are nearly identical to those in model B, while the coefficients on *DClockOut* are both statistically insignificant. Furthermore, the magnitude of the coefficients (i.e., point estimates) on *DClockOut* are both considerably smaller than for *DClockIn*.<sup>48</sup> Overall, these results appear consistent with our hypotheses that committee service should translate into increased employment (at a decreasing rate), but time after committee departure produces no significant change in employment.<sup>49</sup>

Models E through H in table 2, are analogous to models A through D, and present regression results on the impact of Senate committee membership on the number of establishments. Model E shows that accumulated service on Senate committees of relevance is associated with a higher number of establishments, while time accrued postcommittee has no statistically significant association with establishments. The magnitude, however, is smaller than the same coefficient in model A—each additional term of committee service translates into an increase in establishments of about 0.46 percent. Model F, further, shows that there appears to be a nonlinearity in the relationship between committee service and establishments. Once again, the direction and statistical significance of the coefficients on *DClockIn* are similar to their counterparts from the regression on employment. Thus, it appears that Senate committee service is associated with increasing establishments, but at a decreasing rate. The magnitudes of the coefficients on establishments indicate that establishments would also peak after approximately thirteen terms of accumulated Senate committee service. The results in models G and H are qualitatively similar to their counterparts in models C and D.<sup>50</sup> The coefficients on *DClockIn* are nearly identical to those in model B, while the coefficients on *DClockOut* are both statistically insignificant. Overall, the results in table 2 indicate that there is a similar relationship between establishments and Senate committee service, as there was between employment and committee service, though the magnitude is smaller for establishments than for employment.<sup>51</sup>

Table 3 is analogous to table 2—it presents regression results on the impact of House committee membership on employment and establishments. However, unlike table 2, the regression estimates in table 3 fail to find the same statistically significant association. The coefficients on *DClockIn* are not statistically significant, though the direction of the coefficients is as hypothesized—that is, the coefficient on *DClockIn* is positive, while the coefficient on *DClockIn*-squared is of much smaller magnitude and negative. Further, little changes when *DClockOut* is included in the regressions—the coefficients on *DClockIn* remain statistically insignificant, while the coefficients on *DClockOut* are, for the most part, also statistically insignificant.<sup>52</sup> Overall, table 3 does not indicate the same association between House committee service and employment or establishments as we observed in the Senate.

<sup>47</sup>The full *DClockIn* effect does not turn negative until twenty-six terms of service are reached by the legislator. To further explore the concavity, we run the models using levels in the dependent variables (instead of logs). In results presented in appendix table A1, we obtain the same concave effect in these regressions.

<sup>48</sup>Each additional term of committee service translates into an increase in employment of about 1.16 percent for new committee members, while leveling off to 0.92 percent for the median number of years of committee service.

<sup>49</sup>Though we find no statistically significant reduction in employment following the departure of a committee member, our model does allow for the possibility that firms might reduce their economic footprint in response to a departure—a possibility articulated by Bertrand et al. (2018).

<sup>50</sup>All the results for the Senate are qualitatively unchanged when defense contractors are excluded from the analysis.

<sup>51</sup>Expansion of an incumbent firm will most likely be seen in an increase in employment but not a new facility (establishment). New entry by a firm from outside the district should be seen in both an increase in the number of establishments and an increase in employment.

<sup>52</sup>In model E, the coefficient on *DClockOut* is statistically significant, but its direction is negative.

In sum, our main results are consistent with the predictions of our hypotheses for Senate committees, but not for committees in the House of Representatives. Although we expected to find similar results in the House and Senate, we can identify a number of institutional reasons why one might find this difference between the two chambers.

First, on a per representative basis, senators are more powerful than House members. There are only 100 senators compared to 435 House members. Furthermore, congressional committees in the Senate are smaller than those in the House. This difference in power may make it more attractive for firms to target key senators compared to House committee members. The more limited power of individual House members may make them less ideal targets for (arguably) more expensive influence activities such as EIAs.

Second, senators each serve six-year terms as opposed to the two-year terms served by House members. If EIAs are intended to influence and establish a longer-term relationship between an industry and its representatives, the longer terms of senators allows for less risk for firms in making (more) permanent economic investments.

Third, the jurisdictions of House members are geographically smaller than the jurisdictions of senators. This makes senators easier targets for EIAs because the specific location of employment and establishments does not need to be as accurate as it would need to be in targeting House members' districts.

Fourth, House districts are subject to periodic redistricting, while state boundaries are not altered. This geographic uncertainty might also make senators relatively more attractive for location-based EIAs than House members.

Fifth, in concentrated urban areas, the people who work in a particular congressional district may not live in the same district, but rather commute from another district. Even if jobs are created in a specific congressional district, those jobs may instead benefit workers from other districts. This same leakage is less common across state boundaries.

Together, these reasons provide possible explanations for the difference in the House and Senate results. However, more work is needed to more fully explore the factors that drive the differences in the results.

## Robustness

Though our main results support our theory that firms use EIAs to influence key congressional committee members in the Senate, there are several alternative explanations that could instead explain the observed results. In this section we discuss three possible alternative stories that could account for our findings. Because our main results indicated no systematic relationship between committee service and economic activity in the House, our remaining results in this section focus on Senate committees.

