

Political Cleavages and Exposure to the Global Financial Crisis

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Abstract

Can a financial crisis tip the domestic balance of power between the winners and losers of globalization? In this paper, we build on the path-breaking work of [Rogowski \(1987\)](#), who contends that, following a global economic shock, changes in people's financial fates translate into changes in their political capital. We examine corporate campaign contributions and lobbying expenditures in the United States before and after the 2008 global financial crisis. We compare the political expenditures made by firms that were more or less exposed to the global financial crisis, finding that firms more insulated from the crisis experience a relative increase in their political expenditure profiles. We then identify the recipients of these expenditures, tracing the inversion of political capital in campaign contributions to the proliferation of less mainstream candidates in federal elections. Our findings suggest that part of the growing elite polarization in American politics is due to the differential impact of 2008's global financial crisis on the relative political capital of corporate donors.

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1 Introduction

In his classic treatise on exposure to trade and political cleavages, [Rogowski \(1987\)](#) builds on [Stolper and Samuelson \(1941\)](#) and [Becker \(1983\)](#) to argue that adverse shocks to globalization negatively impact the winners from globalization more so than the losers from globalization. As a result, following a major shock — such as the Great Depression — political regimes that favored the interests of abundant factors of production shifted to support the interests of scarce factors of production. This change led to the rise of populism in South America and fascism in Europe and Asia.

The first two decades of the 21st century witnessed a global economic recession and fundamental political realignment within advanced industrial democracies in the west. Does the intuition provided by [Rogowski \(1987\)](#) help us make sense of these political shifts? We use rich data from the United States to address this question by comparing how those firms most and least affected by the global financial crisis (GFC) changed their campaign contributions and lobbying expenditures, and how these changes influenced the electoral fortunes of political players. Our data, from Reference USA¹ and the Center for Responsive Politics,² include more than 14 million observations per year for the 1990-2018 period. We show that firms that lost most from the GFC reduced their financial involvement in politics by more than those firms that were relatively unaffected.

Specifically, when looking at campaign contributions by political party, we find suggestive evidence of a negative effect for Democrats and a positive effect for third party and Republican candidates. Evidence of an effect of the GFC on lobbying expenditures is stronger: compared to firms insulated from the crisis, more exposed firms experienced a relative decline in their lobbying expenditures, an effect that has persisted over time. Furthermore, we show that these changes in the locus of political influence resonated in American politics writ large, with Republicans and non-incumbent politicians disproportionately benefiting.

¹The company that supplied the data is now known as Data Axle and can be purchased on their webpage: <https://www.data-axle.com/what-we-do/reference-solutions/>.

²See <http://www.opensecrets.org/>.

The GFC appears to have tipped the balance of political capital away from the winners from globalization.

Our analysis offers several specific contributions to the literature. First, we confirm a key underlying assumption of the argument of Rogowski (1987) by showing that key tools of political influence are indeed vulnerable to economic shocks. Second, we show that the shifts in the terrain of political influence that result from economy-wide shocks produce substantive changes in the terrain of political power. Our research in the context of the United States further encourages future research applying the logic of Rogowski (1987) to other advanced industrial democracies similarly integrated in the global economic system. Finally, rather than focus on changing preferences for globalization, we study the material political influence of groups with long-standing preferences for and against open economies. We suggest that an overlooked fallout from the GFC is the amplification of the voice of the losers from globalization.

In the following section we explore a simple theory of exposure to financial crises to explain our empirical approach in Section 3. We present our results in Section 4; Section 5 concludes.

2 Economic Shocks and Shifting Political Power

Understanding the recent backlash against globalization has become the focus of much research in political science — see Walter (2021) for a great review of this literature. Most of this research uses cross-national data to investigate the rise of populism in Western democracies, finding that long-term trends in globalization — from falling manufacturing employment (Broz, Frieden, and Weymouth, 2019), to increased automation (Milner, 2020), to decreased financial support for economically vulnerable voters (Baccini and Sattler, 2020) — were exacerbated by the 2008 global financial crisis.

In our study, we limit our scope to a single country (the United States) and isolate a single

mechanism (political expenditures) to find a causal pathway between the financial crisis and the the rise of anti-globalization. Theoretically, we are motivated by a core argument of Rogowski's (1987) influential piece: during an economic crisis, globalization's winners lose, and its losers win, at least in relative terms.

As Rogowski (1987, 1123) puts it in a key assumption driving his approach, "those who enjoy a sudden increase in (actual or potential) wealth and income will be thereby be enabled to expand their political influence." During a crisis, everyone may lose, but some lose more than others, allowing some groups to gain ground in relative terms. Indeed, by definition, those who are less exposed to the global economy should lose less when the global economy shrinks compared to those who are more exposed. Rogowski assumes that the relative financial gains translate into political gains.

Rogowski is not alone in making the claim that the financial fates of globalization's winners and losers convert into their relative political power. Richardson (1993) and Bohara, Gawande, and Sanguinetti (2004) similarly claim that positive exposure to the global economy generates political capital. Research has indeed shown that increased economic (or market) power translates into increased political power (Salamon and Siegfried, 1977; Facio, 2006). So, the idea that economic gains (or losses) from globalization translates into political power is not new. However, these studies do not specify a precise mechanism by which money becomes political power.

We seek to offer one such mechanism by which Rogowski's story of how a global economic shock can translate into a changing of the balance of power in domestic politics. We focus on changes in political campaign contributions and lobbying expenditures by firms following the GFC.

Campaign contributions represent one conduit for money to become political power under democracy. Such a conduit is not without controversy in the American Politics literature. Ansolabehere, De Figueiredo, and Snyder (2003) conclude that there is surprisingly little money in US politics when measured by campaign contributions, leading them to suggest

that this tool of influence buys access, not influence. Yet access is, if not sufficient for influence, at least necessary, as argued by [Bertrand et al. \(2020\)](#), who show that political access is paramount, often using corporate philanthropy as a tool for political influence.

A related tool of political influence is lobbying expenditures. These financial outlays are harder to connect to a specific politician, but are also orders of magnitude larger than the campaign contributions which are subject to federal and state limits. The received wisdom of a substantial body of work on lobbying concludes that — on average — these expenditures are more policy-focused than those outlays that go toward campaign contributions ([Fournaies and Hall, 2018](#); [Kim, 2017](#)). This is not to suggest that they are always earmarked for specific bills or particular regulatory clauses. Lobbying expenditures can occur anywhere in the policy-making process, from informing politicians on the broad strokes of a firm’s financial position to helping craft the specific language of a regulation.

While these tools of political influence may differ in terms of their magnitude, scope, and strategic context, they also share two important qualities for our research. First, they are both relatively liquid tools of influence, meaning that firms have a fair degree of latitude over how much, where, and when to allocate these funds. As such, they are arguably more responsive to broad economic fluctuations that might influence a firm’s bottom line.

Second, these strategies are important to the centers of political power. Campaign contributions flow into specific congressional committees ([Fournaies and Hall, 2018](#)), creating a powerful incentive for incumbents to seek particularly plumb assignments. Lobbying efforts ebb and flow according to the legislative calendar, pumping in millions of dollars that filter down disproportionately among politicians ([Kim, 2017](#)). Put bluntly, these two sources of money in politics create the field in which politicians, lobbyists, interest groups, and voters themselves contribute to produce political outcomes.

We suspect that the sheer magnitude of the GFC may have impacted firms’ financial ability to make campaign contributions and lobbying expenditures, and that the GFC may have had differential impacts on firms that were more or less exposed to the global dimension

of the crisis.

2.1 Exposure to the 2008 Global Financial Crisis

What started in 2007 as a subprime mortgage crisis in parts of the United States, quickly spread to global financial markets on September 15, 2008, the day after Lehman Brothers collapsed. By the end of 2008, U.S. gross domestic product had dropped by 8.4% from the year earlier, at the time the largest economic contraction since the Great Depression.³ The preliminary prognosis for the causes of the global financial crisis (GFC) was exposure to the U.S. subprime mortgage market through purchases of mortgage-backed securities. However, exposure to mortgage-backed securities was not a main predictor of the financial contagion that followed the collapse of Lehman. Rather, it was a trigger that revealed myriad structural issues in the global financial system, including opacity of balance sheets, dependence on short-term funding, and fluctuations in risk aversion ([Kamin and DeMarco, 2012](#)).

