

# How Labor Unions Affect Firm Value: Evidence from Political Contributions in the United States

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## ABSTRACT

This paper investigates the relation between political engagement by special interest groups (corporations and labor unions) and corporate stock returns in the United States. Exploiting two opposing interventions affecting the legality of soft-money political contributions from unions and corporations, we find that abnormal returns around the ban (repeal) of soft-money contributions are positively (negatively) related to unionization. These results suggest that political spending by labor unions has a meaningfully deleterious effect on the value of unionized corporations. To counter-engage labor unions in the political arena, we find that unionized firms provide more support (i.e., hard-money contribution) for Republicans.

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Each election cycle, labor unions directly contribute millions of dollars in hard-money donations to political candidates running for office in the United States. Special interest groups such as corporations and labor unions are able to provide politicians with financial support through two different channels. The first of these channels is known as direct, “hard money” contributions. In short, through this channel, special interest groups are able to establish a Political Action Committee (PAC) which can then provide up to \$5,000 to each and every candidate up for federal election. A complete discussion on the hard-money and soft-money contributions is deferred to Section 1. Importantly, evidence suggests that labor PACs are successful in their pursuit of labor unions’ interests. For example, Moore et al. (1995) find that labor PAC contributions in the United States influence Senate roll-call votes on bills deemed to be important by labor unions, including legislation that specifically relates to union power.<sup>1</sup>

The second method by which a special interest group (i.e., a corporation or labor union) can engage in the political process is known as “soft-money” contributions. These contributions have the special feature of having no limits on the amount that can be contributed by special interest groups as well as individuals, so they can basically contribute as much “soft-money” as they want to. Although these soft-money were not heavily used until the 1990s, soft-money surged after 1992 (Ansolabehere et al., 2004). In terms of aggregate values, Ansolabehere et al. (2004) report that during the 2000 election, the two major parties raised approximately \$500,000,000 in soft-money (Ansolabehere et al., 2004).

If political contributions really do change policy outcomes, such aggressive, Democratic-leaning support by labor unions generates two interesting questions that this paper seeks to answer. First is the empirical question of what effect (if any) this form of spending by labor unions has on the value of corporations who are most exposed to them? In other words, do unions have a deleterious effect on firm value through their political influence?

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<sup>1</sup>In fact, despite the general decline in union membership since the 1970s, contributions to candidates by labor PACs actually increased (in real terms) from 1970 to 1992 (Masters, 2006). It is also interesting to note that PACs were established by labor unions before corporations (Masters and Keim, 1985).

And second, does a firm’s union status predict the level of partisanship in their corporate political contributions. In other words, do corporations appear to “counter-engage” labor unions in the political arena through the provision of funds to anti-union platforms?

Furthermore, these questions are not just interesting in their own right. Indeed the second question may help resolve extant questions in the broader literature on corporate political contributions. Specifically, they may provide insights into the fundamental question of whether or not corporate political contributions are motivated by investment or agency. For example, on the one hand, Aggarwal et al. (2012) argue that political contributions are not shareholder value-maximizing and merely represent a manifestation of the manager-shareholder agency problem. According to this view, corporate spending on political activities represents nothing more than the value-destructive consumption of a perquisite. Aggarwal et al. (2012) find support for the manager-shareholder agency argument by showing that firms who donate directly to political candidates from corporate treasury (i.e., soft-money contributions) experience reduced excess returns in the following year. They also find that firms with poor governance characteristics are more likely to engage in soft-money activity. However, on the other hand, Cooper et al. (2010) find that hard-money contributions to candidates from corporate PACs are positively correlated with *future* abnormal returns and future profitability (proxied by future evolutions in return on equity).<sup>2</sup> Similar findings are made by Hill et al. (2013) who show that both PAC contributions and corporate lobbying appear to be positively associated with firm value.

Thus, with the ex-ante identification of a tractable incentive to engage in the political process, the failure to document a relation between unionization and *corporate* political giving would be inconsistent with the notion that political contributions can be viewed as an investment.

To answer our first research question, we employ an event-study approach in which we

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<sup>2</sup>Although contributions from corporations only represent around 10-12% of campaign funding, Cooper et al. (2010) argue that because firms tend to make large contributions relative to other contributors they are much more likely to be considered important by politicians. Further, they point out that some candidates do in fact, receive a significant proportion of their funding from corporations vis--vis individuals.

test for differences in market reactions to two opposing, exogenous shocks to the legality of “soft-money” contributions from *both* corporations and labor unions. Specifically, we test the relation between industry and firm-level unionization and abnormal returns around a key event relating to the Bipartisan Campaign Reform Act (BCRA) of 2002 as well as the landmark *Citizens United vs Federal Election Commission (FEC)* Supreme Court ruling (5–4) in 2010. The BCRA is the blanket ban of soft-money contributions by *both* unions and corporations (i.e., the “switching-off” of one of the most powerful methods by which a special interest group can financially support federal candidates) and its subsequent repeal in the well-known case of *Citizens United vs FEC* (2010). To answer our second research question on how unionized firms counter-engage labor unions in political arena, we employ fixed effects panel regressions of measures of hard-money corporate political contributions on firm-level unionization. To measure hard money contributions and firm-level unionization, we take advantage of hand-collected data on corporate financial contributions from the FEC as well as hand-collected data on unionization from the National Labor Relations Board (NLRB).

Overall, our first main results indicate that despite their decline, labor unions still wield significant power through their costly participation in campaign financing. We find that abnormal returns around the ban (allowance) of soft-money contributions are positively (negatively) related to unionization. For example, a one standard deviation increase in industry unionization is associated with a 0.28% increase in abnormal returns for a three-day window, which is approximately \$7.65 million dollars. The results are even more pronounced when we use firm-level union status. Our second main results show that unionization is associated with higher dollar-weighted support for Republican candidates and reduced support for candidates who receive significant funding from labor organizations. Taken together, we interpret this as evidence that labor unions have a deleterious effect on firm value through their costly political participation. Further, we note that the patterns in unionized corporations’ political spending leaning towards Republicans appear consistent with a “counter-engagement”

strategy—providing support for the investment hypothesis.

Overall, our paper contributes to the literature by demonstrating two main results: (1) a robust negative association between unionization and firm value derived from political contributions in the United States; and (2) an association between unionization and patterns of corporate political contributions to counter-engage labor unions at the firm-level. Specifically, our first research question and results contribute to the literature on the effects of labor unions on firms value. For example, Lee and Mas (2012) document that the establishment of a new labor union reduces the firm equity value. We bolster this line of research by offering a specific economic channel, *union political spending*, for why labor unions have a negative impact on firm value. Our second research question and results contribute to the debate on whether corporate political contributions are shareholder value-maximizing or merely represent a manifestation of the manager-shareholder agency problem.

Notably, our setting allows us to specify a test of the investment hypothesis in which we compare two groups where the treatment group is presented with a partisan political challenge (i.e., labor unions) that is of significantly lesser concern to the control group. This allows us to form and test expectations regarding a corporations donation activity based on an investment motive. Conditional on this specific political problem, our findings are consistent with the notion that corporate financial contributions to politicians at least in part reflect an investment motive (see, e.g., Cooper et al. (2010)) rather than a mere reflection of owner-shareholder agency problem (see, e.g., Aggarwal et al. (2012)). However, our second result should not be viewed as contradicting the findings by Aggarwal et al. (2012) as our results are not the average actions or outcomes of all firms but are a comparison of actions or outcomes of unionized firms and non-unionized firms. In terms of regulatory implications, our results strongly support the view that Citizens United vs FEC provides labor unions with an important political activism channel that appears to reduce the value of corporations that are exposed to them.

