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Do investors like political connections?

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ABSTRACT

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Keywords: Industry-level regulation Political connections Citizens united v. FEC SpeechNow.org. v. FEC Do investors like political connections? We estimate market reaction after the 2010 US Supreme Court decision, which allowed firms to establish a new form of political connection. We document a positive reaction, especially for highly regulated firms. © 2022 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND

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With its ruling today, the Supreme Court has given a green light to a new stampede of special interest money in our politics. It is a major victory for big oil, Wall Street banks, health insurance companies and the other powerful interests that marshal their power every day in Washington to drown out the voices of everyday Americans. This ruling gives the special interests and their lobbyists even more power in Washington–while undermining the influence of average Americans who make small contributions to support their preferred candidates. That's why I am instructing my Administration to get to work immediately with Congress on this issue. We are going to talk with bipartisan Congressional leaders to develop a forceful response to this decision. The public interest requires nothing less.

["Statement from the President on Today's Supreme Court Decision"]

[The White House] [Office of the Press Secretary]

[January 21, 2010]

1. Introduction

Political connections have been extensively analyzed in the economic literature, especially their correlation with firms' value and performance (Faccio, 2006; Duchin and Sosyura, 2012; Ovtchinnikov and Pantaleoni, 2012; Amore and Bennedsen, 2013; Akey, 2015; Brown and Huang, 2020). However, it is not easy to establish a causal link between political connection and performance and, especially, to address which firm characteristics drive performance changes. This is the goal of our paper. By using a unique and hand-collected measure of political connectedness, we run a two-stage analysis: first, we estimate the stock market reactions around the landmark event; and then we regress the cumulative abnormal returns (CARs) over firm characteristics.

Our focus is on the US Supreme Court decision, in Citizens United v. FEC (January 21, 2010), which found the ban on corporate independent expenditures unconstitutional. This decision paved the way to establish a new type of political connectedness through the employment of independent expenditures. Being an unexpected event (a 5-to-4 decision), this decision provides us with a good setting to establish a causal link between political connections and stock market reaction. The underpinning idea is that firms operating in heavily regulated industries have a greater incentive to establish political connections to possibly make the regulatory impact better for themselves. To this aim, we divide our sample into two subgroups: (1) firms operating in heavily and in non-heavily regulated industries; (2) politically

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Table 1

Variable	Acronym	Definition
Cumulative abnormal returns	CARs	Abnormal returns (ARs) cumulated over a time period around the event
Highly regulated firms	HR	A binary variable taking the value of one for firms operating either in the top 6 regulated industries - by 2 digit-naics, they are: construction (23), wholesale trade (42), finance and insurance (52), utilities (22), professional, scientific and technical services (54), agriculture, forestry, fishing and hunting (11) - or in the cited industries by the President Obama ^a , namely in finance and insurance industry (52) and in mining, quarrying, and oil and gas extraction industry (21), and zero otherwise
Political connected firms	РС	A binary variable taking the value of one when either former directors/corporate executives became politicians, or former politicians (selected because in office over the period 1999–2021) had roles as directors/corporate executives within firms at the time of the rulings, and zero otherwise
Non-pc_hr	NPC_HR	A binary variable taking the value of one for non-politically connected firms at the time of the rulings, operating either in the top 6 regulated industries or in the cited industries by the President Obama, and zero otherwise
Size	Size	The natural logarithm of total assets
Delta price	ΔP	The natural logarithm of the one-period lagged price over two-periods lagged price
Dividends per share	DPS	Dividends paid for share
Total capital over total assets	ETA	The ratio of total capital over total assets
Return on assets	Roa	The ratio of net income over total assets

^aSee the reported "Statement from the President on Today's Supreme Court Decision", The White House, Office of the Press Secretary, January 21, 2010.

and non-politically connected firms. We employ a novel (nondiscretionary) approach to identify highly regulated industries by counting the words in the Code of Federal Regulations that refer to a forbidden or required activity, and then ranking them according to the industries they probably affect (Al-Ubaydli and McLaughlin, 2015; McLaughlin and Sherouse, 2016). We also assume that non-politically connected firms look at the rulings with a special interest, since establishing a political connection should allow them to receive some benefit in the future (e.g., Faccio, 2006; Duchin and Sosyura, 2012; Kang et al., 2015).