The 2008 GFC impacted the real economy due to a sharp drop in global demand not seen since the 1930s. Global trade volumes dropped by 15% in the first year of the crisis ([Freund, 2009](#)).⁴ Although protectionism was largely rebuffed due to coordination through the WTO as well as the newly-established Group of Twenty (G20), the United States experienced a rather sharp drop in exports due to an appreciation of the U.S. dollar caused by an international flight to safety ([Engel, 2010](#)).

The upshot of these features of the GFC is that former winners from globalization may have taken a sudden loss relative to the losers from globalization. As [Claessens, Tong, and Wei \(2012\)](#) find, firms with greater sensitivity to global demand and trade suffered more during the crisis than those more insulated from the global economy. As global demand

³U.S. Bureau of Economic Analysis, Percent Change of Gross Domestic Product [CPGDPAI], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CPGDPAI>, July 24, 2020.

⁴In the first quarter of 2009, nominal trade contracted by 30% on average from the year earlier, [Freund 2009](#).

retreated, firms that specialized in tradable goods or services experienced a more severe downturn than firms specialized in non-tradables, *caeteris paribus*.

Following standard theory in international political economy, we expect that these firms supported politicians who favored globalization and lobbied the government to promote policies favoring free trade. Try though they might during the financial crisis, we hypothesize that they were not able to marshal the financial resources that they would have under better circumstances. The opponents of globalization similarly faced financial constraints during a crisis, but, on the margins, we expect that their lower exposure to the crisis enabled them to better weather the storm. We hypothesize that, compared to the more exposed firms, less exposed firms were able to expend more on campaign contributions and lobbying.

Our key distinction from [Rogowski \(1987\)](#) is in how we define exposure to a global financial crisis, which includes not only exposure to the real economy through an international trade mechanism, but also financial exposure through a leverage channel. It is from this relationship between the two channels of exposure that we hypothesize how exposure to (or insulation from) an economic shock will translate into shifts in relative political power. Rogowski, writing in 1987, relied on the Stolper-Samuelson framework, where winners from trade liberalization included owners of the locally abundant factors of production (capital, labor, land), whereas the losers from trade are the owners of the locally scarce factors. Since that time, international political economy theory on the winners and losers from trade liberalization has advanced. New Trade Theory recognizes the role of increasing returns to scale in explaining intra-industry trade ([Krugman, 1979](#)), where the winners include export-oriented industries. “New” New Trade Theory goes a step further and identifies larger firms as having the capacity to benefit most from globalization ([Melitz, 2003](#)). These firms have taken advantage of lower barriers to trade by moving parts of their supply chain to low-wage countries, which has political implications in terms of trade preferences ([Osgood, 2016](#); [Osgood et al., 2017](#)), trade disputes ([Jensen, Quinn, and Weymouth, 2015](#); [Kim and Spilker, 2019](#)), property rights ([Johns and Wellhausen, 2016](#)), labor rights ([Malesky and Mosley,](#)

2018), and exchange rate policy (Weldzius, 2021). This recent research in international political economy takes an empirical approach to unlocking the political ramifications of trade liberalization. We follow suit, but add an additional channel beyond trade that we believe also impacts shifts in political power: financial exposure.

Recall from the classic treatise on financial crises (Kindleberger and Aliber, 2011) that almost every financial crisis in history followed a speculative mania, that is, a credit-fueled asset bubble. In the years prior to the GFC, financial markets were flush with credit on account of loose monetary policy, an end to the Glass-Steagall Act, and new financial products that allowed banks to securitize loans. While the housing market shares the majority of the blame for this speculative mania, firms — as well as consumers and governments (Blyth, 2013) — also utilized this excess credit, putting strains on their balance sheets. Firms that were more dependent on short-term funding due to an over-leveraged balance sheet were more exposed to the GFC than more risk-averse firms with lower debt-to-equity ratios (Kamin and DeMarco, 2012). In a survey of over 1,050 Chief Financial Officers across the United States, Europe, and Asia, Campello, Graham, and Harvey (2010) find that these over-leveraged firms planned deeper cuts to employment than those less constrained by credit markets. As we will illustrate in the following section, we leverage these empirical findings in our differentiation of exposed and insulated firms during the 2008 GFC.

In summary, Rogowski and others who followed him contend that global economic shocks hit certain types of firms harder than other types of firms, and that this dynamic produces a reversal of the political fortunes of the winners and losers of globalization. We update the approach to identifying which types of firms are more or less exposed to global economic shocks, specifically following the 2008 GFC. We then speculate about two potential channels by which a reversal of financial fates can translate into changing political power: campaign contributions and lobbying expenditures. We now turn to proposing a detailed empirical approach to testing our ideas.

3 Empirical Context and Strategy

We test our theoretical intuition with rich data on the two most well-known measures of political influence: campaign contributions and lobbying. We are fundamentally interested in the degree to which those most exposed to the 2008 GFC withdrew from the political arena, and how this withdrawal reshaped American politics. To proceed, we need to define an empirical measure for “exposure” to the GFC as well as measures of “political influence.” We begin with the latter.

Dependent Variables: Measuring Political Influence

Our outcome measures — campaign contributions and lobbying — are obtained from the Center for Responsive Politics,⁵ a not-for-profit and nonpartisan research group that tracks money in US politics. These data contain the full schedule of political engagements by firms, interest groups, and political action committees (PACs). There are, in theory, many ways to measure influence in a political system. We focus on these two because of their practical significance in American politics,⁶ their importance in the literature,⁷ and their measurability. We restrict our attention to firms and their associated PACs because of the clear impact of the GFC on their spending power. Interest groups, while clearly an important facet in the US political system, have broader donor bases than firms and thus we assume are more uniformly impacted by the GFC. Moreover, we are unconcerned with any bias to our results by restricting our sample to firms and their associated PACs. [Crosson, Furnas, and Lorenz \(2020\)](#) reveal a conservative bias of interest groups’ influence on policy outcomes; thus, if included in our analysis, should only serve to strengthen our results.

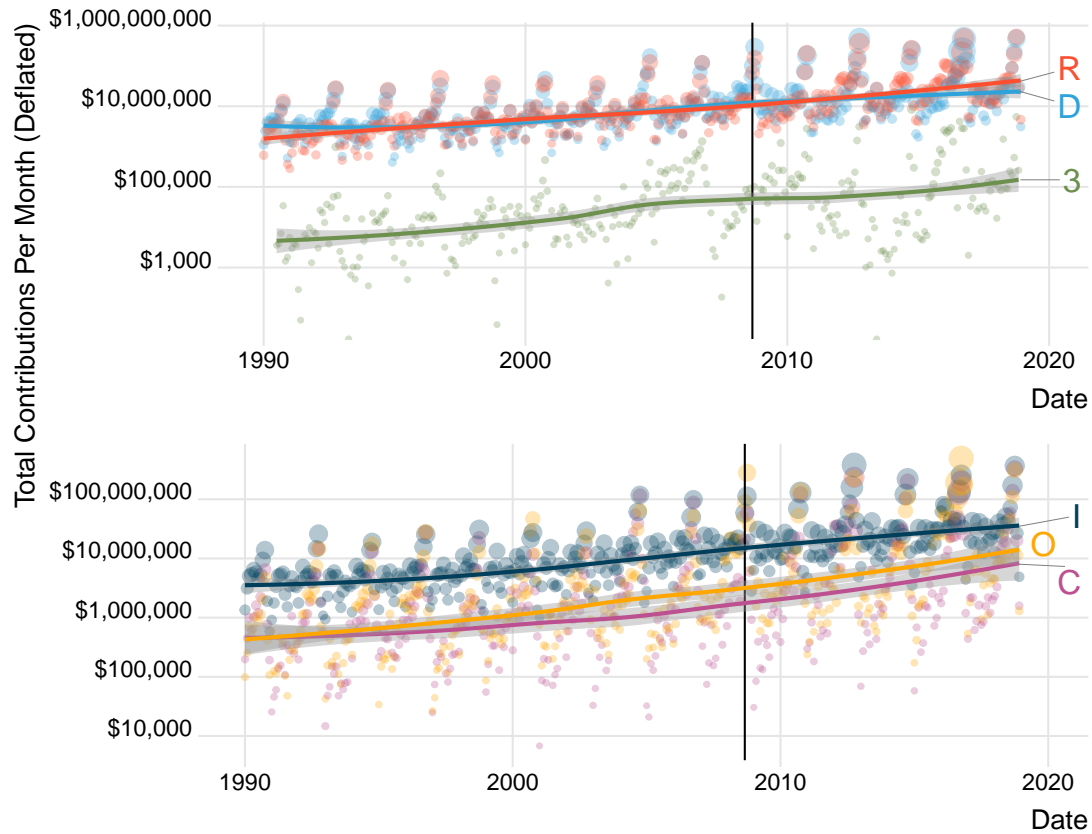
The richness in detail of the data availability for these measures allow us to delve deeply