The remainder of this paper is organized as follows: Section 1 describes the background of

hard-money and soft-money contributions. Section 2 develops and presents our event study analysis to test our first research question, Section 3 develops and presents our firm-level panel regression to test our second research question, and finally, Section 4 concludes.

# 1 Background on Hard-money and Soft-money Contributions

In this section, we provide a brief background on hard money and soft-money contributions. For more details, we refer readers to Ansolabehere et al. (2003) who provide a more comprehensive overview of the sources and sums of campaign contribution under the Federal Election Campaign Act of 1974.

## 1.1 Hard-money Contributions

For hard-money contributions, special interest groups (i.e., a labor union or corporation) are able to establish a Political Action Committee which can then provide up to \$5,000 to each and every candidate up for federal election. These distributions are funded from donations collected from eligible donors such as employees and union members. For example, Political Action Committees (PACs) associated with labor organizations are able to collect voluntary contributions from union members (often elicited alongside their dues) which can then be distributed to pro-union politicians (see, e.g., Freeman and Medoff (1984)). These labor PACS are believed to pursue two forms of potential legislation: (1) bills that directly support union power; and (2) bills that support labor in general, particularly those who earn low incomes (Freeman and Medoff, 1984). Labor PACs are therefore no more than de facto *special interest* groups who support bills that either directly or indirectly enhance the welfare of their members.

Although contributions from corporations only represent around 10-12% of campaign funding, Cooper et al. (2010) argue that because firms tend to make large contributions rel-

ative to other contributors. Therefore, politicians are more likely to consider contributions from corporations are important. Further, Cooper et al. (2010) point out that some candidates do in fact, receive a significant proportion of their funding from corporations vis--vis individuals.

## 1.2 Soft-money Contributions

A special interest group can also engage in the political process through soft-money contributions. Specifically, in 1979, the Federal Election Commission issued a ruling that political parties could create accounts dedicated to money that is used for so-called “party building activities” (e.g., vote drives and “issue” advertisements). Importantly, these accounts exist *outside* the system governing hard-money contributions and are therefore not subject to the same contributions limits nor to the prohibitions on sources (i.e., funds can come from general treasuries).

Although soft-money were not heavily used until the 1990s, soft-money surged after 1992 (Ansolabehere et al., 2004). Notably, the increased use of soft-money by political parties in the 1990s appears to have been related to a Supreme Court decision in June of 1996 which ruled that party organizations could spend unlimited funds as long as they did not explicitly “coordinate” the spending with candidates. This resulted in the funding of “non-coordinated issue advocacy” that appeared much more consistent with coordinated, de facto campaign ads for powerful politicians. For example, The Washington Post (1998) reported that during the 1996 election, the Republican National Committee (RNC) funded 60 second advertisements with soft-money that spent just four seconds on the issues and 56 seconds on promoting Bob Dole for president. Of course, The DNC (Democratic National Committee) ran similarly funded ads promoting Bill Clinton.

Notably, Center for Responsive Politics (ndb) report that the top five donors (in order) in this same 1996 election cycle include: AT&T, the American Federation of State, County and Municipal Employees, the American Association for Justice, the National Education

Association, and the Teamster’s Union. All of whom contributed in the range of \$3,157,147 to \$4,057,095. The remainder of the top 10 donors were all labor unions, giving a minimum of \$2.9 million with an extremely heavy democratic lean (minimum 94% of contributions going to democrats and liberals).<sup>3</sup>

## 2 Event Study Evidence

Our analysis begins by testing the sensitivity of abnormal returns to unionization around two key policy interventions affecting the legality of soft-money contributions. Namely, the Bipartisan Campaign Reform Act of 2002 (BCRA) as well as the landmark 2010 Supreme Court decision of *Citizens United vs FEC* (hereafter referred to as Citizens United). Importantly, these shocks work in *opposite* directions as the latter case overturned key provisions of the former, allowing for a much more convincing test, ex-ante.

The BCRA was a bill chiefly sponsored by Senator John McCain (Republican) and Senator Russ Feingold (Democrat) and resulted in a ban on soft-money contributions (Cooper et al., 2010). According to Briffault (2002), the BCRA is the most significant alteration to campaign financing regulations since the Federal Election Campaign Act (FECA) of 1971 and its’ amendment in 1974. The most important part of the Act include its’ restrictions on the use of soft-money and “issue” advocacy. Specifically the Act completely bans national parties from using soft-money as well as aggressively restricting the use of soft-money by state parties in national elections. Further, the Act also expanded FECA’s prohibitions on “electioneering” communications (i.e., advertisements advocating a federal candidate within 30 days of a primary or 60 days of a general election), disabling the use of corporate and union treasury funds for these purposes (Briffault, 2002).

The BCRA (measure number H.R. 2356) passed in the House on the 14th of February, 2002 with a vote of 240–189 (56%) (Office of the Clerk, U.S. House of Representatives, 2002).

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<sup>3</sup>Other alleged schemes used by special interest groups to gain influence include paid speeches, honorariums, and donations to affiliated charities (e.g., the Clinton Foundation). However, honorariums to members of Congress were outlawed by the Ethics Reform Act of 1989, which became effective in 1991.



The bill was then passed *without amendment* in the Senate shortly thereafter on the 20th of March, satisfying the requirement of a simple majority with a vote of 60–40 (United States Senate, 2002). Importantly, this vote was preceded by agreement (68–32) on a cloture motion on the same day, destroying any opportunity for opponents of the bill to attempt a filibuster (148 Cong. Rec. S2111).<sup>4</sup> Finally, the Bill signed into law by the president a week later (Congress.gov, 2002).

Thus, there are ultimately three events related to the passage of the BCRA; (1) the passage in the House; (2) the passage in the Senate; and (3) the signing by the President. However, it is not clear that these follow-up events (i.e., events 2 and 3) would have genuinely “surprised” the market. For example, before the final vote on the passage of the BCRA in the Senate, Senator McConnell (R-KY), an opponent of the bill stated that “...regretfully, this bill is going to pass and in all likelihood, be signed by the President...” (148 Cong. Rec. S2160). Furthermore, ex-post, the BCRA’s treatment in the Senate is inconsistent with the assumption that the event on the 20th of March would have surprised the market. We point to five facts that support this perspective. First, the BCRA passed the Senate quite rapidly, taking only 22 days from its’ introduction into the Senate. Second, it was effectively only considered for one day, passing on the same day as its’ consideration. Third, it passed without amendment. Fourth, the cloture motion to bring about its’ final vote passed with a supermajority of 68–32. Fifth, the Bill itself passed with a supermajority of 60–40.

Thus, ex-ante, the reliance on these follow-up events could result in a joint test of our hypotheses as well as the empirical question of their informational content. Such a design is likely to lead to spurious inferences regarding our core hypotheses. To avoid such a misspecification, our analysis of the impact of the BCRA is centered on the market’s reaction to its’ originating event, the initial passage in the House, which unambiguously and significantly increased the market’s assessment of the probability that the law will pass.