We document a significant and positive stock market reaction to the Supreme Court decision for heavily regulated firms and non-politically connected firms. This suggests that investors consider the new way of establishing a political connection worthy only if firms operate in highly regulated industries and do not have other connections at the time of the ruling. Then, we address the heterogeneous response of firms: we show that less capitalized firms are more sensitive to the Supreme Court decision, and so to the opportunity to establish a new political connection.¹

Our paper is the first to analyze investors' reaction to the Court decision by employing a new hand-collected political measure (based on the movement from business to politics and vice versa.²) that enables us to provide readers with a broader and complete assessment.

The rest of the paper is organized as follows. Section 2 describes data and the methodology, while in Section 3 we discuss our results. The conclusions are drawn in Section 4.

2. Data and methodology

2.1. Data

We measure political connections using a unique handcollected database in which political connectedness considers the movement of a "revolving door": a political connection exists when either former directors/corporate executives became politicians, or former politicians (in office over the period 1999–2021³) had roles as directors/corporate executives within firms.

Our sample includes all the firms in the S&P500, as of April 2021. Politicians are members of the US Legislative and Executive Branches: specifically, the members of the U.S. Congress (106th-117th Congress), the Cabinet (also positions which are frequently accorded cabinet-level rank) and the principal executives of the Executive Office of the President. Executive profiles are obtained from Bloomberg and complemented by using biographies reported by reliable sources, as universities and corporate websites. We mainly obtain information about the tenure of former politicians within the company through SEC filings. Overall, our sample includes political connections for 505 firms and 6838 politicians. We collected stock market and balance sheet data from Datastream.

The Table 1 defines all variables, Tables 2 and 3 report summary statistics and pairwise correlation coefficients for the variables used in our empirical investigation.⁴

2.2. Event study

 $\mathbf{R}_{\mathrm{it}} = \alpha_{\mathrm{i}} + \beta_{\mathrm{i}}\mathbf{R}_{\mathrm{Mt}} + \varepsilon_{\mathrm{it}}$

In the first stage, we measure the stock market reaction by the ARs around the Court decision. Normal returns are obtained using the market model, as follows:

$$E(\varepsilon_{\rm it}) = 0$$
 and $var(\varepsilon_{\rm it}) = \sigma_{\varepsilon_{\rm i}}^2$ (1)

¹ The U.S. Court of Appeals for the District of Columbia Circuit (in Speech-Now.org v. FEC, March 26, 2010) confirmed the Supreme Court decision by ruling that the contribution limits are unconstitutional as applied to individuals' contributions to independent expenditure groups. As robustness, we replicate our analysis around this event. Not surprisingly, we do not find a significant effect suggesting that the investors already discounted the news. Results are available on request.

² A few papers (Skaife and Werner, 2020; Albuquerque et al., 2020) examined the Supreme Court decisions effects, but they focused on a one-way definition (from politics to business Albuquerque et al., 2020) or the amount contributed by a firm's PAC and amount spent on lobbying the federal government (Skaife and Werner, 2020).

³ Data are updated until September 2021.

⁴ For brevity, variance inflation factor (VIF) results are not reported and are available on request.