⁵See <http://www.opensecrets.org/>.

⁶See, e.g., [Gilens 2012](#).

⁷For recent work on the importance of campaign contributions in American politics see [Powell and Grimmer 2016](#); [Kalla and Brookman 2016](#); [Barber, Canes-Wrone, and Thrower 2017](#); [Fouirnaies and Hall 2018](#); [Fowler, Garro, and Spenkuch 2020](#). On lobbying efforts see [Schnakenberg 2017](#); [McCrain 2018](#); [Lorenz 2020](#); [Bertrand et al. 2020](#).

Figure 1: Total Campaign Contributions, by recipient affiliation and seat status



into patterns of change in political influence following the GFC. Our data not only allow us to measure the degree to which different firms engage in these tools of political influence, but also to identify the beneficiaries of these efforts. Specifically, we can measure the party affiliation, incumbency status, electoral outcome, committee assignment, and ideology of each politician who received money from our firms. Furthermore, we can attribute lobbying spending to specific bills, their sponsors and co-sponsors, and the committees in which they are considered. Figure 1 plots the total campaign contributions by month received by the party affiliation of the recipient (Democrats, Republicans, and 3rd party; top) and by the seat status of the recipient (Incumbents, Challengers, and Open seats; bottom). Points are sized by the number of unique contributions received in each month and the y-axis is placed on a log scale for visual clarity.

As illustrated, third party candidates (top panel) and challengers (bottom panel) receive

substantially fewer contributions, totaling less aggregate funds. In addition, Democrats and Republicans receive roughly equal amounts, although there is suggestive evidence that Democrats were the main beneficiaries in the early 1990s while Republicans start to gain the lead in 2016. However, these patterns interact with each other, since Democrats held majority control of Congress in the early 1990s, meaning that more incumbents were likely Democrats. There is little descriptive evidence to suggest that the GFC had any notable impact on campaign contributions writ large, nor on the electoral fortunes of a particular party or candidate type.

A different story emerges when we shift attention to the lobbying behavior of firms, summarized in Figure 2. Here we are unable to determine the recipients of these expenditures as precisely as with campaign contributions due to the nature of how these reports are filed. Nevertheless, we highlight the much clearer evidence of a response in aggregate to the GFC, whether measured as total spending (left panel, points sized by number of firms), or the total number of firms lobbying (right panel, points sized by total spent). In both plots, we note that the GFC corresponded to a spike in lobbying spending and number of participants. The spike died off in the ensuing years.

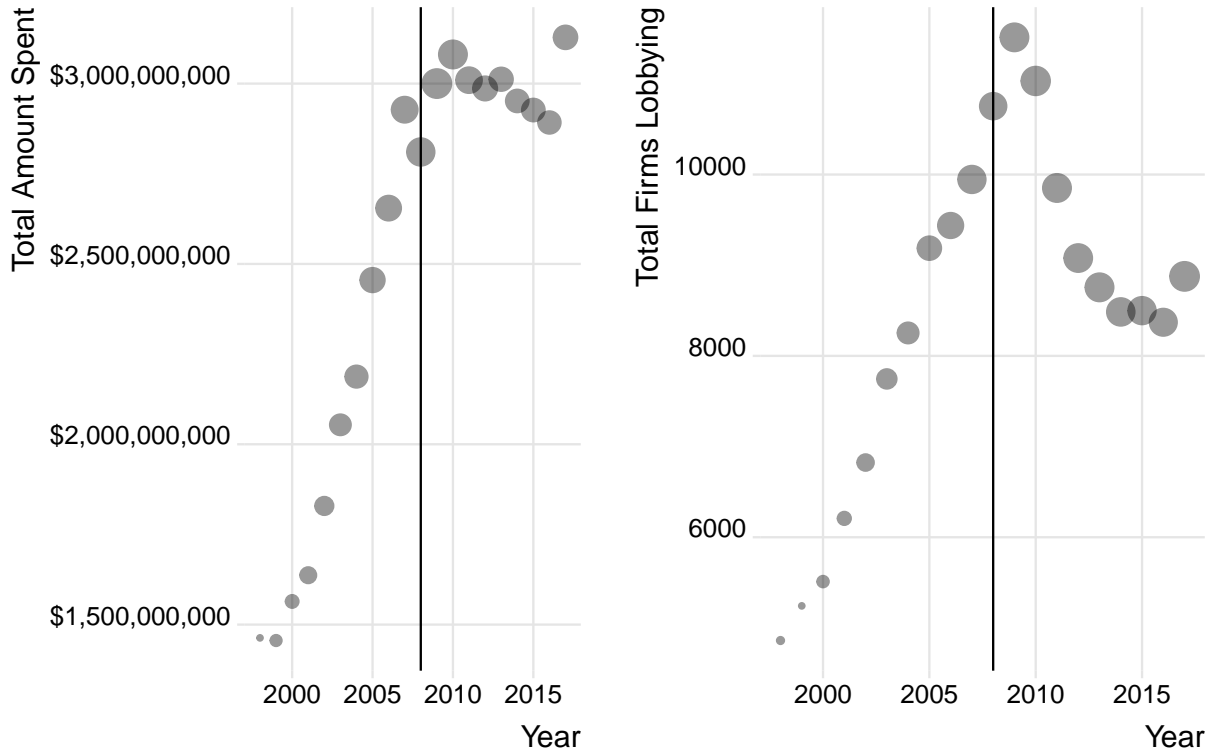
Independent Variable: Measuring Exposure to the GFC

To calculate the degree to which our firms are “exposed” to the GFC, we calculate the industry-level change in employment for the universe of firms in the United States. We obtain these data from Reference USA, which has year-end estimates of employees and sales for every parent firm, subsidiary, and plant in the United States, numbering approximately 14 million observations per year. Importantly, these data include the 8-digit industry code, assigned according to the North American Industry Classification System (NAICS).

We restrict our attention to the firms, subsidiaries, and plants that were open between 2007 and the end of 2009, calculating the percentage change in employment over this period.⁸

⁸The Great Recession officially ended in mid-2009, with the unemployment rate reaching its peak by the

Figure 2: Firm Lobbying Expenditures, total spending (left) and no. of firms (right)



We define as treated those industries in the top 0.20 percentile of all 8-digit NAICS industries whose share of all establishments (i.e., plants, offices, etc.) terminated more than 20% of their workforce during the GFC.⁹ These “highly exposed” industries are indicated in red at the right tail of the distribution in Figure 3. The industries most exposed to the GFC include home-related manufacturing (engineered wood manufacturing, truss manufacturing, plumbing fixture manufacturing), title insurance (direct title insurance carriers, title abstract and settlement offices), and financial services (trust, fiduciary, and custody activities), each of which experienced 15-30% of their plants terminating more than 20% of their employees. Other, more globally exposed, industries included in the treatment group include aircraft

end of this year and turning the corner by early 2010. Thus, we believe the percentage change in employment between 2007, the year before the GFC, and the end of 2009, the very end of the GFC, will best proxy for exposure to the crisis.