Fortunately for us as researchers, core provisions of the BCRA were ultimately ruled as

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<sup>4</sup>The cloture motion was filed by Senate Majority Leader Tom Daschle (D-SD) on the 18th of March (Congress.gov, 2002).

a breach of the First Amendment’s protections of free speech in the Supreme Court case of *Citizens United vs FEC* (2010). This decision was handed down on the 21st of January, 2010 in a surprise 5-4 vote following a reargument. Notably, this decision reversed the BCRA’s ban on corporations and labor unions from engaging in independent political spending (from general treasuries) as well as its’ ban on electioneering communications. The implication of course was that corporations and labor unions could once again freely spend unlimited sums of money to advocate for or to oppose candidates running for office.

Thus, our empirical strategy involves the execution of an event study in which we test the relation of unionization to abnormal returns surrounding two opposing “shocks” to the legality of political spending *outside* of FECA.

## 2.1 Hypothesis Development

We develop hypotheses for our event studies from two competing perspectives which we call the (1) the Labor Union “Investor-contributor” Relevance (UICR) perspective and (2) the Corporate Power Narrative (CPN) perspective. The UICR perspective follows from the premise that labor unions form a de facto special interest group that seeks to influence regulation that benefits its’ movement and its’ members. For example, Freeman and Medoff (1984) provide that labor unions are primarily interested in supporting bills that (1) directly support union power; and (2) support general labor, particularly low-wage earners. It follows then that this perspective asserts that political spending by unions is not merely a consumption good, but is instead an investment aimed at increasing the welfare of its’ stakeholders.

Labor unions, funded by their own members as well as other contributors, support a portfolio of candidates whose political platforms are consistent with their own philosophies. This spending may then increase the probability that their preferred candidates will win their seats, and in turn, increases the probability of pro-labor legislation (see, e.g., Snyder (1990), Cooper et al. (2010)). If unions do indeed genuinely concern themselves with the

welfare of their members and potential members, we would expect to observe that firms operating in unionized industries will be better-off (worse-off) relative to firms in less unionized industries following the BCRA (Citizens United). This follows naturally from the idea that increases in union power lead to transfers of wealth from shareholders in affected companies to their employees. Because unions are self-interested, these effects should be highest where they are most active. Thus, our first hypothesis is given below:

Hypothesis 1a (UICR): *Abnormal returns surrounding the BCRA (Citizens United) will be positively (negatively) associated with industry-level union density.*

Further, if union political power is positively associated with excess wages, as suggested by recent *Australian* evidence presented in Stanfield and Tumarkin (2016), we should also expect to observe a similar relation to Hypothesis 1 at the firm-level. Thus our second, and related hypothesis is:

Hypothesis 1b (UICR): *Abnormal returns surrounding the BCRA (Citizens United) will be positively (negatively) associated with firm-level unionization.*

However, we also consider an alternative perspective that is motivated by commonly held beliefs, particularly on the partisan left, that corporations are by far the most influential and corrupting influence in American politics.<sup>5</sup> We refer to this perspective as the Corporate Power Narrative. Under this perspective, even though political contributions by labor unions may be large, they are unlikely to out-influence corporations. Thus, the CPN generates two additional counter-hypotheses and transforms our question into an empirical one:

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<sup>5</sup>For example, Cenk Uygur the founder of Wolf PAC, a non-profit activist organization dedicated to campaign finance reform was quoted as saying “Our politicians do not serve us; they serve the multinational corporations that pay them...Let’s end the corporate takeover of our government” (Wolf PAC, nd).

**Table 1**  
**Event-study Hypotheses—UICR vs. CPN**

Table 1 provides a summary of predictions for our event studies based on the Union Investor-contributor Relevance (UICR) and Corporate Power Narrative (CPN) perspectives.

(1)	(2)	(3)	(4)
			Events
Perspective	Treatment Variable	BCRA (ban)	Citizens United (repeal)
		Predictions	
UICR	Industry Unionization	+	–
UICR	Firm-level Unionization	+	–
CPN	Industry Unionization	–	+
CPN	Firm-level Unionization	–	+

Hypothesis 2a (CPN): *Abnormal returns surrounding the BCRA (Citizens United) will be negatively (positively) associated with industry-level union density.*

Hypothesis 2b (CPN): *Abnormal returns surrounding the BCRA (Citizens United) will be negatively (positively) associated with firm-level unionization.*

For clarity, our hypotheses are repeated in Table 1, below. Column 1 specifies the relevant perspective, Column 2 provides the treatment variable while Columns 3 and 4 provide the predictions for the BCRA and Citizens United events, respectively.

## 2.2 Controls

Our main tests use four time-varying control variables which likely act as joint determinants of unionization and abnormal returns around the BCRA and Citizens United. These include firm size, cash flow, financial leverage, and market-to-book ratio of assets. Value effects are likely sensitive to size for three reasons. First is the fact that political engagement is a costly exercise which may prevent smaller firms from participating. Thus, to the extent that participation generates firm-specific benefits (rather than spillovers), large firms may derive

significantly more value from political engagement than their smaller counterparts.

Second, it may be that politicians are more willing to have “meaningful connections” with large firms for the private benefits that such a relationship may impart upon the connected politician. For instance, large firm connections may increase the politician’s social capital and allow them to fraternize with powerful CEOs. They might also open up more exit opportunities for the politician. For example, connected politicians might also be more likely to be rewarded on the speech circuit after they leave congress. Further, large firm connections may also enhance the politicians prospects of a career as a well-paid lobbyist on ‘K street’ after leaving Congress. These earnings can greatly exceed the salaries earned in office. For example, the Center for Responsive Politics (nda) report that former Appropriations Committee Chairman, Bob Livingston earned in excess of a million dollars in just his first year on K street. In effect then, political relationships with large firms may be more welcomed by politicians as they increase expected payouts to the politician after she retires far more so than do small-firm connections.

Third, it may also be that politicians have a greater incentive to cooperate with large firms since they can further reciprocate by creating jobs in contested electorates, facilitating the party’s victory (see, e.g., Bertrand et al. (2006)). Consistent with these views, it has been demonstrated that firm size is positively correlated with a firm’s propensity to donate money to political campaigns (Masters and Keim, 1985, Cooper et al., 2010). We proxy for firm size with the natural logarithm of net sales.

Abnormal returns around our events may also be affected by agency. For example, Aggarwal et al. (2012) argue that political contributions may be a manifestation of agency, rather than an investment. One interpretation of this perspective is that agency conflicts may invite a *different type* of political contributor—the “perquisite-contributor”. In this case, senior managers may effectively capture cash flows and channel them to politicians whose platform reflects the *personal* political beliefs of management. Thus, political contributions by perquisite-contributors may be viewed as similar to purchases of private jets and other

potentially irrational spending such as long-distance golf club memberships, which have been shown to have a deleterious effect on value (Yermack, 2006). To control for these potentially confounding effects, we include in our regression the ratio of financial leverage to assets. Financial leverage reduces the quantum of cash flows that can be used at the discretion of managers (Jensen, 1986). Thus, firms with higher levels of leverage should be less vulnerable to perquisite-contributions. Further, following Hill et al. (2013), we include as an additional variable cash flow (operating income before depreciation less interest, taxes, and common dividends) scaled by assets.