### *Committee assignments chasing economic activity*

One alternative explanation is that firms aren't responding to congressional committee membership and seniority, but rather the reverse—legislators are joining committees of relevance when they observe certain industries growing in their districts. Then, once the representative anticipates the industry growth is finished, she chooses to leave the relevant committees. This story assumes legislators are making these choices to join as well as leave approximately in conjunction with industry growth commencing or terminating.

Discerning between this alternative explanation and our hypothesis, based on EIA, is challenging because a legislator's decision both to join and leave a committee is endogenous. However, there are circumstances in which a legislator leaves congressional committees not by choice, but rather by exogenous circumstances—for instance, due to death or scandal.

We use the exogenous departures of senators, as described in [figure 3](#), to test whether the alternative reverse story holds. Models A and C in [table 4](#) report regression estimates that are analogous to models C and G in [table 2](#), but have some key differences in the sample. While results in [table 2](#) are obtained from regressions run on the full sample, the results in [table 4](#) are obtained from regressions only

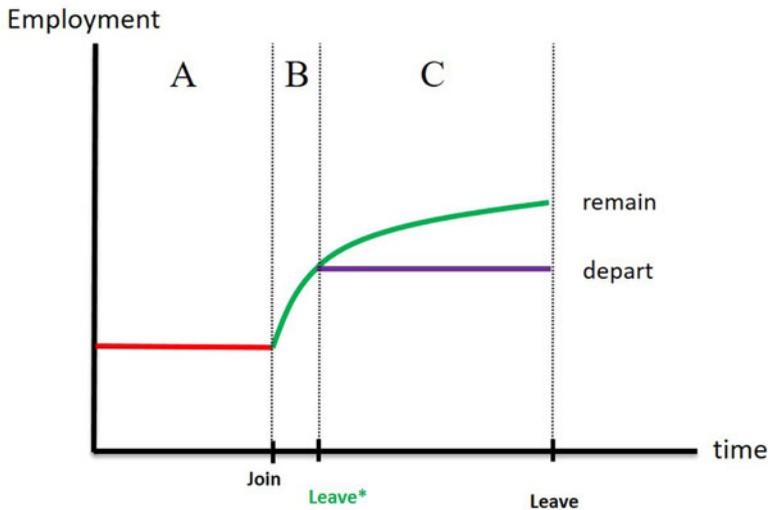


Figure 3: Exogenous committee exit and employment.

Table 4: Robustness regressions—Senate committees.

DV	ln(Employment)		ln(Establishments)		ln(Sales)
	A	B	C	D	
DClockIn	0.0189** (2.17)	0.0092** (2.15)	0.0107* (1.74)	0.0051* (1.76)	0.0198*** (6.44)
DClockIn-squared.	-0.0010** (-2.40)	-0.0003 (-1.24)	-0.0009** (-3.07)	-0.0002 (-1.01)	-0.0005*** (-2.64)
DClockOut	-0.0203 (-1.46)	0.0037 (0.82)	-0.0079 (-0.89)	0.0039 (1.39)	0.0004 (0.08)
DClockOut-squared.	-0.0011 (-0.74)	-0.0002 (-0.36)	0.0007 (0.75)	-0.0004 (-1.48)	0.0004 (0.87)
District FEs	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes
F-statistic	6.66	1.40	4.27	1.61	14.93
Observations	100,911	254,639	100,911	254,639	439,171

Confidence levels: \* = 10%; \*\* = 5%; \*\*\* = 1% (t-values).

Note: This table presents estimates of five regression models, of accumulated committee service in the Senate on relevant industry employment or establishments. Specifications A and C use a subsample of SIC-CD-Ys for whom either (1) DClockOut is zero, due to an exogenous departure, or (2) DClockOut is positive, and the representative is on committee. Specifications B and D use a subsample of SIC-CD-Ys for whom DClockIn is nonzero. Specification E uses the full sample. In specifications A and B the dependent variable is the log of industry employment, in specifications C and D the dependent variable is the log of industry establishments, and in specification E the dependent variable is the log of industry sales. The F-statistic of the test of the joint significance of all explanatory variables, is reported below each column. T-statistics are reported in parentheses. Standard errors are clustered at the four-digit SIC-state level.

including SIC-CD-Ys where the senator is currently on a committee of relevance or, if not on a committee, where the departure was due to an exogenous event. The exogenous departures we consider are departures due to death, resignation related to scandal, or promotion to a higher office (e.g., vice president). In this way, the regressions in table 4 are comparing the increasing and concave curve regions from B and C of figure 3, against the “depart” (constant) curve from region C of figure 3. The alternative explanation would predict the trend in employment and establishments for SIC-CD-Ys that

retain committee members of relevance is different from trends for SIC-CD-Ys whose committee members departed exogenously.

The results presented in models A and C of [table 4](#) are qualitatively similar to our main results. Accumulated Senate committee service is associated with increases in employment and establishments. Moreover, the increases to both employment and establishments occur at a decreasing rate. The magnitudes of the coefficients are also similar to our main results.

More important are the coefficient estimates on the *DClockOut* variables, where the departures are due only to exogenous events. We see in models A and C that growth in employment and establishments levels off after the departure of the senator from a committee of relevance, even though the departure is exogenous. This is inconsistent with the alternative explanation. In light of these findings on exogenous departures, this alternative explanation seems unlikely. Similar to arguments made by Bertrand et al. (2020), who also examined congressional committee departures in establishing causality in strategic targeted corporate philanthropy, the fact that growth in employment and establishments levels off after committee departure suggests that at least part of the initial firm investments are politically motivated.