⁹We believe this to be a relatively optimal level of discrimination. Obviously, if we have too low of a threshold, then our treated sample would include all industries; likewise, too high of a threshold would limit our analysis to a few outlier industries. We are in the process of conducting several robustness checks for testing the bounds of this threshold.

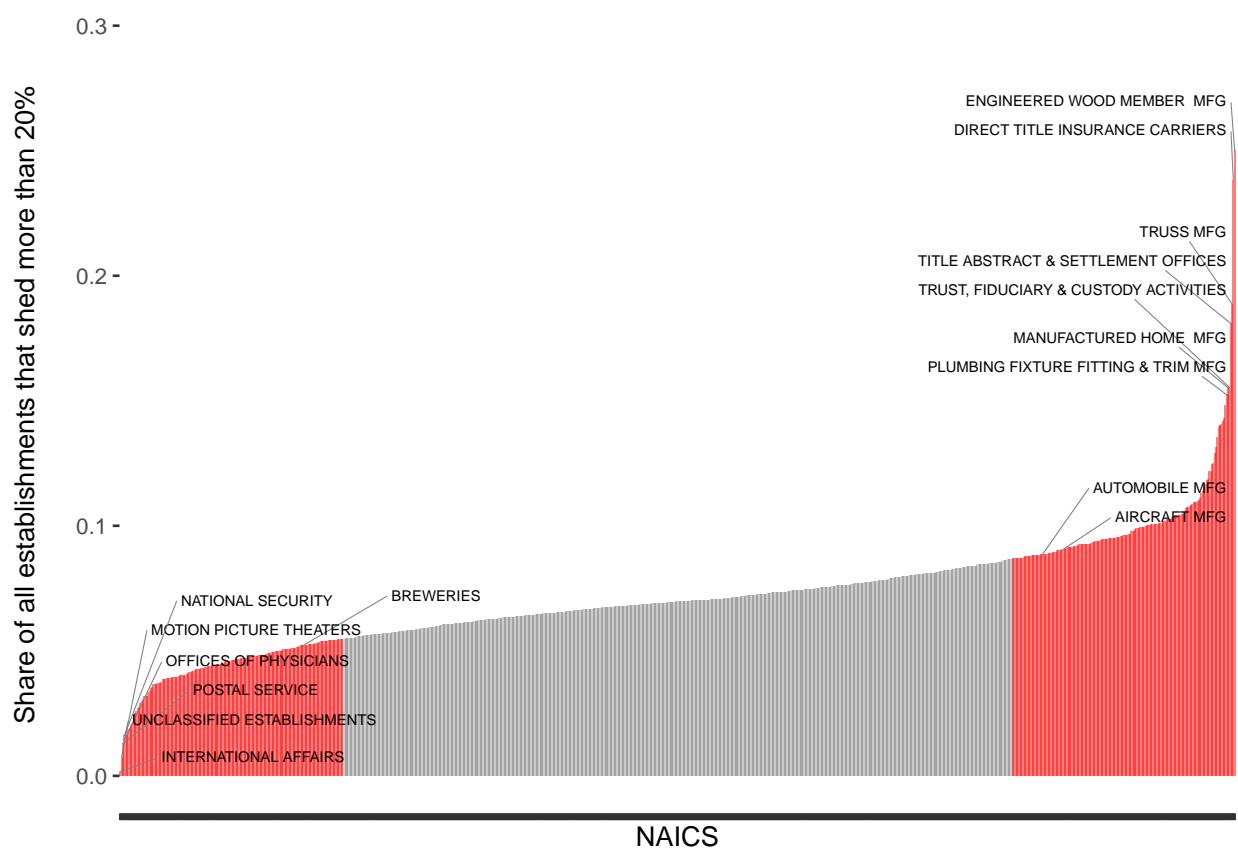
and automobile manufacturing.

The control industries are those that were more insulated from the GFC. They include industries in the bottom 0.20 percentile of all 8-digit NAICS industries whose establishments terminated more than 20% of their employees during the GFC, e.g., national security, motion picture theaters, physician offices, the postal service, and your local brewery (see the left tail in red in Figure 3), each of which had fewer than 5% of their establishments terminate more than 20% of their workforce.

By relying on establishment-level data, we sidestep potential endogeneity concerns associated with more politically active parent companies being better equipped to ride-out the crisis, thus spending the same on political influence.

Following many scholars of international political economy (see, e.g., [Mosley and Singer](#),

Figure 3: Share of Plants with > 20% Employee Termination Rate, 2007-2009



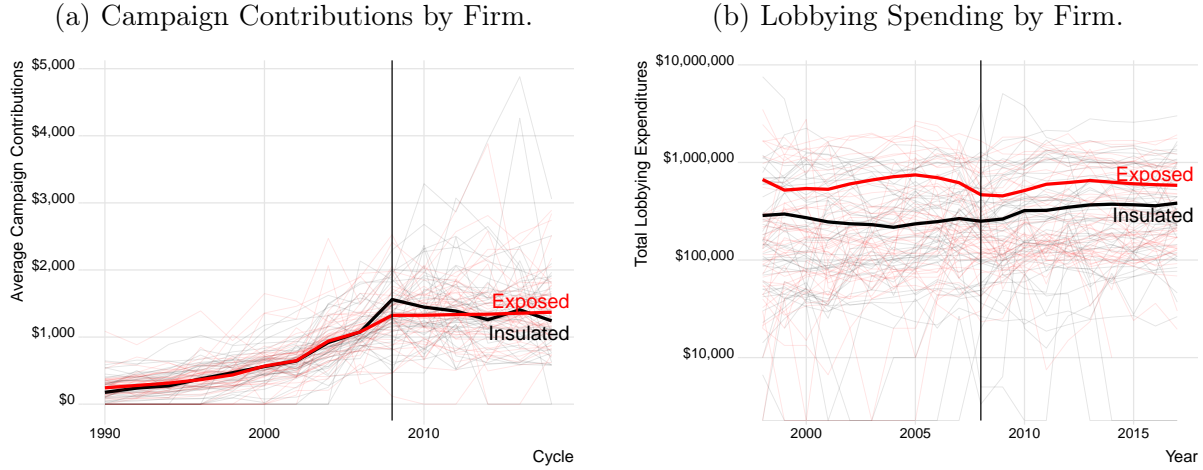
2009; Oatley et al., 2013; Ahlquist, Copelovitch, and Walter, 2020; Peritz et al., 2020, among many others), we appeal to the empirical reality of the GFC to measure exposure to the crisis. This approach releases our analysis from mapping out-of-date theory about the winners and losers from globalization to our data. For example, if we use a central premise of the “New” New Trade Theory literature in international political economy that firm size matters (e.g., Baccini, Pinto, and Weymouth, 2017; Kim, 2017), this should function as a proxy for exposure. But the empirical reality is that firms differ in their reaction to the GFC conditional on their size. Campello, Graham, and Harvey (2010) find where these firms differ in their spending plans in reaction to the GFC, which is not in employee layoffs (small firms expected a -4.3% change in employment, whereas large firms expected a -4.5% change), but rather in marketing expenditures (-10.9% for small firms vs. -4.0% for large firms) and cash holdings (-4.1% for small firms vs. -8.1% for large firms). Our data on employee layoffs is thus a record of those firms most exposed to the GFC, which does not vary across firm size.

A purely descriptive snapshot of campaign contributions and lobbying by firm exposure to the GFC are presented in Figures 4a and 4b respectively. As illustrated, there is suggestive evidence of firms exposed to the crisis adjusting their political strategies. In the case of lobbying, these firms were more active overall, and reduced their influence following the GFC, but remained more prominent players. In the case of campaign contributions, the exposed and insulated firms were much more similar in pre-2008, and the effect of the crisis on their behavior was small, although exposed firms fell behind insulated firms for two cycles.