Finally, another possible determinant of the value of political contributions is the firm’s growth opportunities. For example, Hill et al. (2013) argue that firm’s with higher growth opportunities may be more willing to incur lobbying fees. We reason that such a relation could be driven by two mechanisms. First, high-growth firms may be more vulnerable to political scrutiny which could be somewhat mitigated by political engagement. And second, high-growth firms may be deriving some value from diversified business interests in less-regulated secondary industries or from regulatory arbitrage. We proxy for growth opportunities using the market-to-book ratio as defined by Hill et al. (2013).<sup>6</sup>

## 2.3 Data and Empirical Strategy

To test our hypotheses presented in Table 1, we perform a cross-sectional analysis of cumulative abnormal returns (CARs) surrounding the passage of the BCRA on Thursday, the 14th of February 2002 and the decision in the Citizens United case on Thursday, the 21st of January 2010. We define cumulative abnormal returns as the realized return minus the expected return according to the market model. The CRSP equally-weighted index is used to estimate each stock’s beta. To mitigate the possibility that expected returns will be spuriously influenced by pre-event evolutions in covariance, We use a parameter estimation

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<sup>6</sup>Using Compustat Mnemonics, firm size is defined as the natural log of the Compustat variable sale (adjusted for inflation in panel specifications), market to book ratio of assets is defined as  $(prccf \times csho + lt) / at$ , cash flow is defined as  $(oibdp - txt - xint - dvc) / at$ , and financial leverage is  $(dlc + dltd) / at$ .

window of 255 days that ends 46 days prior to the event date. We require that the security has a minimum of 30 days of coverage during the estimation period to be included in the sample. We then obtain CARs for a number of windows from (-1,0) to (0,7).<sup>7</sup>

Our analysis begins with a sample of all firms listed in CRSP/Compustat with a link to a primary security on CRSP. We then drop all observations with a quarterly announcement date falling within 14 days of the event (from -7 to +7).<sup>8</sup> We do this to mitigate the risk that our results are driven by abnormal returns induced by earnings surprises, rather than the events themselves. We also drop firms involved in significant asset sales and/or significant mergers using Compustat footnote code AB (Chang and Dasgupta, 2011). We also drop firms whose primary industry is listed as either financial, public utilities, or public administration. These firms are dropped because they operate in highly regulated industries and may be unusually affected by alterations to campaign finance laws. Finally, we drop firms with missing data for one or more control variables. Our regression models are given below:

$$CAR_{(w)i,t} = \alpha_0 + \beta_1 \text{INDUSTRY UNIONIZATION}_{i,t-1} + \beta_k X_{i,t-1} + \epsilon_{i,t} \quad (1)$$

$$CAR_{(w)i,t} = \alpha_0 + \beta_1 \text{UVFIRMD}_{i,t-1} + \beta_k X_{i,t-1} + \gamma_{i,j,t} + \epsilon_{i,t} \quad (2)$$

The subscripts i, j, w, and t index firms, industries, event windows and year respectively. The variable CAR represents cumulative abnormal returns based on the market model. The variable X represents a vector of control variables which includes the natural logarithm of sales, market-to-book ratio of assets, cash flow scaled by assets, and financial leverage. These control variables are discussed in Section 2.2 and defined in Footnote 6. Because our shocks occur at the beginning of the year (February 2002 and January 2010, respectively), we lag

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<sup>7</sup>We use standard notation in event-time to define our windows. For example 0 represents  $t = 0$ . Thus the window (0,3) for example refers to cumulative returns over the event-day to three days post.

<sup>8</sup>Quarterly announcement dates are taken from the Quarterly Compustat file.

our treatment and control variables so that the information in the regression model better reflects the information set at the time of the intervention. The Parameter  $\gamma$  represents industry fixed effects.

Our treatment variable in Equation (1) is industry unionization. This variable is defined as the estimated proportion of workers in a given industry who are members of a labor union. These estimates are based on the Current Population Survey and are compiled by Hirsch and Macpherson (2003).<sup>9</sup> These data are collected based on the Census Industrial Classification Scheme which cross-walk to SIC or NAICS at the 2, 3, and 4 digit levels and the 2, 3, 4, 5, and 6 digit levels, respectively.

Our treatment variable in Equation (2) is a dichotomous variable coded as 1 if the firm has been identified as experiencing a union election victory in a representation election covering at least 50 workers at least once, otherwise 0. We refer to firms with a value of 1 for this variable as UV (union victory) firms and firms with a value of 0 as non-UV firms. We hand-collect these data from public disclosures by the National Labor Relations Board (NLRB). We compile these data from 1977 to 2010 using data from Holmes (2006) and releases from [www.data.gov](http://www.data.gov). To ensure that our firm-level estimates in Equation (2) do not merely reflect differences in unobserved industry characteristics, we also include industry-level fixed effects. Robust standard errors are used for inference.

## 2.4 Results and Discussion

### 2.4.1 Descriptive Statistics and Tests of Non-equivalence at the Mean

Before presenting and interpreting the results of our regressions in Equations (1) and (2), we first test for differences between UV firms and non-UV firms. Consistent with expectations, at the univariate level, we find that UV firms are significantly larger than non-UV firms and have higher levels of financial leverage as well as lower growth opportunities (proxied by market-to-book ratio of assets) (see., e.g., Woods et al. (2017)). We also find that UV firms

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<sup>9</sup>Industry unionization data is available from <http://www.unionstats.com>.



enjoy a higher ratio of cash-flows to assets. These results are presented in Table 2.

**\*\*\*PLACE TABLE 2 HERE\*\*\***

#### **2.4.2 Event-study Results of Unionization and Soft-money Political Contributions**

Results for the BCRA are presented in Table 3. Panel A presents the CAR results for our industry-level unionization Equation number (1) while Panel B presents the CAR results for our firm-level Equation number (2). Because the final debate on the Bill occurred during trading hours on the 13th of February and the bill was passed at 2:42am on the 14th we present the window (-1,0) as being the “event-day” where  $t = 0$  denotes the 14th of February.

**\*\*\*PLACE TABLE 3 HERE\*\*\***

Overall, our results on the BCRA are consistent with the predictions of the UICR perspective. Abnormal returns around a surprise legislative intervention which banned special interest groups from contributing previously unrestricted soft-money were significantly higher for firms with exposure to labor unions. These results demonstrate that labor unions have a deleterious effect on firm-value through their political spending. Results in Panel A reveal that the coefficient on industry unionization is statistically significant for the (-1,1), and (0,7) windows. Thus, it would appear that at the industry-level, differences in abnormal returns appear at  $t + 1$  and continue to accumulate through  $t + 7$ . To determine the economic significance of the relation, we multiply the coefficient by 11 (one standard deviation). Thus, for the (-1, 1) window, one standard deviation increase in industry unionization is associated with a 0.28% increase in abnormal returns. In terms of dollar amounts, this represents a mean difference of approximately \$7.65 million dollars (weighted by market capitalization). Over the (0,7) window, this increases to a difference of 0.65% (approximately \$17.74 million).

We find even stronger results at the firm-level. Significant differences in CARs between UV and non-UV firms are evident on the event-day (-1,0) as well during the (-1,1), (0,3),

and (0,7) windows. Similar to our industry-level analysis, we find that abnormal returns appear to accumulate through the week after the announcement. Abnormal returns on the event-day are an economically significant 0.65% (\$17.5 million) higher for UV firms relative to non-UV firms in the same industry while controlling for other determinants of political value. This increases to 1.78% (approximately \$48 million) in the week after the passage of the BCRA in the House.

Such an accumulation, or drift, is likely explained by the complexity of the bill and its' relevance to the first Amendment of the Constitution. As such, some market participants may have required extra time to form expectations regarding its' chances of being overruled by the Supreme Court, which may have taken several days.