Table 2

I I I I I I I I I I I I I I I I I I I	Obs	Mean	Standard deviation	Minimum	Maximum	Median
	003.	Ivicali	Standard deviation	wiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	WidAIIIIUIII	wiculati
Dependent variables						
CAR(-1, 1)	424	0.016	0.043	-0.075	0.273	0.006
CAR(-3, 1)	424	0.014	0.042	-0.092	0.247	0.005
CAR(-1, 0)	424	0.010	0.033	-0.077	0.171	0.005
Independent variables						
HR	424	0.344	0.476	0.000	1.000	0.000
PC	424	0.109	0.311	0.000	1.000	0.000
NPC_HR	424	0.309	0.463	0.000	1.000	0.000
Size	424	16.216	1.624	10.757	21.522	16.178
ΔP	424	-0.472	0.305	-0.984	0.613	-0.423
DPS	424	0.638	0.793	0.000	4.880	0.340
ETA	424	0.627	0.205	0.083	0.962	0.661
Roa	424	0.043	0.084	-0.383	0.310	0.043

This table reports the summary statistics of the variables that we employed in our analysis.

Table 3

Pairwise	airwise correlation coefficients.						
	NPC_HR	Size	ΔP	DPS	ETA		
Size	0.2794 (0.0000)						
ΔP	-0.0412 (0.3973)	-0.1736 (0.0003)					
DPS	0.0144 (0.7678)	0.2941 (0.0000)	0.1666 (0.0006)				
ETA	-0.4052 (0.0000)	-0.4931 (0.0000)	0.1346 (0.0055)	0.0198 (0.6843)			
Roa	-0.0960 (0.0481)	-0.0389 (0.4243)	0.2998 (0.0000)	0.0556 (0.2535)	0.0735 (0.1307)		

This table reports the pairwise correlation coefficients of the independent variables, with significance level in brackets.

where the normal return (R_{it}) is the daily log return for every *i*th firm at time *t*, and the market index return is the daily log return of the S&P 500 Index at time t (R_{Mt}). We estimate the α_i and β_i parameters through an Ordinary Least Squares (OLS) regression over a 240-day estimation period, ending 20 days before the announcement of the decision. Daily ARs are obtained by computing the difference between actual and predicted returns:

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{Mt})$$
⁽²⁾

Our focus is on the ARs in the day of the event and in the threeday period centered on the date of the decisions: (-1, 1). We also consider the windows (-3, 1) and (-1, 0). The ARs are cumulated over a time period around the event to obtain the CARs, which are computed as follows:

$$CAR_{i}(t_{1}, t_{2}) = \sum_{t=t_{1}}^{t_{2}} AR_{it}$$
 (3)

where t_1 and t_2 are the start and the end dates of each window. The ARs can be also aggregated on a cross-sectional basis for a portfolio of N firms. Therefore, the cumulative average abnormal return (CAAR) is computed as:

CAAR
$$(t_1, t_2) = \frac{1}{N} \sum_{i=1}^{N} CAR_i(t_1, t_2)$$
 (4)

We test the hypothesis of a market reaction significantly different from zero using the methodology suggested by Mikkelson and Partch (1988), largely applied in finance papers (Kolari and Pynnönen, 2010).

2.3. Regression analysis

As a second step, the CARs are regressed on a set of specific variables. The main goal is to test which firms are more sensitive to the Court decision. As such, we estimate the following model:

$$CAR_{i}(t_{1}, t_{2}) = \alpha + \beta NPC_HR_{i} + \sum_{k} \gamma_{k} FIRM_{i,k} + \sum_{n} \lambda_{n} industry_{n} + \varepsilon_{i}$$
(5)

The dependent variable is the CAR for the *i*th firm over the event window (t_1, t_2) ; NPC_HR is a binary variable taking the value of one for non-politically connected and highly regulated firms, and zero otherwise; *FIRM* is a vector of *k* firm-specific variables lagged by one-period: size, dividends per share, delta price, return on assets, total capital over total assets. All variables (described in Table 1) are winsorized at 1 and 99 percentile levels, except for size. Furthermore, we added industry-fixed effects.

