Does Money Matter When Firms Lobby?

– Firm-level Evidence from Consultations at the EU Commission

Benjamin C.K. Egerod[1] Anders Woller[2]

Abstract

This study presents the first firm-level quantitative evidence that companies with high operating performance are more likely to persuade the EU Commission to adhere to their preferences. We do this by collecting data on individual companies active across 45 consultation procedures from 2005-2013 on issues related to the internal market in the EU, totaling more than 300 companies. We propose three distinct mechanisms accounting for the association: companies with high operating performance are 1) able to conduct investments in the economy, upon which decision-makers rely 2) likely to be knowledgeable about their respective sector – information which decision-makers demand 3) capable of mounting opposition if decision-makers are unresponsive to their needs. Our results support the first proposed mechanism: politicians are more responsive to companies with high operating performance as it allow companies to invest in employment opportunities. Finally, we show that high salience of an issue, following times of crisis, significantly limits the influence of big business.

Wordcount (incl. appendix): 8,603 (9,775)

Keywords: Corporate lobbying, Special interest groups, Firm non-market strategy, Lobbying in EU consultation, Financial resources and lobbying.

JEL Classification: D22, D72, D73.

[1]Department of Political Science, University of Copenhagen. Corresponding Author. Email: benjamin.carl.egerod@ifs.ku.dk. Phone: +45 27151536. Address: Øster Farimagsgade 5, opgang E, DK-1353 København K.

[2]Department of Political Science, University of Copenhagen. Address: Øster Farimagsgade 5, opgang E, DK-1353 København K.

1 Introduction

One of the more puzzling findings in the literature on interest groups and lobbying is that – on average – the economic resources of single advocates do not seem to matter for their probability of lobbying successfully on a policy issue. This is a highly robust finding, which replicates across political systems and context, time-period as well as group type (see e.g. Baumgartner et al. 2009; Junk 2017; Klüver 2011; Lowery 2013).

In this article, we argue that for politically active firms, the most commonly used measures of financial resources (lobbying expenditure, campaign contributions, size of lobbying staff etc.) do not capture one of the most important sources of corporate political power – how well the company is performing financially. High-performance companies generally have strong expertise, a lot of political muscle, and will be key players shaping their market through future investments. Consequently, decision-makers depend on them, and give their positions weight in shaping policy – even if the firms do not directly engage in lobbying. However, because firms have a strong interest in designing regulation that benefits themselves, decision-makers have to trade off the preferences of high-performance companies against those of the remaining societal groups.

We test the argument using automated text analysis on all the pieces of new legislation proposed by the Directorate-General for the Internal Market (DG Internal Market) in the period 2005-2013, for which stakeholder consultations were held. Using this data, we construct a measure of whether or not any given company is successful in changing the Commission's proposal. We combine this with data on the economic characteristics of companies, thereby constructing the first firm-level dataset linking operating performance to preference attainment. This allows us to test how firm-specific economic characteristics correlate with the probability of achieving lobbying success. We find that, on average, high-revenue companies are more likely to be successful in their lobbying endeavors.

We investigate three potential mechanisms. First, to explore whether the effect is driven by the expert knowledge that often comes with a good operating performance, we collect data on R&D investments and patents, which capture the dimension of information related to being a highly innovative company. While high-performance firms clearly are

more innovative, there is no connection between investing in knowledge capacities and preference attainment. While this does not rule out other dimensions of information – e.g. intimate knowledge of the market's composition – as a mechanism, it does suggest that innovative companies are not particularly influential.

Second, if the results were driven by high-performance companies having a larger capacity to make investments in employment – thereby granting them control of voter welfare (see Jensen and Malesky 2018) – we would expect the effect of being a high-performance firm to be driven by companies that are also important employers. Indeed, we do find that the effect is moderated by the labor intensity.

Finally, to investigate how the preferences of high-performance firms are traded off against citizen interests, we leverage the onset of the Great Recession starting in September 2008 to explore how the privileged position of high-performance companies is shaped by shocks to the political system. In doing so, we unearth a redistribution of political power, which sets in with the Great Recession. Thus, the average effects, we uncover here, are driven by the time before 2010 and after 2011. In those periods, high-revenue firms were most successful in shaping the Commission's proposals. However, during the crucial years 2009 through 2011 – when the legislation dealing with the fallout from the recession and the sovereign debt crisis was proposed – the relationship between operating performance and preference attainment disappears, likely due to the fact that the salience of the initiatives resulted in corporate interests being crowded out by other societal interests. This is important in its own right, since the DG Internal Market regulates the banking industry, which was the focus of most of the high-stakes legislation, which was proposed in the wake of the recession.