Estimating the Effect of the GFC on Different Types of Firms

With this description of the data in mind, we estimate a series of generalized difference-in-differences regressions. Specifically, we define a firm i as belonging to either the treated or control group $G \in [0, 1]$ where treatment is not activated until the intervention t_0 , which we set to the outset of the 2008 GFC.

Figure 4: Firm-Level Political Expenditures, by exposed vs. insulated



Note: Red lines reflect exposed firms, while black lines indicate insulated firms. Thicker, darker lines represent the averages by exposure type.

This set-up provides an intuitive counterfactual setting in which we can compare how exposed (treated) and insulated (control) donors changed their respective behaviors before and after the GFC. The most simple diff-in-diff specification can be formalized as:

$$y_{igt} = \beta_1 GFC_t + \beta_2 Exposure_g + \beta_3 (GFC_t \times Exposure_g) + \alpha_i + \delta_t + \varepsilon_{igt} \quad (1)$$

where y_{igt} represents the campaign contributions of donor i , belonging to treatment group g , in period t . GFC_t is an indicator variable taking the value 1 for all periods after 2008 and zero otherwise and $Exposure_g$ is an indicator taking on the value 1 for all donors who are categorized as “exposed” according to our definition above. The coefficient of interest is β_3 which captures the causal effect of the GFC on exposed firm donations.

The benefit of a clean diff-in-diff specification is that one can simply plot the outcome over time by treatment group in order to capture the visual intuition behind the identifying logic. In our context, the claim is that any changes in the difference between the behaviors of treated and control donors prior to and following the GFC are attributable to the recession. This claim rests on the assumption that the difference between the treated and control groups observed in the pre-intervention period (prior to 2008) would have persisted in the post-

intervention period were it not for the intervention itself — the parallel trends assumption.

To test the validity of this assumption, we implement a matching strategy to identify the insulated donors who, in the pre-intervention period, look as similar as possible to the exposed donors. Specifically, we use the `tjbal` package for `R` which matches treated and control units on both their pre-treated covariates *as well as* their pre-intervention outcomes themselves. Other approaches match observations only on covariates, but our preferred approach of matching on the dependent variable as well as covariates enables us to consider both observed factors (captured by the covariates) and unobserved factors (captured by remaining variance in the dependent variable) that influence donations. See [Hazlett and Xu \(2018\)](#) for a detailed presentation of this approach.

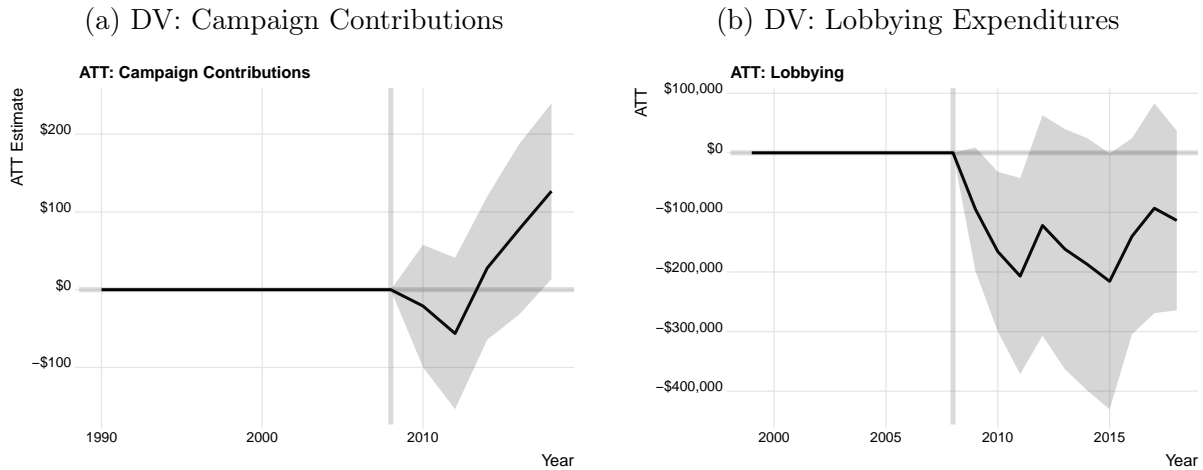
The `tjbal` package further augments estimation by matching treated and control units on both the means and higher-order moments of their pre-treatment distributions, using kernel expansion of the pre-intervention vectors of outcomes. In theory, this kernel-expansion means that we are matching our treated and control units not only on their period-by-period averages, but also on distributional features of the outcome variable, such as variance, skewness, and kurtosis. Substantively, this rich matching strategy matches treated units with control units with a similar “trajectory,” providing more confidence in our claim that the parallel trends assumption is satisfied.

4 Results

To anticipate our main findings presented in detail below, our principal analysis of campaign contributions reveals no systematic impact of the GFC on the campaign contributions of exposed firms — but when we consider the GFC effect by political party, we find suggestive evidence that the war chests of Democratic recipients of campaign contributions took a negative hit. Third party and Republican candidates appear to have benefited, by comparison.

Turning to lobbying expenditures, we find an unambiguous picture. The GFC substan-

Figure 5: Average Treatment Effects on the Treated



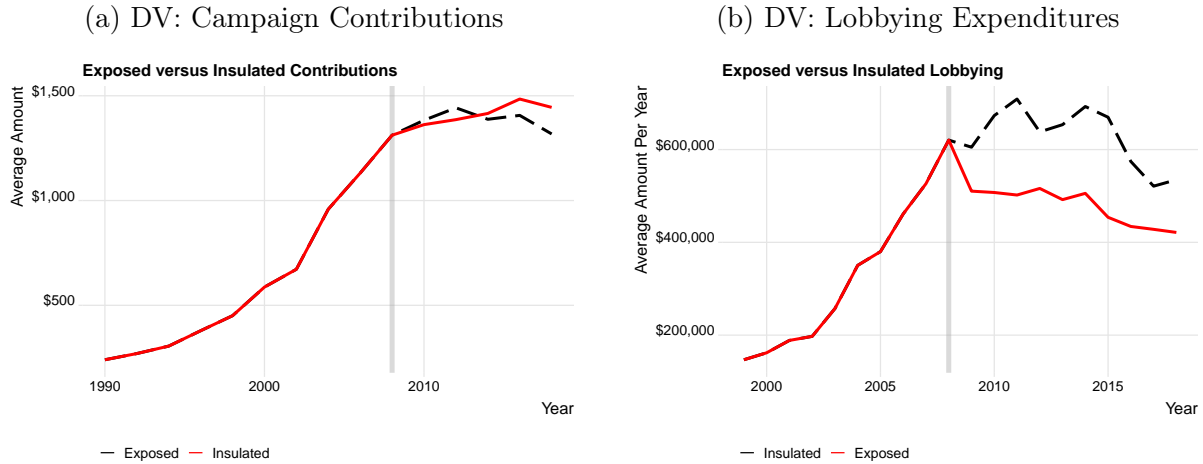
tially impacted the lobbying expenditures of exposed firms. When comparing these expenditures to those of firms insulated from the crisis, we find that the negative effect of the GFC on lobbying has persisted over time. In other words, the GFC indeed appears to have tipped the balance of political capital away from the winners from globalization.

Campaign Contributions and Lobbying Expenditures

We begin by estimating the effect of exposure to the GFC on our two main measures of political influence — campaign contributions and lobbying. These results are summarized in Figure 5, which plots the average treatment effect on the treated (ATT). As illustrated, there is little evidence to suggest that the GFC had a meaningful impact on the contributions of firms writ large. While the average contributions by exposed firms do dip below those of insulated firms in the ensuing cycles, the difference is neither statistically nor substantively meaningful.