Our interpretation of these results are reinforced by our results for the Citizens United intervention in Table 4. We find that when special interest groups were once again free to make soft-money contributions, firms with greater exposure to labor unions were made *worse off* than their counterparts. Unlike in the case of the BCRA, here, the effects were concentrated on the event-day (0,0) with an immediately detectable difference in abnormal returns at both the firm- and industry-levels. This is unsurprising given the event is a “final” decision by the Supreme Court. At the industry-level a one standard deviation increase in industry unionization is associated with a difference in abnormal returns of  $-0.41\%$  ( $11 \times -0.037$ ) on the event-day. This represents an average difference of \$21 million in market capitalization. In Panel B, our results indicate that UV firms experienced a similar reduction of  $-0.38\%$  on the event-day, increasing slightly to  $-0.44\%$  (significant at 10% level) for the (0,1) window, yielding quantitatively similar effects on market cap. Thus, our results are strongly consistent with the UICR perspective. Our inferences remain the same when we cluster standard errors at the industry-level.

Looking at the results overall, it is also interesting to note that at the firm-level, there appears to be an asymmetry in effect size. That is, the positive coefficient on unionization resulting from the BCRA is larger in absolute terms than the negative coefficient resulting

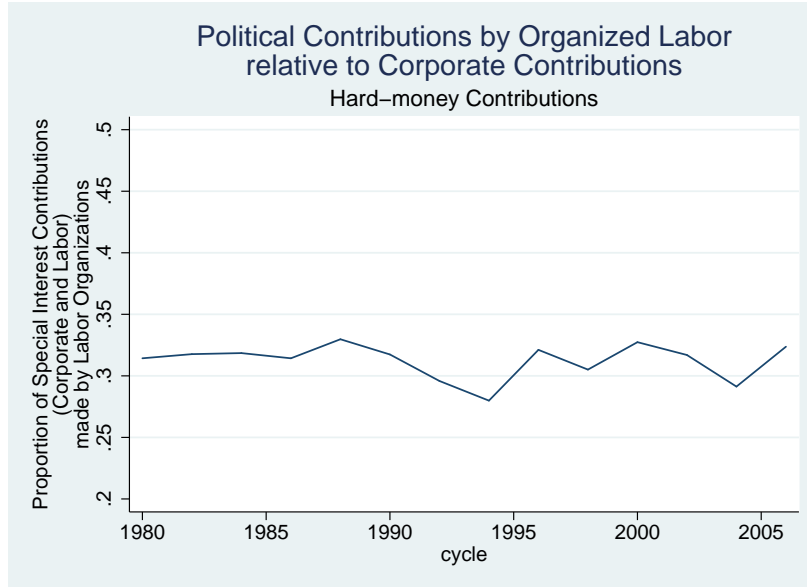
from Citizens United. There are two possible reasons for this difference. First, it could be that the potential political influence of labor unions has declined in the intervening period between the BCRA (2002) and Citizens United (2010). Though this explanation is not particularly compelling given the general consistency of union engagement in politics over time. Instead, this difference is likely explained by the fact that some firms may have found creative, imperfect substitutes for the banned contributions through the use of 527 and 501(c)4 committees. Such a side-step would reduce the significance of Citizens United relative to the initial passage of the BCRA, explaining the difference in magnitudes.

**\*\*\*PLACE TABLE 4 HERE\*\*\***

### **3 Labor Unions and Hard-money Contributions**

Heretofore, our empirical analysis has only considered the differential effects of soft-money on firm value for firms with greater (lesser) exposure to labor unions. However, a more vivid picture of the relation between unionization and corporate political contributions can be developed using hand-collected, firm-level hard-money contributions (a complement of soft-money) data from the FEC. The richness of these data allow us to test a number of interesting hypotheses regarding the relation between firm-level contributions and unionization. It also allows us to examine the *relative* level of political engagement by labor unions and corporations through time. Indeed, we motivate our analysis of hard-money contributions with a plot of the “split” in hard-money contributions between labor unions and corporations in Figure 1 below. Interestingly, we find that despite the general decline in union density between 1980 and 2006, contributions by labor unions relative to corporations have remained rather consistent overtime, ranging from between approximately 27% to 32%. That is, at the lowest level, for every \$0.73 contributed by a corporation, labor unions contributed \$0.27.

Furthermore, we find that approximately 31% of candidates between 1980–2006 receive



**Figure 1**

Figure 1 plots the magnitude of hard-money contributions to candidates running for seats in the Federal House and Senate by labor unions relative to contributions made by corporations.

*more* funding from labor unions than they do from corporations. We refer to these candidates as “labor-funded” and find that 96% of them are affiliated with the Democratic party which is generally viewed as being significantly more pro-labor than the Republicans. The *potential* significance of these facts are self-evident and so in this section of the paper, we seek to determine whether and to what extent unionized corporations “counter-engage” labor unions through an analysis of the hard-money channel.

### 3.1 Data Sources, Hypotheses, and Univariate Analysis

We obtain data on hard-money from the FEC who supply three separate datasets which we merge together to form a distribution-level dataset for all direct contributions from Corporate PACs to candidates running for federal office in the House and Senate.<sup>10</sup> These data span the period 1980–2006. 2006 is the natural end of the sample as it represents the final year for which the FEC has provided a candidate summary file with sufficient data and in-

<sup>10</sup>Following Cooper et al. (2010) we drop any distributions to presidential races. These three datasets include the detailed committee file, the candidate summary file, and the distributions from PACs to candidates files. All of these files can be downloaded from the FEC’s FTP server.

struction. The information we are interested in for each record includes the PAC’s connected organization (i.e., firm name), the amount distributed, the candidate who received the money and their party affiliation as well as information on their total receipts from Corporate and Labor Union donors. Because these distribution-level data only include the PAC’s connected organization’s name (i.e., we do not have any identifying codes such as an Employer Identification Number), we manually match each PAC to a list of all firm names ever appearing in CRSP. In doing so, we are equipped with rich distribution-level data containing with a permco-firm name link which can be used to merge the dataset with CRSP/Compustat. We obtain data on 1,107,503 distributions from corporations with capital stock from 1980–2006 election cycles. 904,888 of these distributions relate to one of 2,123 firms who have been covered at some point by CRSP. We merge these data to CRSP/Compustat and calculate three primary variables of interest for which we develop hypotheses based on the UICR and CPN below.