Overall, our results indicate that decision-makers are more responsive to the firms that exhibit high operating performance, because they impact voter welfare through their investments. However, for high-stakes legislation – and during times of economic turmoil – decision-makers may very well regulate against the preferences of big business, whom they otherwise depend on.

Much of the research on interest groups has focused on group type. Because business

groups are often much more well-endowed than their civil society counterparts, it could be expected that the EU system would be biased in the direction of business interests. However, Dür et al. (2015) have recently shown that if anything, the average business group attains less influence on EU decision-making through lobbying than citizen groups. Similarly, focusing on the Commission's formulation of policy proposals, Klüver (2012a) found no differences between group types. With our finding that high-revenue companies are more likely to attain their preferences in the lobbying game, we contribute with part of an explanation of this pattern. Because few large companies are vastly more successful than the many small ones, business actors taken as one category would seem less influential due to large heterogeneity among them.

This article is most closely related to the literature on the causes and consequences of corporate lobbying. Here, one important line of research has sought to link firm-level lobbying to economic performance. Thus, it has been found that US firms that spend more on lobbying are on average more profitable (Huneeus and Kim 2018; Shaffer et al. 2000), and increase their stock prices (Chen et al. 2010). Studies with more explicitly political angles have found higher lobby expenditure to be related to lower levels of taxation (Richter et al. 2009), and less regulatory oversight (Gordon and Hafer 2005). To our knowledge, however, the only research on the link between corporate economic performance and political outcomes broadly speaking has relied on self-reported data. Thus, it has been shown that are self-reportedly larger, older and publicly owned companies report themselves to be more politically influential (Bennedsen et al. 2011; Campos and Giovannoni 2007). Until now, studies focusing on firm-level characteristics that are not self-reported, have sought to explain under which conditions companies become politically active (cf. Bernhagen and Mitchell 2009; Drutman 2015). We add to this literature by providing the first large-N investigation of the impact of firm-level financial characteristics on successful lobbying.

The remainder of the article is structured as follows. In the following section, we present three arguments for why corporate operating performance should matter for lobbying success. Seeing as the use of automated content analysis to study interest repre-

sentation is not uncontroversial (Bunea and Ibenskas 2015), in section three we discuss at length how we conduct the textual analysis to overcome potential biases and inefficiencies of our measure of influence. Here, we also present our data and its sources. Section four presents our results and investigates some potential mechanisms. In the fifth section, we conclude and provide brief comments on the implications of our study.

2 Why High-Performance Companies Should Be More Influential

We now present three separate theoretical accounts explaining why decision-makers should be more reponsive to firms with high operating performance.

Investment Capacity & Structural Dependence

Because the means of production in a free market economy are privately owned, the choice of how and where to invest is inherently privatized. This means that short-term growth as well as long-term economic sustainability is placed in the hands of the economic elites, who exhibit high operating performance, because they will control the choice of investment, and can use the threat of disinvestment to gain influence (Przeworski and Wallerstein 1982). This threat is likely to be indirect: regulation in favor of any company will produce above-market-clearing pay-offs and it will consequently also have inefficiently high investment rates. Changing regulation against this company's preferences, will lead to it disinvesting as pay-offs revert back towards market-clearing. This provides an incentive for policymakers to tailor policy to suit the preferences of big employers in order to pander to voters (Jensen and Malesky 2018). This places policymakers in a two-fold dependent relationship with the high-performance companies: On one hand, voters are deeply sensitive to fluctuations in economic growth, and are likely to punish policy-makers who perform badly regarding employment (Duch and Stevenson 2008). Because of this, voters react positively to this pandering strategy (Jensen and Malesky 2018). At the same time, the policy-makers need taxes from the economic elites to finance their policies (Bates

and Donald Lien 1985; Tilly 1985). This will force the Commission (and policy-makers elsewhere) to share power with the economic elites by trading off influence on political outcomes for influence on politico-economic regulation (Przeworski and Wallerstein 1988). In this framework, lobbying of big business merely mediates their structural power – it serves only to remind the Commission of its structural dependence on the economic elites (Bernhagen and Bräuninger 2005, p. 48). This would partly explain why lobbying effort in isolation is such a weak predictor of success. The true effect stems from the company's ability to control voter welfare through employment and investments.

Note, however, that the choice of economic regulation is a double-edged sword: on one hand the policy-maker can buy popular support by favoring some corporations, who will then increase employment above market-clearing. But on the other hand, too much of this is likely to prove economically inefficient, and will be punished by voters. This leads to the Commission having to strike a balance between favoring specific economic constituencies and providing efficient economic regulation.