The results summarized in Figure 5a describe a shift in the relative campaign contributions of firms who were exposed to the GFC, compared to those firms that were insulated from the crisis. Furthermore, as the plot makes clear, the magnitude of this divergence was greatest in the years immediately following the GFC. Nevertheless, there is little to suggest that the global financial crisis shifted the basis of private sector influence on American poli-

Figure 6: Average Spent by firms per year, Exposed vs. Insulated



tics. The analysis in Figure 6a, which compares the impact of the GFC on the treated with the untreated firms, is consistent with these results.

A different story emerges when we turn our attention to lobbying behavior, however. As illustrated in Figure 5b, the divergence between insulated and exposed firm lobbying is substantially greater, statistically significant, and persists over the ensuing years.

Insofar as political influence is a zero-sum game, these results tell a compelling story of shifting electoral fortunes. But does this divergence reflect a relative or absolute decline in lobbying? A relative decline would obtain if both insulated and exposed firms continued to increase their lobbying expenditures in the ensuing years, with the ATT generated by insulated firms increasing by a greater amount. Conversely, an absolute decline would mean that the exposed firms' lobbying fell off after the crisis. Figure 6b suggests that the answer lies somewhere in the middle of these stories. As illustrated, exposed firms did indeed see a drop-off in their lobbying, a decline that has yet to recover to its pre-crisis levels. And this reduction in influence coincided with increased spending by the relatively insulated firms, at least up until 2015. More recent years suggest that the insulated firms have also seen a decline in lobbying expenditures, although the gap that opened up with the GFC persists.

Did this shift reflect a fundamental restructuring of American politics? Or was it a short-lived aberration after which economic recovery replaced the dominant players in their

traditional positions of influence? The story here is slightly more nuanced. On the one hand, the lobbying data would suggest that the shift was permanent. The exposed firms experienced a decline in influence from which they would be unable to recover. Even the most similar firms that were less exposed to the GFC — those that also saw a secular decline in lobbying from 2007’s high-water mark — maintained a substantial lobbying advantage of approximately \$75,000 per year.

But on the other hand, what suggestive evidence of a gap in campaign contributions that appeared immediately following the crisis quickly disappeared, as illustrated in Figure 6a. If anything, the exposed firms actually outspent their most similar insulated counterparts after 2012, although again the difference is both substantively and statistically trivial.

Did the terrain of money in politics change?

What is the relationship, if any, between this shift in political influence and the electoral fortunes of politicians and parties? We explore this question in two ways. First, we predict the campaign contributions to Democrats and Republicans separately. Second, we calculate a donation-weighted measure of recipient ideology and use this as the outcome of interest.

The former is a straightforward investigation of whether one party or another benefited disproportionately as a function of the GFC. The latter captures the degree to which more ideologically extreme candidates benefitted as a function of the GFC. To construct this donation-weighted measure, we treat the recipient politician’s ideology as the outcome of interest, and calculate a weighted average of this measure for each donor in each cycle, with weights given by the share of total contributions that went to a given politician. To accommodate challengers, we rely on [Bonica’s \(2019\)](#) DIME database which estimates ideology for any politician who has received campaign contributions.

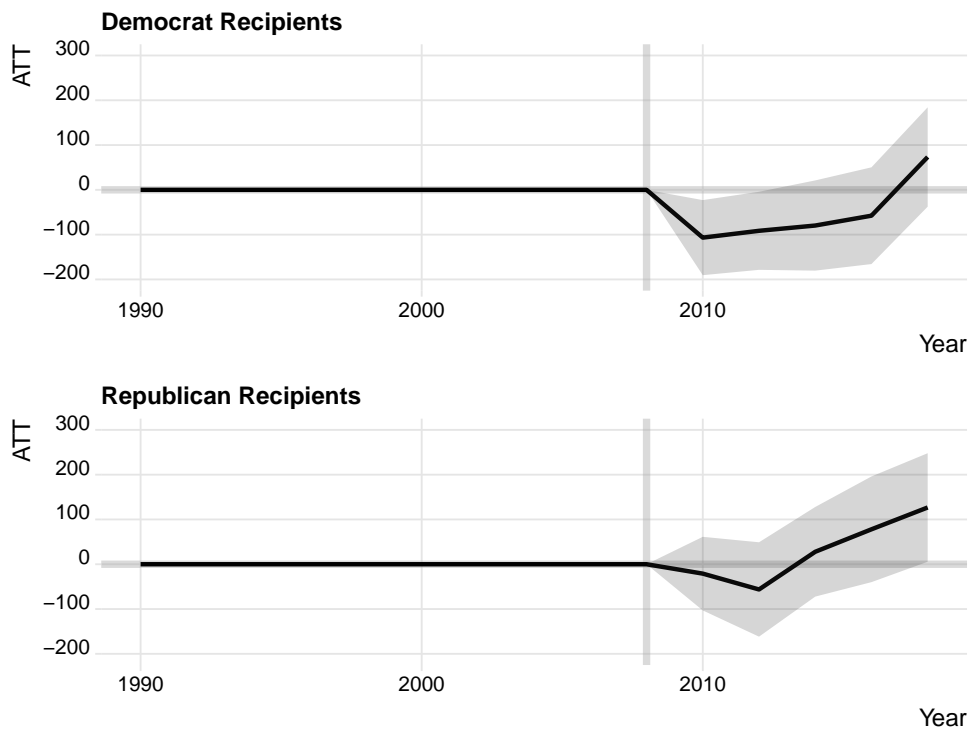
We begin by examining the partisan split along the dimensions of campaign contributions and lobbying in Figure 7. The top panel displays the ATT estimates subsetting to Democrat recipients of the contributions, while the bottom panel does the same subsetting to Repub-

lican recipients. As illustrated, the global financial crisis yielded a reduction in campaign contributions to Democrats of approximately \$100 per firm in the ensuing cycle, while the estimated gap for Republican recipients was negligible. These plots suggest that, while the overall effect of the crisis did not yield striking divergence in the overall contributing behavior of insulated versus exposed firms, it did significantly affect the war chests of Democratic candidates.

However, these subset results are suggestive at best. While the ATT estimates for the Democrat reduction are roughly double those observed for Republicans, the estimates are noisy enough to preclude stronger claims about a partisan penalty. An alternative test of the partisan fortunes that were affected by the GFC is to reorient the data to make the party affiliation of the recipient the identifying group, and then compare how Democrats fared against otherwise identical Republicans in prior to, and following, the global financial crisis.

However, re-orienting the data in this fashion prevents us from using the trajectory

Figure 7: Average Treatment Effects on the Treated, by campaign contribution recipient

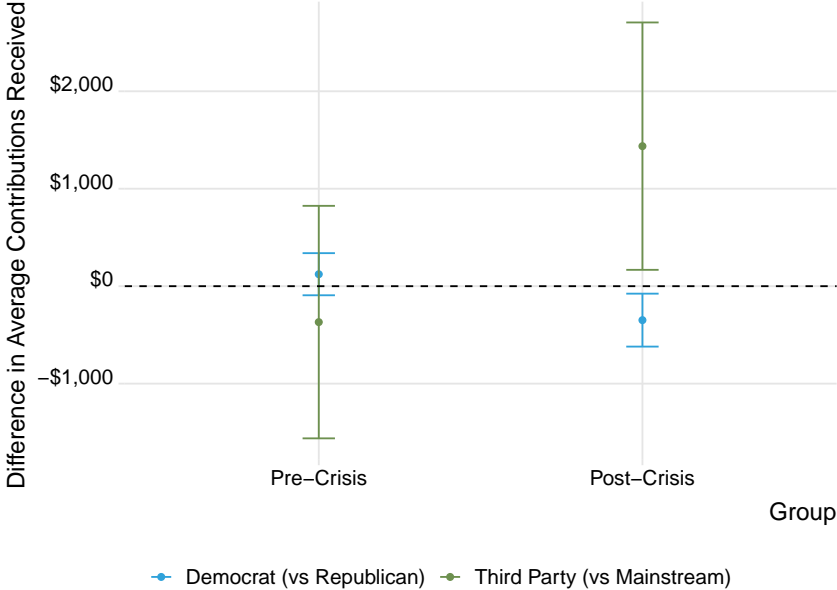


balancing method used above, since very few of the recipients are consistently observed over the full period of interest. Instead, we fall back on a more conventional differences-in-differences analysis of the following form:

$$y_{i,t} = \alpha_i + \delta_t + \beta_1 D_i + \beta_2 Post + \beta_3 D_i \times Post + \varepsilon_{i,t} \tag{2}$$

where $y_{i,t}$ is the average amount of contributions received by candidate i in cycle t , D_i is an indicator that takes the value 1 if the candidate is a Democrat (alternatively, a third party candidate) and zero otherwise, and $Post$ is an indicator that takes on the value 1 after 2008. α_i and δ_t are random effects for candidate and cycle, respectively. We are interested in the β_3 coefficient that captures the growth in the difference between Democrats and Republicans (or third party versus mainstream candidates) following the GFC. Figure 8 plots these results as marginal effects.