3. Results

We show a generally positive and statistically significant stock market reaction around the Supreme Court decision (Table 4, Panel A). Next, we split the sample into firms operating in highly regulated industries vs. firms operating in non-highly regulated industries: we document that the positive stock reaction is driven by highly regulated firms, suggesting the incentive to look for a political connection increases as regulation becomes more complex and stronger. Furthermore, we focus on firms operating in highly regulated industries by splitting the sample between firms having previously established political connections and not. Interestingly, we show that the stock market reaction is driven by firms which are non-politically connected (Table 4, Panel B).

In the second stage, we regress the CARs over a set of firmspecific variables. Our findings (Tables 5 and 6) are consistent with those discussed in the univariate analysis: firms operating in a highly regulated industry and non-politically connected firms are positively related to abnormal stock returns. With respect to the event window (-1, 1), coefficient estimates for delta price, Roa, and capital ratio are always negative and statistically significant suggesting that less performing and less capitalized firms are more sensitive to the Court decision and therefore to the opportunity to establish a new type of political connectedness (Table 5). In the event window (-1, 0), we also note a negative coefficient for the dividends per share suggesting that less attractive firms are more sensitive to the decision (Table 6).

3.1. Robustness checks

As robustness, we employ two alternative measures of political connections⁵ used in past papers (e.g., Coates, 2012). Specifically, we hand-collect data on Opensecrets related to: (i) PAC

⁵ We would like to thank the referee for this suggestion.

Source. Datastream	•					
Panel A – Entire	sample					
Event window	Full sample $(N = 442)$		Highly regulated firms $(N = 155)$		Non-highly regulated firms $(N = 287)$	
	CAARs	% Pos	CAARs	% Pos	CAARs	% Pos
(-1, 1)	1.61%**	59.95%	2.78%**	63.87%	0.98%	57.84%
(-3, 1)	1.39%**	58.82%	2.32%**	59.35%	0.90%	58.54%
(-1, 0)	1.04%*	59.05%	1.95%**	61.94%	0.55%	57.49%

Table 4
The stock market reaction to the Supreme Court decision.
Source: Datastream.

Panel B - A focus on highly regulated firms

Event window Politically connected firms (N = 15)		cted firms	Non-politically con $(N = 140)$	nnected firms
	CAARs	Pos(%)	CAARs	Pos(%)
(-1, 1)	1.52%	60.00%	2.92%***	64.29%
(-3, 1)	0.30%	40.00%	2.53%**	61.43%
(-1, 0)	0.33%	53.33%	2.12%***	62.86%

This table reports the CAARs around the date of the Supreme Court decision (January 21, 2010), by considering (a) the entire sample (firms included in the S&P500 index as of April 2021); (b) the highly regulated firms (operating either in the top 6 regulated industries or in the cited industries by the President Obama); (c) the non-highly regulated firms. In Panel A, we report the CAARs in the first column, and the percentages of the positive CARs are in the second column. In Panel B, we focus on highly regulated firms, and we disentangle firms with and without political connections.

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Results from the regression model.

Source. Datastream.			
Variables	(1)	(2)	(3)
	$\mathbf{y} = \mathbf{CAR}(-1, 1)$	$\mathbf{y} = \mathbf{CAR}(-1, 1)$	y = CAR(-1, 1)
NPC_HR	0.02055***	0.00849*	0.02074**
	(0.00544)	(0.00433)	(0.00956)
Size		-0.00052	-0.00078
		(0.00142)	(0.00129)
ΔP		-0.02017***	-0.01494**
		(0.00729)	(0.00709)
DPS		-0.00055	-0.00206
		(0.00257)	(0.00254)
ETA		-0.06029***	-0.05045***
		(0.01300)	(0.01276)
Roa		-0.07098^{***}	-0.06677***
		(0.02433)	(0.02216)
Constant	0.00988***	0.05366**	0.02085
	(0.00187)	(0.02616)	(0.02717)
Industry fixed effects	No	No	Yes
Observations	424	424	424
R-squared	0.04883	0.17704	0.39543

This table reports the empirical results by running an OLS regression over CARs calculated over the event window (-1, 1), around the Supreme Court decision. Robust standard errors are in parentheses. ***, **, * denote that estimates are statistically significant at the 1, 5 and 10% levels.