Information and Legislative Subsidies

Because policy-makers are highly resource constrained, and work with a limited bureaucracy (particularly in the EU Commission), they cannot extract all relevant information themselves. Instead, they depend on stakeholders to do so (Grossman and Helpman 2001; Hall and Deardorff 2006). Just a brief glimpse at a set of EU consultation documents, will show that interest groups, indeed, do use their position papers to provide information to the Commission. For firms, this mainly comes in the form of how a given proposal would impact their market and influence their operations. From this point of departure, it has been argued that the Commission consults interest groups to benefit from their technical knowledge on specific areas about to be legislated, the goal being to prevent dysfunctional regulation (Joos 2011, pp. 104–105). Bouwen (2002) argues that the exchange of knowledge and information between the political system and business groups are important determinants of successful corporate interest representation, because decision-makers need the technical knowledge and representativeness of business groups to overcome issues

with legitimacy and implementation of regulation.

The relevant technical, informational resources are likely to be concentrated with high-performance firms. First, their knowledge and financial resources are likely to go hand-in-hand, simply because monied interests can invest in information (Klüver 2012b). Second, even if the firm does not directly invest in knowledge production, high performance is likely to come from a better understanding of the market, which the company is active on. Because of this intimate knowledge of how the market functions, information received from high-performance firms may be better. Third, and related to the previous point, good operating performance is likely to be perceived as validation – that the firm is doing something right – thereby legitimating the company as well as the information it provides. Thus, even if the company does not control more informational resources than other firms, information from high-performance firms is likely to be viewed as better. Fourth, decision-makers may simply view the world in the same manner as high-performance companies, simply because the views of market leaders are seen as more legitimate. When presented with their views, decision-makers could very well tend to give them more weight (see McCarty 2013, on cognitive capture).

These mechanisms suggest that it is not necessarily about high-performance companies providing 'better' information – it might just be that there preferences are given more weight, because they are perceived as more informed. Importantly, research suggests that information provided in this way is not unbiased, as firms have their own agendas, and are likely to portray the reality on their market in ways that will further their interests (Grossman and Helpman 2001). Since the preferences of high-performance firms will tend to be different from smaller companies, other interest groups, and – at times – voters, decision-makers are forced to trade off these positions against each other.

Latent Political Muscle

Previous accounts of financial resources have focused on active expenditure on lobbying campaigns. While high-performance firms are likely to spend more, simply because they have the resources to do so, this is unlikely to be the whole story. In particular, when

decision-makers know that firms are able to initiate expensive lobbying campaigns, they may anticipate their preferences – even without the firm engaging in actual political activities. This happens, because high-performance firms can credibly threaten decision-makers with campaigns that could make life hard for them, e.g. by targeting the opinions of the voting public or supporting the opposition, etc.[3] Because of this, corporate lobbying expenditures may not matter for the outcome of any given issue. However, the knowledge that high-performance companies can and will engage in expensive campaigns – that can be painful for the decision-maker – if they do not get their will, could on the margin matter, when policy proposals are written. This would mean that the preferences of high-performance companies are taken into account almost without the company exerting any lobbying effort.

3 Data & Methods

3.1 Selection of policy areas and firms

To measure how the investment capabilities of corporations impacts new legislative proposals in the EU, we focus on the Commission's consultations in the DG Internal Market. The Commission enjoys a privileged position within the institutional make up of the EU. Through the Right of Initiative the Commission acts as a gatekeeper to all other EU institutions. Therefore, lobbying at this stage should be very appealing to special interest groups (SIGs) as this process of designing regulation presents them with the opportunity to impact a given issue at an early stage (Greenwood 2011, p. 24). Furthermore the Commission's option to withdraw or change the proposal throughout the whole legislative process gives the Commission de facto veto power (Bouwen 2002, p. 21). All of this makes the Commission's stakeholder consultations a natural point of departure for our study.

An important part of the motivation for selecting DG Internal Market is that – through its regulation of the free movement of capital, goods and workers as well as public procurement – it redistributes enormous sums, which provides the politically active firm with the potential of seeking vast private gains. Because of this, the DG Internal Market

[3]See Gordon and Hafer (2007, 2005) for an alternative account of corporate lobbying as signaling.

is an interesting case in its own right.

Last but certainly not least the question concerning selection of firms lobbying the DG Internal Market arises. As no well-defined population exists, assessments on whether the sample is representative are challenging (Berkhout and Lowery 2010; Wonka et al. 2010). To overcome this problem we use an issue-based sampling approach (Beyers et al. 2014) to create a register of submitted consultation documents in the period ranging from 2005-2013. Thus, we include firms that have actually made their preferences known to the Commission by submitting a position paper. As the degree of institutionalization presumably affects the influence enjoyed by a specific firm, our sample only includes firms who appear in more than one consultation procedure in the period under investigation. Consequently only firms who have an interest throughout the period are included. This does lead to a bias towards over-representation of financial institutions, but we find it easier to control for the type of firm than for the degree of institutionalization. This selection strategy results in data on 45 legislative proposals containing 90 Commission positions and 543 firm positions. Because of missing data on some controls, 313 corporations are included in the full models.