Figure 8: Difference in Average Contribution Received, pre- and post-crisis



As illustrated, there is statistically significant divergence between the support for Democrats and Republicans following the GFC. Specifically, while the average candidate in each party received roughly the same average contributions in the pre-crisis period, in the post-crisis

period Democrats started to fall behind Republicans to the tune of approximately \$400 per cycle in the average contribution. The reverse pattern obtains for third-party candidates, indicated by the green bars in Figure 8. In the pre-crisis period, 3rd party candidates earned roughly the same per contribution as Democrats and Republicans (labeled “mainstream” in the figure). Following the crisis, these outsiders began enjoying approximately \$1,400 more per contribution.

By themselves, these trends are only weak evidence of a shift in the center of gravity in American political power. Many other things were happening over this period, and by orienting our data to make the recipient politicians the unit of analysis, we are unable to rely on the exposure mapping described above. But in conjunction with the widening gaps between exposed and insulated firms described above, this is at least smoking gun evidence suggesting that (1) third-party candidates benefitted and (2) Republicans benefitted, at least in relative terms.

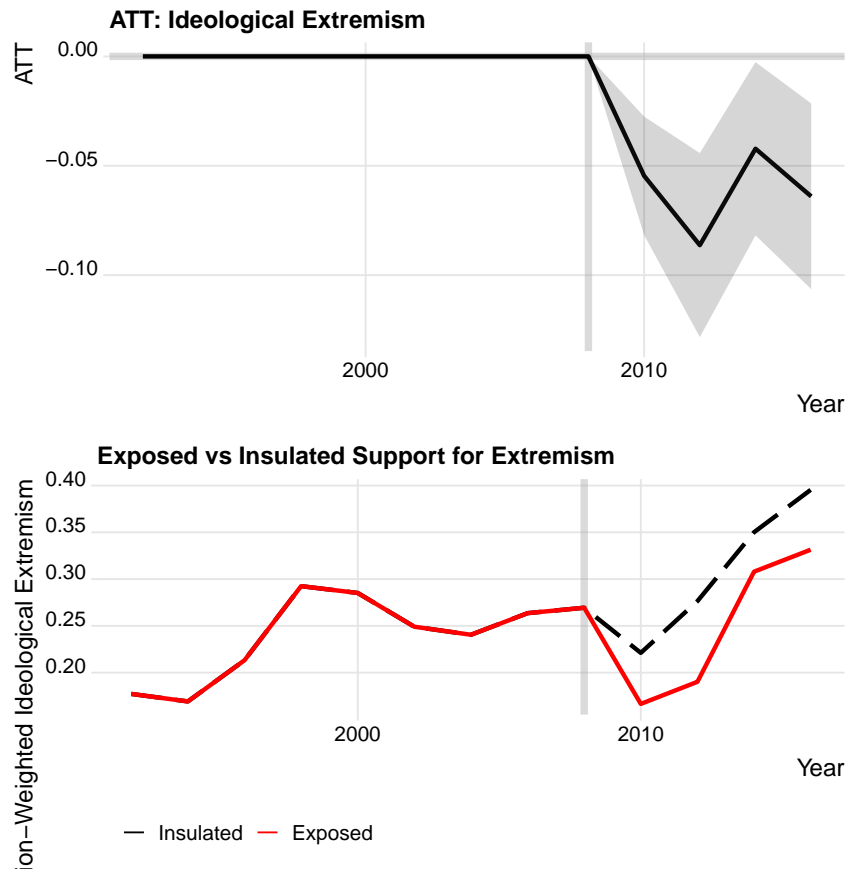
To more directly link these dynamics with the firm-level measure of exposure, we return to the trajectory balancing approach and replace the nominal value of campaign contributions with a donation-weighted average of the ideological extremism of the receiving candidates. Specifically, for each firm, we take the weighted average of the recipient politicians’ ideology, where the weights are the amount contributed in each transaction. Formally, firm f in cycle t has an ideology-weighted donation profile of:

$$Ideo_{f,t} = \sum_i Ideo_i * \frac{Cont_{i,f,t}}{\sum_{j \neq i} Cont_{j,f,t}}$$

To capture the degree to which firms started contributing to more ideologically extreme candidates, we square this weighted ideology measure. We then apply the same trajectory balancing method described above, the results of which are summarized in Figure 9. In the top panel of Figure 9 we see that in the years following the GFC, exposed firms are giving less to ideologically extreme candidates than insulated firms. Indeed, as illustrated in the bottom

panel, exposed firms are giving much less to ideologically extreme candidates in the ensuing cycles, leaving space for the otherwise insulated firms to support non-moderate candidates. We explore this link between the GFC and the rise of more ideologically-extreme candidates in the next section.

Figure 9: Weighting Recipients by Ideological Extremism



Anti-Establishment Politicians

According to the framework summarized in Rogowski (1987), the preferences of globalization’s winners and losers are clearly defined. In his stylized model, winners and losers were sharply divided along the dimensions of expanding and declining exposure to trade. In the first two decades of the 21st century, the salience of foreign policy along such simplified dimensions was greatly diminished (see, e.g., Osgood, 2016; Kim, 2017; Baccini, Pinto, and

Weymouth, 2017; Malesky and Mosley, 2018; Kim and Spilker, 2019; Weldzius, 2021, among many others). But the underlying intuition that economic disruption erodes the existing power structures persists. Indeed, while the complex integration of the global economy today defies the old reductionist models that identified winners and losers from globalization via factor endowments and sector employment, new new trade theory still seeks to identify firms that generally win from greater economic integration from those that lose out from global competition. The GFC led firms that had been winning from participation in the global economy to suddenly take massive losses, finding themselves less able to expend resources on political influence. Insulated firms, by contrast, suddenly found that their political war chests were in a comparatively advantageous position to influence politicians. Pursuant to this intuition, we test whether outsider politicians benefitted from the global financial crisis.

The analysis of ideological extremism summarized above touches on this dimension, albeit tangentially. Here we focus explicitly on the campaign contributions that went to non-incumbents. Our assumption is that an uptick in these contributions represents a shift toward anti-establishment politicians.

To test this, we again organize the data by recipient politician, and rely on the diff-in-diff specification described above. Figure 10 plots the results of the analysis, comparing the average contributions received by incumbents to those received by challengers (red), and the average receipts of open seats to occupied (black). As illustrated, there is striking evidence that incumbents suffered a large penalty following the GFC, and that much more was spent on open seats than occupied races following. The magnitude of these estimates is substantial, amounting to over \$2,500 per contribution in both cases.

But do these average receipts translate into substantial losses when aggregated up per cycle? Figure 11 suggests that they do, with only negligible differences in the pre-2008 period giving way to large disparities in excess of \$1m per cycle favoring challengers, and over \$2m more spent on open seats.