### *Committee member selection*

Another alternative explanation for our main results is that it could be driven largely from an underlying difference between the districts of congressional committee versus noncommittee members. For instance, it has been well established that members in Congress self-select into committees that either have jurisdiction over issues that are key for their constituents and/or reflect the main industries in their districts.<sup>53</sup>

Perhaps then the result we obtain is simply a result of a level difference between districts with committee members and those without? Under this argument, industries in districts with committee representation would have naturally higher levels of employment and establishments, and these levels do not increase with more committee service. Rather, our result may be driven entirely by a move from *DClockIn* being zero, to *DClockIn* being positive.

We examine this potential alternative explanation. First, our results on exogenous departures (models A and C in [table 4](#)) involve only SIC-CD-Ys with at least some accumulated Senate committee service—that is, for all SIC-CD-Ys in the subsample, *DClockIn* is strictly positive. Yet the results are similar in magnitude and statistical significance to our main findings. Second, we estimate the same regressions as models C and G from [table 2](#), but with the sample restricted only to SIC-CD-Ys that have accrued at least one term of relevant committee service—that is, *DClockIn* is at least one.

We present the results in models B and D in [table 4](#). In models B and D we see that the coefficient on *DClockIn* is positive and statistically significant, and the coefficient on *DClockIn*-squared is negative, and of approximately the same magnitude as in previous estimates—however, now it is statistically insignificant. As before, the coefficients on *DClockOut* remain statistically insignificant. We therefore still observe a positive association between accumulated Senate committee service and both employment and the number of establishments.<sup>54</sup> Overall, we can again see that employment and establishments do increase with accumulated committee service, even conditional on a legislator already having served on the committee. Hence, the “difference-in-level” argument cannot replace the accumulated committee experience explanation we provide.

### *EIA Effectiveness*

A final concern that may arise relates to measurement of the dependent variable in our main statistical analysis. We focus on potential inputs that we believe directly reflect EIA—employment and

<sup>53</sup>See Fenno (1973), Mayhew (1974), Shepsle (1978), or Weingast and Moran (1983).

<sup>54</sup>Though not reported, the results are qualitatively similar in magnitude and statistically stronger in significance for a regression with sales as the dependent variable.

investment (business creation). But is EIA effective? Are the inputs yielding benefits to the firms that engage in EIA?

Measuring EIA's effectiveness is extremely difficult. The effect might manifest itself in one or many forms, might accrue in various geographies in which the firm competes, and might benefit the firm in the form of higher prices, lower costs, more quantity, or better future corporate positioning. Given the heterogeneity of firm and industries engaged in EIA, pinpointing the results of these activities in a large-scale, cross-industry dataset is challenging.

We can, however, attempt a partial examination of the question in the committee members' focal district. The Trinet data records sales by establishment. To the extent that EIA results in "quantity" benefits in the focal congressional district, we should see an increase in the relevant industry sales in the district during the legislator's committee tenure.

To test this possibility, we aggregate the sales data to the four-digit-SIC-congressional-district-year level and estimate equation (1) with sales being the dependent variable. Model E of table 4 presents regression results on the impact of Senate committee membership on sales. As with employment and number of establishments, we find strong evidence that accrued Senate committee service results in higher sales, and that sales increase at a decreasing rate with more accumulated committee service. However, in model E both *DClockOut* coefficients are statistically indistinguishable from zero. These results indicate that not only do sales increase with accumulated committee service (as with employees and establishments), sales remain at the same levels following a representative's departure from committee. While a rough and partial test, these results of the benefits of EIA are consistent with the patterns of EIA found in the main regression analysis.

## Extensions

In this section, we explore extensions to our theory and main results. Although the results in this section are not definitive, they do establish what we believe are interesting facts that can be extended by future work.

### Political heterogeneity

In the main section of the paper, we include district fixed-effects in all regressions to control for time-invariant district heterogeneity. However, the political competitiveness of a district may change over time and cause different EIA intensity by firms. The recent literature does not contain a single prediction as to how electoral competitiveness might affect EIA intensity. On one hand, tight political contests might result in higher job creation rates<sup>55</sup> and, on the other hand, wide election margins by a politician might attract private investment to a legislator who might be a long-term attractive ally.<sup>56</sup>

To examine the role of vote margin on EIA, we estimate models that include an election vote margin variable as a measure of safety. In particular, we add *Vote Margin* to the employment specification in equation (1), both directly and interacted with the *DClockIn* variables.<sup>57</sup>

The results including *Vote Margin* are presented in table 5. In the Senate models A and B we see that our original findings are unchanged by the inclusion of vote margins. The coefficient for *DClockIn* is still positive, statistically significant, and of a similar magnitude to our main results in table 2. By itself, the coefficient on *Vote Margin* is positive and statistically significant. The positive magnitude indicates that states with higher average win margins exhibit higher employment. In model B we find no coefficients on the interaction terms between *Vote Margin* and *DClockIn* (or its square) are statistically significant. Overall, inclusion of *Vote Margin* has little effect on our original Senate results.

<sup>55</sup>Bertrand et al., 2018; Raiha, 2018; Bisbee and You, 2020.

<sup>56</sup>Berry and Fowler, 2018; Romer and Snyder, 1994.