First, and motivated by the partisan spending of labor unions, we proxy for a corporation’s ideological split in each cycle by calculating the dollar-weighted percentage of contributions going to candidates affiliated with the Republican party vis-à-vis Democrats. One way of thinking about this variable is the extent to which the corporation provides a general funding (dis)advantage to the Republican Party through their contributions to individual candidates:

$$\text{Prop\_Repub}_{i,t} = \frac{\text{Contributions to Republicans}_{i,t}}{(\text{Contributions to Republicans}_{i,t} + \text{Contributions to Democrats}_{i,t})} \quad (3)$$

where subscripts  $i$  and  $t$  denotes firms and cycles, respectively. If political spending is viewed as an investment, we expect to observe that corporations will increase their relative giving to the Republican party to counter-engage labor unions. This follows from the premise that the Republican party’s platform is inherently more anti-union and anti-labor than the Demo-

cratic party's. A premise that on face-value appears well supported by the fact that labor unions provide scarce support for Republicans. Thus, our third hypothesis is constructed as:

Hypothesis 3: *Corporations will increase the proportion of contributions to the Republican Party following an increase in unionization.*

Second, we take advantage of the FEC's provision of a break-down of each candidate's funding from special interest groups and calculate the proportion of their funding that comes from labor organizations relative to corporations. We identify these candidates as labor-captured and then calculate the proportion of total distributions by each firm-cycle that goes to these candidates:

$$Prop\_labor-funded_{i,t} = \frac{\text{Contributions to Labor Funded Candidates}_{i,t}}{\text{Total Contributions}_{i,t}} \quad (4)$$

where subscripts  $i$  and  $t$  denotes firms and cycles, respectively. We reason that following an increase in unionization, a corporation's aversion to such candidates will increase. This is especially the case where the political mechanism by which corporations profit from political support is by helping a candidate win. In a sense, this can be viewed as an alternative proxy for the conceptual argument for Equation (3):

Hypothesis 4: *Corporations will reduce the proportion of contributions to labor-funded candidates following an increase in unionization.*

Finally, and for completeness sake. We also calculate the *number* of supported candidates for each corporation in each cycle. As explained by Cooper et al. (2010), contributions to candidates can be thought of as akin to the formation of a *portfolio* of political candidates. This variable is therefore reasoned to proxy for the extent to which a corporation engages in the political process. This variable is defined in Equation (5) below:

$$Num\_Cand_{i,t} = \sum_{c=1}^C Cand_{c,t} \quad (5)$$

$$Num\_Dem_{i,t} = \sum_{d=1}^D DemocraticCand_t \quad (6)$$

Where subscripts  $c$ ,  $i$ , and  $t$  index candidates, firm, and cycle, respectively. Candidates are identified using the FEC's 9-character Candidate Identification number which uniquely identifies candidates within each cycle. Thus, the variable  $Num\_Cand_{i,t}$  is simply the number of unique Candidate IDs who have at least one distribution record for a particular firm-cycle. We also calculate the number of supported Democratic candidates. This variable allows us to test whether or not corporations expand or withdraw their support for candidates following unionization.

We consider two competing hypotheses relating to these variable. First, it could be that following unionization, corporations may wish to simply expand their political sphere of influence by *increasing* the raw number of supported candidates, regardless of their party affiliation:

Hypothesis 5a: *Corporations will increase the number of candidates supported following an increase in unionization.*

Alternatively, it may be that corporations respond to unionization by engaging in a partisan withdrawal of support. That is, they will further concentrate their support on republican candidates by *reducing* the number of supported Democratic candidates. Thus, as a secondary hypothesis to Hypothesis 3, we have:

Hypothesis 5b: *Corporations will reduce the number of Democratic candidates supported following an increase in unionization.*

Table 5 provides summary statistics for our FEC variables for UV and Non-UV firms for each two-year election cycle from 1980–2006. At the mean, we find that UV firms are significantly different (at the 1% level) to non-UV firms with respect to all of our hard-money outcome variables. Most significant is the difference in the number of supported candidates. UV firms support 71.47 candidates in any one election cycle, 25 more than their non-unionized counterparts. Further, UV firms contribute 3.4% more money to Republican candidates than Democratic candidates and 1% less to labor-captured candidates.

**\*\*\*PLACE TABLE 5 HERE\*\*\***

### 3.2 Empirical Strategy and Results

To test our hypotheses in Section 3.1, we estimate the following panel regression:

$$HMC_{i,t} = \alpha_0 + \beta_1 UVFIRMD_{i,t} + \beta_k X_{i,t} + \eta_i + \epsilon_{i,t} \quad (7)$$

where subscripts  $i$  and  $t$  index firms and cycles, respectively. The variable  $HMC_{i,t}$  denotes one of our hard-money contribution variables (e.g., *Num\_Cand*, *prop\_repub*). The treatment variable,  $UVFIRMD_{i,t}$  is an indicator variable coded as 1 if the firm has experienced a union election victory (i.e., a UV firm) and 0 otherwise (i.e., a non-UV firm). Our main hypotheses 3 and 4 predict that the sign on  $\beta_1$  coefficient will be negative when the dependent variable,  $HMC_{i,t}$  is ‘*Prop\_Repub*’ and ‘*Prop\_labor-funded*’. The vector  $X_{i,t}$  includes the same set of time-varying control variables as our event studies (firm size, market-to-book ratio of assets, financial leverage, and cash flow to assets). The parameter  $\eta_i$  represent firm fixed effects and  $\epsilon_{i,t}$  is the error term. The inclusion of firm fixed effects sweeps out any unobserved, firm-specific time-invariant heterogeneity. In doing so, the coefficient on our treatment variable is determined using *within*-firm variation in unionization. Robust standard errors, clustered at the firm-level are used for inference.



Notably, given we have data on union elections, we also consider the Sharp Regression Discontinuity Estimator (SRD) to test these hypotheses.<sup>11</sup> However, we encounter two critical issues (ex-ante) that lead us to discarding it as an option. First, the SRD produces a weighted treatment effect where the weights are proportional to the units ex-ante probability of experiencing a close-call election (e.g., barely winning or losing). This is potentially problematic because it will bias our estimate downwards as our treatment effect is weighted in favor of the weakest unions (see, e.g., Lee and Mas (2012)). Second, and arguably more importantly, the SRD estimator works under the assumption of local randomization, that is, the units that are compared face the same ex-ante probability of unionizing (i.e., the same threat of unionization). If firms participate in the political process to avoid unionizing, the control group may be misidentified in such a setup.

Results are presented in Table 6. Overall, the results indicate that following a successful union election, corporations adjust their hard-money giving in several interesting ways. First, and consistent with Hypotheses 3 as well as our univariate tests, we find that unionized firms increase the dollar-weighted proportion of contributions to Republican candidates by 4.3% (Column 1). Compared to the univariate mean of Non-UV firms, this represents an increase in Republican lean by 6%. Further, and consistent with Hypothesis 4, corporations respond to unionization by reducing their relative giving labor-captured candidates by 2% (Column 2). In relative terms, this represents a 17% ( $0.02 \div 0.12$ ) reduction relative to the non-UV firm mean.

Interpreting the results in Columns 1 (*Prop\_Repub*), 4 (*Num\_Cand*), and 3 (*Num\_Dem*) together implies that unionized firms higher dollar-weighted Republican lean (i.e., *Prop\_Repub*) comes about by withdrawing support from candidates from both sides of the isle but while simultaneously concentrating support on Republican candidates, generating a larger funding advantage for Republicans. Further, we find no evidence of a relation between firm-level

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<sup>11</sup>The SRD works best by comparing firms who barely unionize to firms who barely fail to unionize. If the ex-post assignment of unionization is random around the cut-off, comparing these two groups yields a treatment effect that has a high level of internal validity.

unionization and real total contributions (unreported). Thus, these shifts can be thought of as akin to a rebalancing towards Republicans and away from labor-funded candidates.<sup>12</sup>

**\*\*\*PLACE TABLE 6 HERE\*\*\***

Overall, these associations are consistent with the notion that corporations shift their political giving following a successful union election (i.e., the formation of a labor union). Specifically, they reduce their relative giving to labor-captured candidates and increase their relative giving to Republicans. These shifts are consistent with a counter-engagement strategy aimed at reducing the net effects of labor’s political influence. In terms of the broader literature on corporate political contributions, these results lend further support to the view that political spending does not always merely represents agency costs.