Table 6 Results from the regression model.

Source	Datastrea

ource. Ducusticum.		
Variables	(1)	(2)
	y = CAR(-1, 0)	y = CAR(-3,1)
NPC_HR	0.02213**	0.02582**
	(0.00949)	(0.01210)
Size	0.00051	-0.00009
	(0.00111)	(0.00138)
ΔP	-0.00553	-0.00401
	(0.00538)	(0.00731)
DPS	-0.00390**	-0.00181
	(0.00188)	(0.00256)
ETA	-0.03343***	-0.04344***
	(0.00996)	(0.01298)
Roa	-0.04727***	-0.07529***
	(0.01739)	(0.02449)
Constant	-0.01050	-0.00112
	(0.02429)	(0.03044)
Industry fixed effects	Yes	Yes
Observations	424	424
R-squared	0.33311	0.32222

This table reports the empirical results by running an OLS regression over CARs calculated over the event windows (-1, 0) and (-3, 1), around the Supreme Court decision. Robust standard errors are in parentheses. ***, **, * denote that estimates are statistically significant at the 1, 5 and 10% levels.

Summary Data, 2007-2008 (total raised), and (ii) total lobbying expenditures, 2009. We then divide these data into quartiles, and we run our event study by considering the subset of the highly regulated firms. Highly regulated firms with a low level of lobbying expenditure strongly reacted following the Court decision. This strengthens our results meaning that firms with a low level of political activity but operating in heavily regulated firms look for the establishment of a political connection that, in this case, is offered by the Supreme Court decision. Conversely, highly regulated firms characterized by low levels of amount raised by PACs react very weakly to the Court decision. This is probably because the opportunity to employ independent expenditures is not perceived as an alternative to PACs (see Table 7).⁶

To further verify whether the market reaction was due to the Court decision, we conduct a placebo test. Specifically, we run the event study pretending that the years of the regulation were 2009

 $^{^{6}}$ We cannot split further the subset of the heavily regulated firms since we do not have enough observations to perform a deeper analysis.

Panel A – Highly r	egulated firms and	l lobbying activit	ty						
Event window	HR + lob1 $N = 22$		HR + lob2 $N = 25$	HR + lob2 $N = 25$		$\frac{HR + lob3}{N = 35}$		HR + lob4 $N = 29$	
	CAARs	% Pos	CAARs	% Pos	CAARs	% Pos	CAARs	% Pos	
(-1, 1)	6.08%***	77.27%	2.21%	56%	2.32%*	62.86%	1.99%	51.72%	
(-3, 1)	5.18%***	72.73%	1.24%	44%	2.03%*	65.71%	1.86%	51.72%	
(-1, 0)	4.80%***	86.36%	1.36%	56%	1.39%	60%	1.26%	55.17%	

Table 7

The stock market reaction to the Supreme	Court decision:	Alternative	measures.
Source: Datastream and Opensecrets			

Panel B – Highly regulated firms and PACs										
Event window	HR + pac1 $N = 21$		HR + pac2 $N = 22$		HR + pac3 $N = 31$		HR + pac4 $N = 34$			
	CAARs	% Pos	CAARs	% Pos	CAARs	% Pos	CAARs	% Pos		
(-1, 1) (-3, 1) (-1, 0)	1.61%* 0.87% 0.98%	71.43% 61.90% 61.90%	3.03% 2.77% 2.81%*	63.64% 63.64% 63.64%	3.33% 2.89% 1.99%	51.61% 54.84% 48.39%	3.40% 3.01% 2.26%	55.88% 58.82% 61.76%		