<sup>57</sup>We define *Vote Margin* in table 5 as the difference between the percentage of votes obtained by the election winner over the second place candidate. For House races, the win margin is the simple difference in percentage votes between the top two vote receiving candidates in the previous election. However, because states have two senators, we the average win margins from the previous elections for each Senate seat as our win margin measure.

**Table 5:** Win margins results—Senate and House committees.

DV Committees	ln(Employment)			
	Senate		House	
	A	B	C	D
DClockIn	0.0150*** (5.09)	0.0139*** (3.03)	0.0039 (1.44)	0.0038 (1.41)
DClockIn-squared.	-0.0005*** (-2.71)	-0.0004 (-1.51)	-0.0002 (-1.86)	-0.0002 (-0.87)
DClockOut	0.0027 (0.69)	0.0027 (0.69)	-0.0048* (-1.93)	-0.0050** (-1.99)
DClockOut-squared.	-0.0000 (-0.01)	-0.0000 (-0.01)	0.0003 (1.59)	0.0003 (1.62)
Vote Margin	0.0013*** (4.06)	0.0013*** (3.37)	0.0008*** (4.78)	0.0003 (1.42)
Vote Margin×DClockIn		0.0001 (0.32)		0.0003*** (4.05)
Vote Margin×DClockIn – squared.		-0.0000 (-0.43)		-0.00001** (-2.47)
Pres. Democrat Vote Share	-0.0047*** (-7.77)	-0.0047*** (-7.77)	-0.0075*** (-10.54)	-0.0075*** (-10.55)
State Unemployment	0.0024 (0.85)	0.0023 (0.84)	0.0067** (2.21)	0.0069** (2.28)
District FEs	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes
F-statistic	14.79	11.54	19.25	17.65
Observations	441,756	441,756	363,211	363,211

Confidence levels: \* = 10%; \*\* = 5%; \*\*\* = 1% (t-values).

*Note:* This table presents estimates of four regression models, of accumulated committee service in the Senate and House on relevant industry employment, using the full sample. In all models the dependent variable is the log of industry employment. In models A and B the committee service is in the Senate, while in models C and D the committee service is in the House. All models include industry, district, and year fixed effects. The F-statistic of the test of the joint significance of all explanatory variables, is reported below each column. T-statistics are reported in parentheses. Standard errors are clustered at the four-digit SIC-state level.

Models C and D in [table 5](#) show, however, the win margin results are not the same in the House. In models C and D, the direct effects of *DClockIn* and its square continue to be statistically insignificant, as in the original results. In addition, in model C, the direct effect of *Vote Margin* is positive and statistically significant, as in the Senate models in the table. But in model D, we find that the interactions between win margin and *DClockIn* are both statistically significant. This finding, in model D, provides the first glimpse of a result in the use of EIA for House committees, and indicates that increased committee seniority is associated with increased employment only in electorally safe House districts. The result is worth further future investigation.

### *Industry heterogeneity: Breadth of industries*

While our main findings indicate that firms appear to engage in EIA toward relevant Senate committee members, we examine here the extent of EIA across industries. To do this, we run regressions with

separate *DClockIn* variables for each two-digit SIC industry. We estimate the following regression specification:

$$\ln(y_{idt}) = \beta_0 + \beta_1 DClockIn_{idt}^{SIC=01} + \dots + \beta_{97} DClockIn_{idt}^{SIC=97} + \beta_3 DClockOut_{idt} + \alpha_1 \iota + \alpha_2 \delta + \alpha_3 \tau + \epsilon \quad (2)$$

where  $y_{idt}$  is employment, and  $\iota$ ,  $\delta$ , and  $\tau$  are defined as before.  $DClockIn_{idt}^{SIC=X}$  is the industry-specific *DClockIn* variable. Equation (2) allows us to measure the importance of Senate committee seniority differently across different industries. We use two-digit SIC industries because this involves only seventy-four *DClockIn* coefficients.<sup>58</sup> Also, to simplify the analysis and reduce the number of coefficient estimates, we do not include squared terms.

We estimate a total of seventy-four two-digit industry coefficients.<sup>59</sup> A total of nineteen of the industry *DClockIn* coefficients are positive and statistically significant, while twenty-nine of them are positive but not statistically significant. Another twenty coefficients are negative and not statistically significant, and six of them are negative and statistically significant. Consistent with our earlier findings, the coefficients on the *DClockOut* variables are not statistically significant. The binomial probability of at least nineteen coefficients being statistically significant by chance is less than 0.1 percent, even at a 10 percent significance level.

Table A2, in the appendix, presents the coefficient estimates from the industries that had positive and statistically significant coefficients. A broad variety of industries are represented ranging from agriculture to oil and gas, to eating and drinking places, industrial machinery and equipment, as well as hotels and other lodging. The scope of industries ranges from heavy industries studied by other researchers,<sup>60</sup> to more service-oriented industries often overlooked in the literature.

### Industry heterogeneity: Responsiveness of investment

In a final extension, we explore the responsiveness of investment entry to committee membership and seniority. While some industries may face significant lag times and start-up costs when locating new establishments, or reorienting operations and employment, others might have varying degrees of flexibility and ease in creating new operations.