## 4 Conclusion

Overall, we find that despite the decline in unionism in the United States, labor unions still have significant bark and bite through their active and costly participation in the financing of federal political campaigns. Indeed, consistent with Masters (2006), using data on distributions from special interest groups to candidates running for federal office, we observe that labor unions have been remarkably consistent in their relative engagement vis-à-vis corporations from 1980–2006, contributing a material proportion of federal campaign financing. This spending by labor unions does not seem to simply enhance the welfare of the receiving politician. This follows from our event-study evidence of two exogenous shocks (of opposite effects) to campaign financing laws in which we find that labor unions do indeed have a deleterious effect on firm value through the political channel.

Specifically, we find that abnormal returns around the soft-money *ban* imposed by the Bipartisan Campaign Reform Act (2002) were significantly higher for firms operating in

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<sup>12</sup>We have deliberately excluded “total contributions” from our primary analysis because our hypotheses are partisan in nature. Total contributions are significantly less informative with respect to funding advantage. For example, on partisan issues, a \$1 contribution to Republicans is more powerful than a \$1 contribution to Republicans with an accompanying \$1 contribution to Democrats.

unionized industries as well as for firms who have experienced a successful union election. Such a difference implies that labor unions are “investor-contributors” who reduce the value of unionized corporations relative to their non-unionized peers. This interpretation is reinforced when we further test abnormal returns around the BCRA’s *repeal* in the 2010 Supreme Court case of *Citizens United vs. FEC*. Here, we find that abnormal returns are *negatively* associated with industry-level union density as well as firm-level union status. Thus, when labor unions and corporations are once again free to contribute unlimited amounts of soft-money, unionized corporations are left worse-off than their non-unionized counterparts.

Motivated by these results and the extant debate regarding the possibility that campaign financing can be viewed as an investment by shareholders (see, e.g., Hill et al. (2013), Cooper et al. (2010)), we test the relation between unionization and patterns of hard-money contributions. Specifically, using fixed effects panel regressions we find that unionization is associated with higher dollar-weighted support for Republican candidates and reduced support for candidates who receive significant funding from labor organizations. We interpret this as evidence that corporations attempt to counter-engage labor unions in the political arena—a form of political investment.

Overall, our paper contributes to the literature by demonstrating a robust association between unionization and reductions in firm value derived from political contributions in the United States as well as an association between unionization and patterns of corporate political contributions. Moreover, our findings are consistent with the notion that financial contributions to politicians at least in part reflect an investment motive (see, e.g., Cooper et al. (2010)) rather than a mere reflection of the manager-shareholder agency problem (see, e.g., Aggarwal et al. (2012)). Finally, we also contribute to the non-academic debate on the effects of campaign financing regulations on Corporate America by providing direct evidence on the value-effects of political spending between the two major special-interest contributors, namely corporations and labor unions.

## 5 Tables and Figures

Table 2

**Summary Statistics—Pooled BCRA and Citizens United Sample**  
 Table 2 provides summary statistics for the pooled sample of firm-years in our BCRA and Citizens United samples. We present summary statistics for Non-UV and UV (union victory) firms. Column 10 provides the results of tests of equivalence of means assuming unequal variance. Using Computat mnemonics, firm size is defined as the natural log of the Computat variable sale (adjusted for inflation), market-to-book ratio is defined as  $(\text{prcf} \times \text{csho} + \text{lt})/\text{at}$ , cash flow is defined as  $(\text{oibdp} - \text{txt} - \text{xint} - \text{dvc})/\text{at}$ , and financial leverage is  $(\text{dlc} + \text{dltt})/\text{at}$ . \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Variable	Summary Statistics (Union Victory (UV) vs. Non-UV firm-years)										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	Non-UV Firms					UV Firms					UV minus Non-UV
	N	Mean	SD	Median	N	Mean	SD	Median	Difference in Mean		
FIRM SIZE	5913	5.55	2.14	5.59	413	7.99	1.9	8.12	2.439***		
MARKET-TO-BOOK	5710	1.75	1.69	1.17	383	1.09	0.7	0.89	-0.656***		
FINANCIAL LEVERAGE	5974	0.2	0.21	0.14	413	0.3	0.19	0.28	0.101***		
CASH FLOW	5384	0	0.21	0.06	404	0.06	0.08	0.07	0.0681***		

**Table 3**

**CARs and Unionization—BCRA (ban on soft-money)**

Table 3 presents the results of a regression of cumulative abnormal returns around the Bipartisan Campaign Reform Act on unionization. Panel A (B) presents the CAR results for our industry-level (firm-level) unionization analysis. Using Compustat Mnemonics, firm size is defined as the natural log of the Compustat variable sale, market to book ratio of assets is defined as  $(prcf \times csho + lt)/at$ , cash flow is defined as  $(oibdp - txt - xint - dvc)/at$ , and financial leverage is  $(dlc + dltd)/at$ . UNIONVD is a dummy variable coded as 1 if the firm has been identified as experiencing a union election victory in a representation election covering at least 50 workers at least once, otherwise 0. Control and dependent variables are winsorized at the 1st and 99th percentiles to reduce the impact of outliers. Cumulative Abnormal Returns are in percentage for ease of interpretation and presentation. All regressions include a constant and control variables. Robust standard errors are used for inference and are provided in parentheses. UICR stands for the Union Investor-contributor relevance hypothesis and predicts a positive association between CARs and unionization. CPN stands for the Corporate Power Narrative hypothesis and predicts a negative association between CARs and unionization.

<b>Panel A: CARs and Industry-level Unionization around BCRA</b>						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variable	Predictions	Event Windows				
		(-1,0)	(0,0)	(-1,1)	(0,3)	(0,7)
INDUSTRY UNIONIZATION	UICR:+	-0.003	-0.002	0.025**	0.021	0.059***
	CPN: -	(0.009)	(0.007)	(0.011)	(0.013)	(0.018)
FIRM SIZE		0.092*	0.051	0.085	0.288***	0.661***
		(0.048)	(0.036)	(0.055)	(0.066)	(0.091)
MARKET-TO-BOOK		-0.090	-0.061	-0.206***	-0.243***	-0.365***
		(0.062)	(0.043)	(0.068)	(0.079)	(0.111)
FINANCIAL LEVERAGE		-0.859*	-0.201	-1.158**	-0.752	0.784
		(0.503)	(0.372)	(0.569)	(0.695)	(0.962)
CASH FLOW		1.073	0.230	0.225	-0.467	0.047
		(0.668)	(0.483)	(0.721)	(0.827)	(1.159)
N		2,867	2,687	2,687	2,687	2,687
Adj R-squared		0.007	0.003	0.008	0.014	0.047
<b>Panel B: CARs and Firm-level Unionization around BCRA</b>						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variable	Predictions	Event Windows				
		(-1,0)	(0,0)	(-1,1)	(0,3)	(0,7)
UNIONVD	UICR:+	0.653**	0.216	0.932***	0.956**	1.778***
	CPN: -	(0.299)	(0.195)	(0.326)	(0.376)	(0.545)
Control variables		YES	YES	YES	YES	YES
Industry fixed-effects		YES	YES	YES	YES	YES
N		3,057	3,057	3,057	3,057	3,057
Adj R-squared		0.034	0.031	0.034	0.046	0.087

**Table 4**

**CARs and Unionization—Citizens United (legalization of soft-money)**

Table 4 presents the results of a regression of cumulative abnormal returns around Citizens United on unionization. Control variables include firm size (natural log of sales), market-to-book ratio of assets, cash flow scaled by assets, and financial leverage. Panel A (B) presents the CAR results for our industry-level (firm-level) unionization analysis. Using Compustat Mnemonics, firm size is defined as the natural log of the Compustat variable sale, market to book ratio of assets is defined as  $(prccf \times csho + lt) / at$ , cash flow is defined as  $(oibdp - txt - xint - dvc) / at$ , and financial leverage is  $(dlc + dltd) / at$ . UNIONVD is a dummy variable coded as 1 if the firm has been identified as experiencing a union election victory in a representation election covering at least 50 workers at least once, otherwise 0. Control and dependent variables are winsorized at the 1st and 99th percentiles to reduce the impact of outliers. Cumulative Abnormal Returns are in percentage for ease of interpretation and presentation. All regressions include a constant. Robust standard errors are used for inference and are provided in parentheses. UICR stands for the Union Investor-contributor relevance hypothesis and predicts a negative association between CARs and unionization. CPN stands for the Corporate Power Narrative hypothesis and predicts a positive association between CARs and unionization.