This table reports the CAARs around the date of the Supreme Court decision (January 21, 2010), by considering the subset of highly regulated firms. In Panel A, we report our results for different levels of lobbying expenditure (quartiles). In Panel B, we report our results for different level of amount raised by PACs (quartiles). In each table: (i) "HR" stands for "highly regulated firms"; (ii) "lob1", "lob2", "lob3", "lob4" indicate increasing levels of lobbying expenditures; (iii) "pac1", "pac2", "pac3", "pac4" indicate increasing levels of money raised by PACs.⁷

and 2011. We always find that the estimated CAARs are never significant at the 10% level or less.⁸

4. Conclusions

In 2010, a Supreme Court decision has tremendously altered the landscape for financing independent expenditures. Such ruling was particularly controversial, with the supporters invoking the principle of free speech, and the opponents asserting that large contributions are likely to lead to preferential treatment towards those who make the contributions. We suppose that the Court decision paved the way for establishing a new type of political connection.

By employing a unique political measure, our results show that firms operating in highly regulated industries and nonpolitically connected firms registered positive ARs after the decision. Our findings have important policy implications, providing new empirical evidence related to the opportunity to regulate the influence of money in politics (and therefore the establishment of political connections) and reconsider the regulation of campaign finance laws. The debate on this topic is still current, since the ways in which the Court decision can affect the democratic process are sizeable.

We know that the overall impact of such decision will continue to play an important part in academic research for a long period. Therefore, we believe that further investigation is still required, to either support or reject the need for regulation on this issue.

Data availability

Data will be made available on request.

References

- Akey, P., 2015. Valuing changes in political networks: evidence from campaign contributions to close congressional elections. Rev. Financ. Stud. 28, 3188–3223.
- Al-Ubaydli, O., McLaughlin, P.A., 2015. RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012, Regulation & Governance. http://dx.doi.org/10.1111/ rego.12107.
- Albuquerque, R., Lei, Z., Rocholl, J., Zhang, C., 2020. Citizens United vs. FEC and corporate political activism. J. Corp. Finance.
- Amore, M.D., Bennedsen, M., 2013. The value of local political connections in a low-corruption environment. J. Financ. Econ. 110, 387–402.
- Brown, J.R., Huang, J., 2020. All the president's friends: political access and firm value. J. Financ. Econ. 138, 415–431.
- Coates, J.C., 2012. Corporate politics, governance, and value before and after Citizens United. J. Empir. Leg. Stud. 9, 657–696.
- Duchin, R., Sosyura, D., 2012. The politics of government investment. J. Financ. Econ. 106, 24–48.
- Faccio, M., 2006. Politically connected firms. Amer. Econ. Rev. 96, 369-386.
- Kang, A., Lowery, R., Wardlaw, M., 2015. The costs of closing failed banks: A structural estimation of regulatory incentives. Rev. Financ. Stud. 28, 1060–1102.
- Kolari, J.W., Pynnönen, S., 2010. Event study testing with cross-sectional correlation of abnormal returns. Rev. Financ. Stud. 23, 3996–4025.
- McLaughlin, P.A., Sherouse, O., 2016. The impact of Federal Regulation on the 50 States, 2016 ed. Mercatus Center at George Mason University, Arlington, VA.
- Mikkelson, W.H., Partch, M.M., 1988. Withdrawn security offerings. J. Financ. Quant. Anal. 23, 119–133.
- Ovtchinnikov, A.V., Pantaleoni, E., 2012. Individual political contributions and firm performance. J. Financ. Econ. 105, 367–392.
- Skaife, H.A., Werner, T., 2020. Changes in firms' political investment opportunities, managerial accountability, and reputational risk. J. Bus. Ethics 163, 239–263.

 $^{^7}$ Please note that, for a number of firms, PACs and lobbying expenditures data are not available.

 $^{^{8}}$ For brevity, the results are only available on request.