We attempt to quantify the ease with which firms in an industry can make new investments in EIA, by examining one potential measure of operational flexibility and time horizon—the length of the product development cycle (PDC). The PDC refers to the industry average time it takes to develop and bring new products to market.<sup>61</sup> Some industries, such as chemicals and pharmaceuticals, face long PDCs as it typically takes years of development, research, and operational readjustment to create new products. By contrast other industries, such as retail or printing and publishing, can develop and reorient operations to develop new products in a shorter period of time. As such an industry's typical PDC is likely correlated with its ease of operational flexibility.

In the context of EIAs, we believe that firms in industries with greater operational flexibility and ease of entry are more likely to employ EIAs. To test this, we employ a dataset of average PDCs at the industry level developed by National Academy of Engineering<sup>62</sup> and Bushman et al.<sup>63</sup> We define the variable *Short PDC* as those industries with a PDC of less than four years.<sup>64</sup> While the set of industries measured by this dataset is not exhaustive, it covers more than one-third of our samples' district-industry-year observations.

<sup>58</sup>By contrast, performing the same analysis with four-digit SIC industries would require 1,189 coefficients.

<sup>59</sup>Seven industries were dropped due to having no relevant Senate committees.

<sup>60</sup>Bingham and Mier, 1993; Sorenson, 1995; Hansen et al., 2011.

<sup>61</sup>National Academy of Engineering, 1992; Bushman et al., 1996.

<sup>62</sup>National Academy of Engineering, 1992.

<sup>63</sup>Bushman et al., 1996.

<sup>64</sup>This dataset and measure has been used by several papers in the finance and accounting literatures (e.g., Erkens, 2011; Raiha, 2019).

**Table 6:** Industry heterogeneity table—Senate committees.

DV	ln(Employment)			
	A	B	C	D
DClockIn	0.0055 (1.14)	0.0209*** (2.34)	0.0142 (1.57)	0.0143 (1.57)
DClockIn-squared.		-0.0012** (-2.02)	-0.0007 (-1.18)	-0.0007 (-1.19)
DClockOut	0.0198** (2.38)		0.0221 (1.42)	0.0223 (1.42)
DClockOut-squared.			-0.0006 (-0.40)	-0.0006 (-0.40)
DClockIn×Short PDC	0.0131*** (4.16)	0.0246*** (4.90)	0.0248*** (4.95)	0.0248*** (4.95)
DClockIn-squared.×Short PDC		-0.0009*** (-3.61)	-0.0008*** (-3.05)	-0.0008*** (-3.03)
DClockOut×Short PDC	0.0081** (2.20)		0.0049 (0.63)	0.0051 (0.66)
DClockOut-squared.×Short PDC			-0.0000 (-0.05)	-0.0000 (-0.06)
Pres. Democrat Vote Share				-0.0045*** (-4.33)
State Unemployment				0.0028 (0.57)
District FEs	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes
F-statistic	5.82	7.27	4.23	5.41
Observations	163,876	163,876	163,876	163,876

Confidence levels: \* = 10%; \*\* = 5%; \*\*\* = 1% (t-values).

*Note:* This table presents estimates of four regression models, of accumulated committee service in the Senate on relevant industry employment, using the subsample of industries for which the product development cycle variable is available. In all models the dependent variable is the log of industry employment. All models include industry, district, and year fixed effects. The F-statistic of the test of the joint significance of all explanatory variables, is reported below each column. T-statistics are reported in parentheses. Standard errors are clustered at the four-digit SIC-state level.

To test our hypothesis, we add interactions to the specification in equation (1), so that the *DClockIn* and *DClockOut* variables appear on their own, as well as interacted with *Short PDC*.

The results are presented in table 6. Models A through D are analogous to the same labeled models in table 2. In all models we find that the coefficient on the interaction between *DClockIn* and *Short PDC* is positive and statistically significant, which indicates that committee membership and seniority is associated with greater employment particularly for industries with short PDCs. Furthermore, the interaction between *Short PDC* and the squared *DClockIn* is also statistically significant and consistent with our main results. We generally find little evidence of any statistically significant interaction between *Short PDC* and *DClockOut*. In models C and D we also observe no significant association between *DClockIn* and employment for industries with long PDCs. The direct effect of the clock variables maintain their original signs, though at times do not reach statistical significance, perhaps because of the lower power of the tests with the fewer observations. These findings suggest that firms with potentially greater operational flexibility and ease of entry are more likely to engage in EIA. These results, and the role of different kinds of fixed and sunk costs, do warrant further

investigation in the future, as the coefficients of the *DClockOut* parameters do meander in and out of statistical significance.

## Conclusion

In this article we have attempted to empirically analyze the use of EIAs by firms to influence key relevant congressional committee members in the US Congress. We find evidence that firms increase employment and establishments in the states of senators who are on committees that oversee or have some authority over the industries of the firms. As a senator accumulates greater committee seniority, firms increase employment and the number of establishments over time at a decreasing rate. However, once the senator leaves the committee of relevance, firms appear to attenuate their expansion and hold constant their economic footprint. Although we explore the same relationship in the House of Representatives, we find limited evidence of any systematic relationship in that venue.

We also explore a number of alternative explanations for our main findings. Using exogenous departures of Senate committee members, we show that reverse causality in the relationship between committee service and economic activity is unlikely. By studying subsamples of districts that have at least some committee representation we also demonstrate committee member selection effects are unlikely to explain our findings. Finally, utilizing data on establishment sales, we show that the EIA output measures demonstrate results consistent with EIA input measures.