<b>Panel A: CARs and Industry-level Unionization around Citizens United</b>					
(1)	(2)	(3)	(4)	(5)	(6)
Variable	Predictions		Event Windows		
		(0,0)	(0,1)	(0,3)	(0,7)
INDUSTRY UNIONIZATION	UICR: -	-0.037***	-0.016*	-0.033***	-0.041**
	CPN: +	(0.008)	(0.009)	(0.012)	(0.016)
Control variables		YES	YES	YES	YES
Industry fixed-effects		NO	NO	NO	NO
N		2,533	2,533	2,533	2,533
Adj R-squared		0.021	0.015	0.045	0.041
<b>Panel B: CARs and Firm-level Unionization around Citizens United</b>					
(1)	(2)	(3)	(4)	(5)	(6)
Variable	Predictions		Event Windows		
		(0,0)	(0,1)	(0,3)	(0,7)
UNIONVD	UICR: -	-0.378**	-0.439*	-0.393	-0.489
	CPN: +	(0.158)	(0.229)	(0.298)	(0.426)
Control variables		YES	YES	YES	YES
Industry fixed-effects		YES	YES	YES	YES
N		2,030	2,537	2,537	2,537
Adj R-squared		0.095	0.072	0.102	0.0897

Table 5

Summary Statistics—FEC Contribution Variables

Table 5 provides summary statistics for our FEC variables for UV (union victory) and Non-UV firm-cycles. Column 10 provides the results of tests of equivalence between UV and non-UV firms, assuming unequal variance. The variable *Num\_Cand* is the number of supported candidates, regardless of their party affiliation, by the firm. The variable *Num\_Dem* is the number of supported Democratic candidates by the firm. The variable *Prop\_Repub* is the proportion of contributions given by the firm to Republican candidates. The variable *Prop\_labor-funded* is the proportion of contributions given by the firm to candidates who raise more money from labor unions than corporations. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. All firms in the sample participate in hard-money contributions.

Summary Statistics—FEC Contribution Variables (UV vs. Non-UV firm-years)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Variable	N	Mean	SD	Median	N	Mean	SD	Median	Difference (mean)
	Non-UV Firms				UV Firms				UV minus Non-UV
<i>Num_Cand</i>	4647	46.49	55.14	24	1374	71.47	69.02	48	24.82***
<i>Num_Dem</i>	4647	17.38	23.73	8	1374	25.26	29.42	14	7.662***
<i>Prop_Repub</i>	4647	0.65	0.24	0.67	1374	0.68	0.21	0.71	0.0342***
<i>Prop_labor-funded</i>	4647	0.12	0.12	0.08	1374	0.11	0.1	0.08	-0.0121***

**Table 6**  
**Unionization and Hard-money Contributions**

Table 6 provides the results of panel regressions of hard money contributions on firm-level unionization. The variable *Num\_Cand* is the number of supported candidates, regardless of their party affiliation, by the firm. The variable *Num\_Dem* is the number of supported Democratic candidates by the firm. The variable *Prop\_Repub* is the proportion of contributions given by the firm to Republican candidates. The variable *Prop\_labor-funded* is the proportion of contributions given by the firm to candidates who raise more money from labor unions than corporations. Using Compustat Mnemonics, firm size is defined as the natural log of the Compustat variable sale (adjusted for inflation in panel specifications), market to book ratio of assets is defined as  $(prcfc \times csho + lt)/at$ , cash flow is defined as  $(oibdp - txt - xint - dvc)/at$ , and financial leverage is  $(dlc + dlft)/at$ . All regressions include a constant term. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels respectively. Robust standard errors, clustered by firm are presented in parentheses.

	(1)	(2)	(3)	(4)
Variable	<i>Prop_Repub</i>	<i>Prop_labor-funded</i>	<i>Num_Dem</i>	<i>Num_Cand</i>
Predicted Sign	H3: $\beta_1 > 0$	H4: $\beta_1 < 0$	H5b: $\beta_1 < 0$	H5a: $\beta_1 < 0$
UNIONVD ( $\beta_1$ )	0.043*** (0.016)	-0.020** (0.009)	-6.302*** (2.044)	-13.252** (5.452)
FIRM SIZE	0.024*** (0.008)	-0.006 (0.004)	4.377*** (0.885)	15.285*** (2.070)
MARKET-TO-BOOK	0.018*** (0.005)	0.000 (0.003)	-1.748*** (0.591)	-1.735 (1.318)
FINANCIAL LEVERAGE	-0.055 (0.035)	-0.012 (0.016)	-0.405 (2.194)	-5.513 (5.048)
CASH FLOW	0.013 (0.078)	-0.098** (0.045)	-2.165 (6.610)	-25.826* (14.428)
Firm Fixed Effects	YES	YES	YES	YES
N	5,840	5,840	5,840	5,840
R-squared	0.57	0.52	0.78	0.82
R-squared within	0.01	0.01	0.03	0.06



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# Appendices

## A Definition of Variables

**Table 7**  
**Definition of Variables**

Table 7 provides definitions for the variables used in this study. Column 1 provides the Variable Name and Column 2 provides the Definition. Compustat mnemonics are used to facilitate understanding. Refer to the full text of the manuscript for their motivation.

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Variable	Definition
<i>Num_Cand</i>	<i>Num_Cand</i> is the number of supported candidates, regardless of their party affiliation, by the firm.
<i>Num_Dem</i>	<i>Num_Dem</i> is the number of supported Democratic candidates by the firm.
<i>Prop_Repub</i>	<i>Prop_Repub</i> is the proportion of contributions given by the firm to Republican candidates.
<i>Prop_labor-funded</i>	<i>Prop_labor-funded</i> is the proportion of contributions given by the firm to candidates who raise more money from labor unions than corporations.
FIRM SIZE	FIRM SIZE is defined as the natural log of sale and deflated by inflation.
MARKET-TO-BOOK	Market to book ratio of assets is defined as the ratio of the market value of firm to the book value of firm $(prccf \times csho + lt)/at$ .
CASH FLOW	Cash flow is defined as $(oibdp - txt - xint - dvc)/at$ .
FINANCIAL LEVERAGE	Financial leverage is defined as the ratio of total debt to total assets $(dlc + dltd)/at$ .
UNIONVD	UNIONVD is a dummy variable coded as 1 if the firm has been identified as experiencing a union election victory in a representation election covering at least 50 workers at least once, otherwise 0.

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