However, by focusing on the recipient politician as the unit of aggregation, these results

Figure 10: Difference in Average Contribution Received, pre- and post-crisis

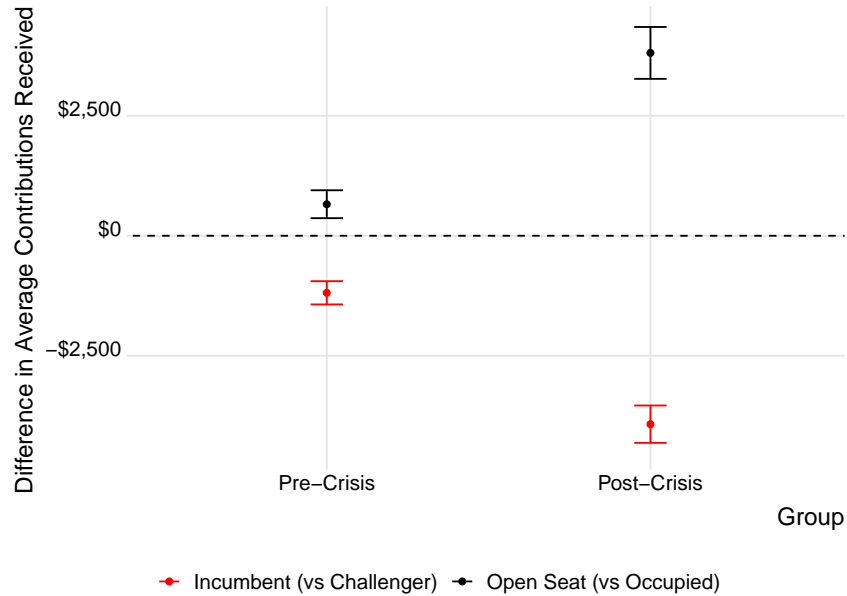
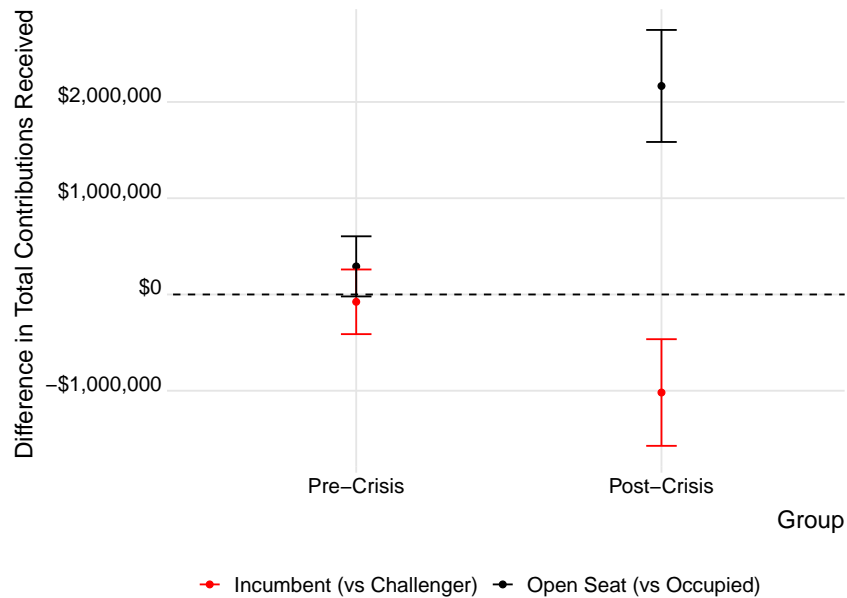


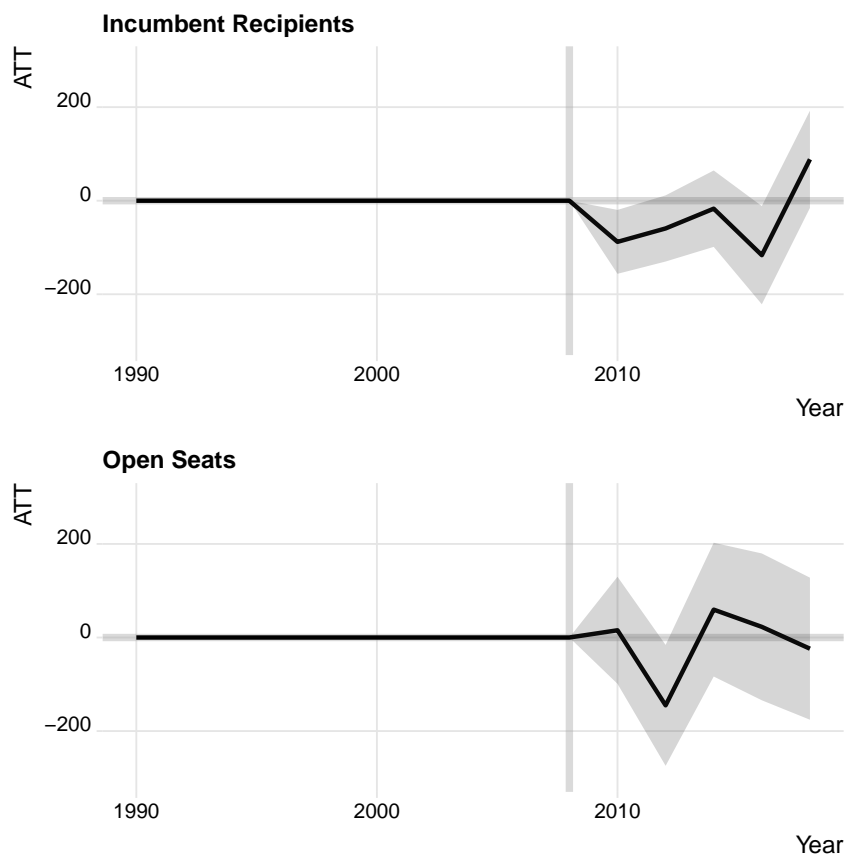
Figure 11: Total Contributions Received, pre- and post-crisis



again suffer from a lack of convincing identification. Is this divergence due to the financial hardship experienced unequally across firms in the United States? Or does part of the story involve the well-known pattern of punishing an incumbent for bad economic times? As a final test, we subset the trajectory balancing estimates by recipient status, plotted in Figure 12.

As illustrated, the penalty experienced by incumbents does appear to be at least partially driven by the financial challenges faced by a subset of donor firms. However, the increased contributions to open seats is uncorrelated with the firm-level exposure to the GFC.

Figure 12: Average Treatment Effects on the Treated, Incumbent and Open Seat Recipients



5 Conclusion

A fundamental assumption of the path-breaking work of Rogowski (1987) is that a reversal of financial fortunes translates into a change in political capital. Yet, there is little empirical work in IPE studying precise channels impacting political power following crises. We take a narrow approach by carefully examining a rich dataset on two key channels — campaign contributions and lobbying expenditures — in an important case, the United States following the 2008 global financial crisis. We interrogate whether the GFC presented an upheaval in

these prevailing channels of political influence.

In line with Rogowski's theory, we show that the GFC did indeed disrupt the relative influence of different economic actors on politics. Specifically, both campaign contributions and lobbying expenditures among the firms most exposed to the crisis declined significantly. Furthermore, these shifts in the tools of political influence tended to impact incumbents negatively, and with more political capital being directed at open seats.

Many scholars are scrutinizing the origins of the recent backlash against globalization, focusing on how deteriorating economic conditions have led people to change their preferences over open economies. Rather than look at changing preferences, our work here emphasizes instead the changes in the amplification of the voice and influence — specifically via campaign contributions and lobbying expenditures. Future work should continue to investigate how these expenditures influence voting behavior and policy. The purpose of this paper is simply to highlight that anti-globalization preferences have persisted throughout the integration of world markets, and one of the effects of the GFC seems to have been to increase the relative influence of these preferences in US politics. This paper adds to the literature on economic shocks and political outcomes, providing a clear channel through which these relative shifts in economic power translate into political power.

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Appendix

Figure 13: Contributions to Candidates and PACs (exposed: blue; insulated: red)



Figure 14: Contributions to Candidates and PACs, by party affiliation (exposed: blue; insulated: red)