Further, we extend our analysis by examining the effect of heterogeneity in electoral margins and heterogeneity in industries on the use of EIAs. We find greater EIA in House districts with electorally safe seats, but find no such effect in the Senate. In addition, we find data consistent with the systematic use of EIAs in a range of industries, but differences in EIA utilization based on different product development cycles across industries. We believe these extensions will be useful points of departure for future research.

Our findings contribute to the literature on firms' political influence. EIA is often employed but not well understood. Even though the US Congress has been the subject of many studies on the use of lobbying and campaign contributions to influence key members of congress, our study is one of the first large-scale studies of the use of EIAs in the context of the US Congress and economy for a broad set of industries. This allows us to explore the cross-industry and time-series variation in the use of EIAs. It highlights one more tool in the firm's arsenal of political influence and non-market strategy.

The findings here open and suggest a variety of avenues for future research. Three emanate directly from our work. First, data limitations—and in particular the lack of unique establishment identifiers that are consistent across establishments across time—preclude us from analyzing individual firm behavior. It necessitated that we aggregate the unit of observation to the SIC-CD-Y level. New and more detailed datasets that overcome these data limitations should allow future work to test this theory in a more detailed and nuanced way. Second, future work might explore the reasons for leveling, as opposed to withdrawal, of investment after politicians leave committees. We argue this is because of the cost of investment withdrawal. An additional contributory factor may be that firms have achieved agglomeration economies in their industries and thus find higher operational efficiencies *ex post* relative to the *ex ante* investment decision. A parsing through this effect might yield interesting results. Third, future work could examine the substitution effect between EIAs and other forms of political influence such as campaign contributions and lobbying. While Raiha examined this question theoretically,<sup>65</sup> there are few empirical studies of EIAs that have examined how different forms of influence interact as substitutes or complements.<sup>66</sup> Future research could empirically examine under what conditions different forms of political influence would be most effective and, in doing so, potentially contribute new insights into the long-standing literatures on campaign contributions and lobbying.

<sup>65</sup>Raiha, 2018.

<sup>66</sup>See Bombardini and Trebbi, 2011 for an example.

## References

- Acemoglu, D., S. Johnson, A. Kermani, J. Kwak, and T. Mitton. 2016. "The Value of Connections in Turbulent Times: Evidence from the United States." *Journal of Financial Economics* 121 (2): 368–91.
- Ansolabehere, S., J. M. de Figueiredo, and J. M. Snyder. 2003. "Why Is There so Little Money in US Politics?" *Journal of Economic Perspectives* 17 (1): 105–30.
- Bandeira-de Mello, R. 2018. "Leveraging the Winner: Corporate Political Action under Resource-Dependence Heterogeneity." Working Paper.
- Barber, B. I., and D. Blake. 2019. "My Kind of People: Why Political Ideology Determines Firm Location." Working Paper.
- Baron, D. P. 1995. "The Nonmarket Strategy System." *Sloan Management Review* 37 (1): 73–85.
- Berry, C. R., and A. Fowler. 2018. "Congressional Committees, Legislative Influence, and the Hegemony of Chairs." *Journal of Public Economics* 158: 1–11.
- Bertrand, M., M. Bombardini, R. Fisman, and F. Trebbi. 2020. "Tax Exempt Lobbying: Corporate Philanthropy as a Tool for Political Influence." *American Economic Review* 110 (7): 2065–2102.
- Bertrand, M., F. Kramarz, A. Schoar, and D. Thesmar. 2018. "The Cost of Political Connections." *Review of Finance* 22 (3): 849–76.
- Bingham, R. D., and R. Mier. 1993. *Theories of Local Economic Development: Perspectives from across the Disciplines*. Sage Publications.
- Bisbee, J., and H. Y. You. 2020. "Political Geography and Firm Strategies: How Electoral Competition Influences Local Job Creation." Working Paper.
- Blake, D. J., and C. Moschieri. 2017. "Policy Risk, Strategic Decisions, and Contagion Effects: Firm-Specific Considerations." *Strategic Management Journal* 38 (3): 732–50.
- Blanes i Vidal, J., M. Draca, and C. Fons-Rosen. 2012. "Revolving Door Lobbyists." *American Economic Review* 102 (7): 3731–3748.
- Bombardini, M., and F. Trebbi. 2011. "Votes or Money? Theory and Evidence from the US Congress." *Journal of Public Economics* 95 (7–8): 587–611.
- Bonardi, J.-P., and S. Urbiztondo. 2011. "Asset Freezing, Campaign Contributions and the Tullock Paradox." Working Paper.
- Bonardi, J.-P., and S. Urbiztondo. 2013. "Asset Freezing, Corporate Political Resources, and the Tullock Paradox." *Business and Politics* 15 (3): 275–93.
- Bonica, A. 2016. "Avenues of Influence: On the Political Expenditures of Corporations and Their Directors and Executives." *Business and Politics* 18 (4): 367–94.
- Bushman, R. M., R. J. Indjejikian, and A. Smith. 1996. "CEO Compensation: The Role of Individual Performance Evaluation." *Journal of Accounting and Economics* 21 (2): 161–93.
- Cadwalladr, C. & D. Campbell. (2019). "Revealed: Facebook's global lobbying against data privacy laws." *The Guardian*, 2 March, 2019.
- Canayaz, M. I. 2018. "Does Congressional Committee Seniority Affect Corporate Performance?" Working Paper.
- Carvalho, D. 2014. "The Real Effects of Government-Owned Banks: Evidence from an Emerging Market." *Journal of Finance* 69 (2): 577–609.
- de Figueiredo, J. M. 2002. "Lobbying and Information in Politics." *Business and Politics* 4 (2): 125–29.
- de Figueiredo, J. M., and C. M. Cameron. 2019. "Endogenous Cost Lobbying: Theory and Evidence." Working Paper.
- de Figueiredo, J. M., and B. Richter. 2014. "Advancing the Empirical Literature in Lobbying." *Annual Review of Political Science* 17: 163–85.
- de Figueiredo, J. M., and B. S. Silverman. 2006. "Academic Earmarks and the Returns to Lobbying." *Journal of Law and Economics* 49 (2): 597–626.
- Erkens, D. H. 2011. "Do Firms Use Time-Vested Stock-Based Pay to Keep Research and Development Investments Secret?" *Journal of Accounting Research* 49 (4): 861–94.
- Farren, M. and T. DeHaven. (2019). "Airbus' Alabama plant is for building political capital, not planes." *The Hill*, 4 February, 2019.
- Fenno, R. F. 1973. *Congressmen in Committees*. Little, Brown and Company.
- Fournaies, A., and A. B. Hall. 2018. "How Do Interest Groups Seek Access to Committees?" *American Journal of Political Science* 62 (1): 132–47.
- Funk, R. J., and D. Hirschman. 2017. "Beyond Nonmarket Strategy: Market Actions as Corporate Political Activity." *Academy of Management Review* 42 (1): 32–52.
- Grier, K. B., and M. C. Munger. 1991. "Committee Assignments, Constituent Preferences, and Campaign Contributions." *Economic Inquiry* 29 (1): 24–42.
- Hall, R. L. and A. V. Deardorff. 2006. "Lobbying as Legislative Subsidy." *American Political Science Review* 100 (1): 69–84.
- Hansen, Z. K., G. D. Libecap, and S. E. Lowe. 2011. "The Political Economy of major Water Infrastructure Investments in the Western United States and the Impact on Agriculture: A Historical Analysis." Working Paper.
- Hillman, A. J., A. Zardkoohi, and L. Bierman. 1999. "Corporate Political Strategies and Firm Performance: Indicators of Firm-Specific Benefits from Personal Service in the US Government." *Strategic Management Journal* 20 (1): 67–81.
- Holburn, G., and D. Raiha. 2017, October 24. "Startups Are Turning Customers into Lobbyists." *Harvard Business Review*. <https://hbr.org/2017/10/startups-are-turning-customers-into-lobbyists>.

- Kang, K. 2016. "Policy Influence and Private Returns from Lobbying in the Energy Sector." *Review of Economic Studies* 83 (1): 269–305.
- Kroszner, R. S., and T. Stratmann. 1998. "Interest-Group Competition and the Organization of Congress: Theory and Evidence from Financial Services' Political Action Committees." *American Economic Review* 88 (5): 1163–87.
- Lester, R. H., A. Hillman, A. Zardkoohi, and A. A. Cannella. 2008. "Former Government Officials as Outside Directors: The Role of Human and Social Capital." *Academy of Management Journal* 51 (5): 999–1013.
- Liebeskind, J. P., T. C. Opler, and D. E. Hatfield. 1996. "Corporate Restructuring and the Consolidation of US Industry." *Journal of Industrial Economics* 44 (1): 53–68.
- Mayhew, D. 1974. *Congress: The Electoral Connection*. Yale University Press.
- Montgomery, C. A., and B. Wernerfelt. 1988. "Diversification, Ricardian Rents, and Tobin's q." *RAND Journal of Economics* 19 (4): 623–32.
- National Academy of Engineering. 1992. "Time Horizons and Technology Investments." Technical report, Washington, DC.
- Ovtchinnikov, A. V., and E. Pantaleoni. 2012. "Individual Political Contributions and Firm Performance." *Journal of Financial Economics* 105 (2):367–92.
- Pang, M.-S., R. J. Funk, and D. Hirschman. 2020. "We Fly Congress: Market Actions as Corporate Political Activity in the US Airline Industry." Working Paper.
- Powell, E. N., and J. Grimmer. 2016. "Money in Exile: Campaign Contributions and Committee Access." *Journal of Politics* 78 (4): 974–88.
- Raiha, D. 2018. "Economic Influence Activities." *Journal of Economics and Management Strategy* 27 (4): 830–43.
- Raiha, D. 2019. "Time Horizons and Corporate Governance." *American Journal of Finance and Accounting* 6 (1): 77–100.
- Roberts, B. E. 1986. "Asset Values and the Political Process." PhD thesis, Washington University in St. Louis, Department of Economics.
- Romer, T. and J. M. Snyder. 1994. "An Empirical Investigation of the Dynamics of PAC Contributions." *American Journal of Political Science* 38 (3): 745–69.
- Shepsle, K. A. 1978. *The Giant Jigsaw Puzzle: Democratic Committee Assignments in the Modern House*. University of Chicago Press.
- Silverman, B. S. 1999. "Technological Resources and the Direction of Corporate Diversification: Toward an Integration of the Resource-Based View and Transaction Cost Economics." *Management Science* 45 (8): 1025–1176.
- Snyder, J. M. 1990. "Campaign Contributions as Investments: The US House of Representatives 1980–1986." *Journal of Political Economy* 98 (6): 1195–1227.
- Snyder, J. M. 1992. "Long-Term Investing in Politicians; or, Give Early, Give Often." *Journal of Law and Economics* 35 (1): 15–43.
- Sorenson, D. S. 1995. *The Politics of Strategic Aircraft Modernization*. Praeger Publishers.
- Stratmann, T. 2005. "Some Talk: Money in Politics, a (Partial) Review of the Literature." *Public Choice* 124 (1/2): 135–56.
- Teece, D. J., R. Rumelt, G. Dosi, and S. Winter. 1994. "Understanding Corporate Coherence: Theory and Evidence." *Journal of Economic Behavior and Organization* 23 (1): 1–30.
- Underwood, Jerry. (2016). "Rich in history, Alabama aerospace industry climbing to new heights." *Made in Alabama*, 12 July, 2016.
- Walker, E. T. 2012. "Putting a Face on the Issue: Corporate Stakeholder Mobilization in Professional Grassroots Lobbying Campaigns." *Business and Society* 51 (4): 561–601.
- Weingast, B. R., and M. J. Moran. 1983. "Bureaucratic Discretion or Congressional Control? Regulatory Policymaking by the Federal Trade Commission." *Journal of Political Economy* 91 (5): 765–800.
- Zelenak, L. 1989. "Are Rifle Shot Transition Rules and Other Ad Hoc Tax Legislation Constitutional?" *New York Law Review* 44: 563–625.

## Appendix A

Table A1 Unlogged DV table—Senate and House committees.

DV Committees	Employment		Establishments	
	Senate	House	Senate	House
	A	B	C	D
DClockIn	4.6649** (2.02)	1.0457 (0.49)	0.0434*** (3.27)	-0.0148* (-1.67)
DClockIn-squared.	-0.0258 (-0.15)	-0.0444 (-0.29)	-0.0014* (-1.86)	0.0010* (1.70)
DClockOut	-2.6750 (-0.77)	-2.3185 (-1.28)	0.0299 (1.63)	-0.0000 (-0.00)
DClockOut-squared.	0.5611 (1.20)	0.1114 (0.93)	-0.0018 (-1.10)	-0.0006 (-1.09)
Pres. Democrat Vote Share	-1.4739*** (-3.21)	-1.4978*** (-3.23)	-0.0130*** (-3.15)	-0.0139*** (-3.39)
State Unemployment	2.5914 (1.45)	2.0252 (1.13)	0.0018 (0.10)	-0.0052 (-0.28)
District FEs	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes
F-statistic	3.99	2.40	4.57	5.10
Observations	441,766	431,447	441,766	431,447

Confidence levels: \* = 10%; \*\* = 5%; \*\*\* = 1% (t-values).

Note: This table presents estimates of four regression models, of accumulated committee service in the Senate and House on relevant industry employment or establishments, using the full sample. In models A–B the dependent variable is the level of industry employment, while in models C–D the dependent variable is the level of industry establishments. In models A and C the committee service is in the Senate, while in models B and D the committee service is in the House. All models include industry, district, and year fixed effects. The F-statistic of the test of the joint significance of all explanatory variables, is reported below each column. T-statistics are reported in parentheses. Standard errors are clustered at the four-digit SIC-state level.

**Table A2:** Senate committees and significant SIC industries.

DV = log(Employees)	Coef. (t-stat)
SIC-01 (Agricultural Production - Crops)	0.0596*** (5.24)
SIC-02 (Agricultural Production - Livestock)	0.0579*** (3.81)
SIC-07 (Agricultural Services)	0.0490** (2.18)
SIC-13 (Oil & Gas Extraction)	0.1550*** (4.72)
SIC-14 (Nonmetallic Minerals)	0.0460** (2.34)
SIC-21 (Tobacco Products)	0.0991* (1.65)
SIC-27 (Printing & Publishing)	0.0218*** (2.58)
SIC-34 (Fabricated Metal Products)	0.0222*** (2.82)
SIC-35 (Industrial Machinery & Equipment)	0.0391*** (3.62)
SIC-45 (Transportation by Air)	0.0166** (2.36)
SIC-52 (Building Materials)	0.0273* (1.91)
SIC-53 (General Merchandise Stores)	0.0522** (2.55)
SIC-58 (Eating & Drinking Places)	0.0561*** (2.84)
SIC-59 (Miscellaneous Retail)	0.0164* (1.80)
SIC-64 (Insurance Agents, Brokers, & Service)	0.0339* (1.91)
SIC-65 (Real Estate)	0.0282*** (4.20)
SIC-70 (Hotels & Other Lodging)	0.0892*** (3.99)
SIC-80 (Health Services)	0.0172* (1.91)
SIC-83 (Social Services)	0.0317* (1.75)

Confidence levels: \* = 10%; \*\* = 5%; \*\*\* = 1%.

Note: This table presents the positive and significant coefficient estimates of a regression that includes a separate DClockIn measure of committee service, for each two-digit SIC industry. The dependent variable is the log of industry employment. The regression includes industry, district, and year fixed effects. T-statistics are reported in parentheses. Standard errors are clustered at the four-digit SIC-state level.

**Cite this article:** de Figueiredo JM, Raiha D (2022). Economic influence activities and the strategic location of investment. *Business and Politics* 24, 292–317. <https://doi.org/10.1017/bap.2022.11>