3.2 Measuring Lobbying Success

To proxy lobbying success, we apply a large-N 'preference attainment' approach (Dür 2008). We use documents from the Commission's consultations (Klüver 2009, 2011). Preference attainment is to be understood as degree to which the final proposal of the Commission has moved towards the position of a given SIG, after the preferences of that SIG have become known to the Commission. We assume that SIGs have a single ideal position on a given policy issue (Schneider and Baltz 2003). Thus, lobbying success is the utility gain brought about by the Commission's final proposal compared to the utility the SIG would have enjoyed if the Commission's original proposal would have been enacted. Following (Klüver 2009, 2011), we use the unsupervised machine learning algorithm Wordfish (Slapin and Proksch 2008) to estimate the preferences of the corporations under consideration by using the position papers they submit to the consultation. Green

papers, consultation documents and final legislative proposal are used to estimate the original and final position of the Commission.

In order to be identified, the Wordfish model has to constrain the variance of any estimation, therefore we use a dichotomous measure of success. The success variable is a binary indicator, which takes on the value 1, when the Commission's final proposal is closer to the position of the firm, than the first draft proposal was. Thereby a firm is taken to be successful if it has managed to move the Commission towards its ideal position and zero otherwise.

3.3 Validating Wordfish Estimates and Finding Best Practice

As Bunea and Ibenskas (2015) show, differences in how actors understand and use words as well as the contexts in which a position paper is written can severely harm the performance of Wordfish. This is obviously a salient concern, when working with position papers from a range of different interest groups. However, since we are only interested in the positions of two types of actors – companies and the Commission – this concern should be smaller in our less heterogeneous setting. In addition, we validated our Wordfish estimates on a larger sample than has been previous practice.

To do so, we chose a set of validation texts from three consultations that presented least likely contexts for good Wordfish performance in that they a) dealt with highly technical issues of regulation, b) were low-salience for the public, and c) contained little explicitly political language. We hand coded the positions of each text to validate Wordfish estimates. The cases were: *Reinforcing sanctioning regimes in the financial services sector* ('National Sanctions'), which dealt with issues concerning how best to harmonize sanctioning regimes in the financial sector across Europe. *A New European Regime for Venture Capital* ('Venture Capital'), which had as its goal to develop legislation that could incentivize investment in small and newly started businesses. And finally, *Review of the Investor Compensation Scheme Directive* ('ICSD'), which summarized stakeholder experiences with the inner workings of the existing investor compensation scheme with the goal of updating legislation. In Appendix A, we provide further details on the consultations

and the hand-coding scheme, we used.

Results from the validation exercise are shown in Figure 1. In all three cases, we include the Commission's two positions, business actors and the set of groups opposing the interests of the firms (consumer groups and trade unions). As we can see, Wordfish does remarkably well, exhibiting strong correlations with the hand-coded estimates (respectively .87, .63 and .48), and little deviation between the diagonal line and the best linear fit. The somewhat lower correlation in the case of Venture Capital is driven by discrepancies regarding only two actors, while the remaining ones are placed with high precision.

Finding Best Practice for Using Wordfish

While this shows that Wordfish can, indeed, estimate the policy positions of firms with high validity, we sought to better understand how various document characteristics influence Wordsfish performance. Knowing what predicts good Wordfish performance allows us to choose which texts to include, when we move beyond our validation set, in a way so that optimizes Wordfish performance.

In the models presented in Figure 1, we only keep business actors, because they are the organizations, we are interested in. We can use the remaining actors, however, to gain variation in the characteristics that are likely to predict good Wordfish performance. To estimate which characteristics a set of documents should have, we include the remaining non-business actors in the three validation set consultations step-by-step. Thus, we estimate positions using Wordfish in a number of iterations, each time including more groups chosen at random from the full sample of actors active in the consultation. This gives us random variation in the length of the individual texts, differences in word use and meaning, and the number of actors, all of which are factors, which are likely to negatively impact Wordfish performance (Bunea and Ibenskas 2015; Hjorth et al. 2015).

We present the results from this exercise in Appendix A. Importantly, we find that Wordfish performance depends systematically on a number of document characteristics. We find that in order for Wordfish to provide feasible estimates, average document length

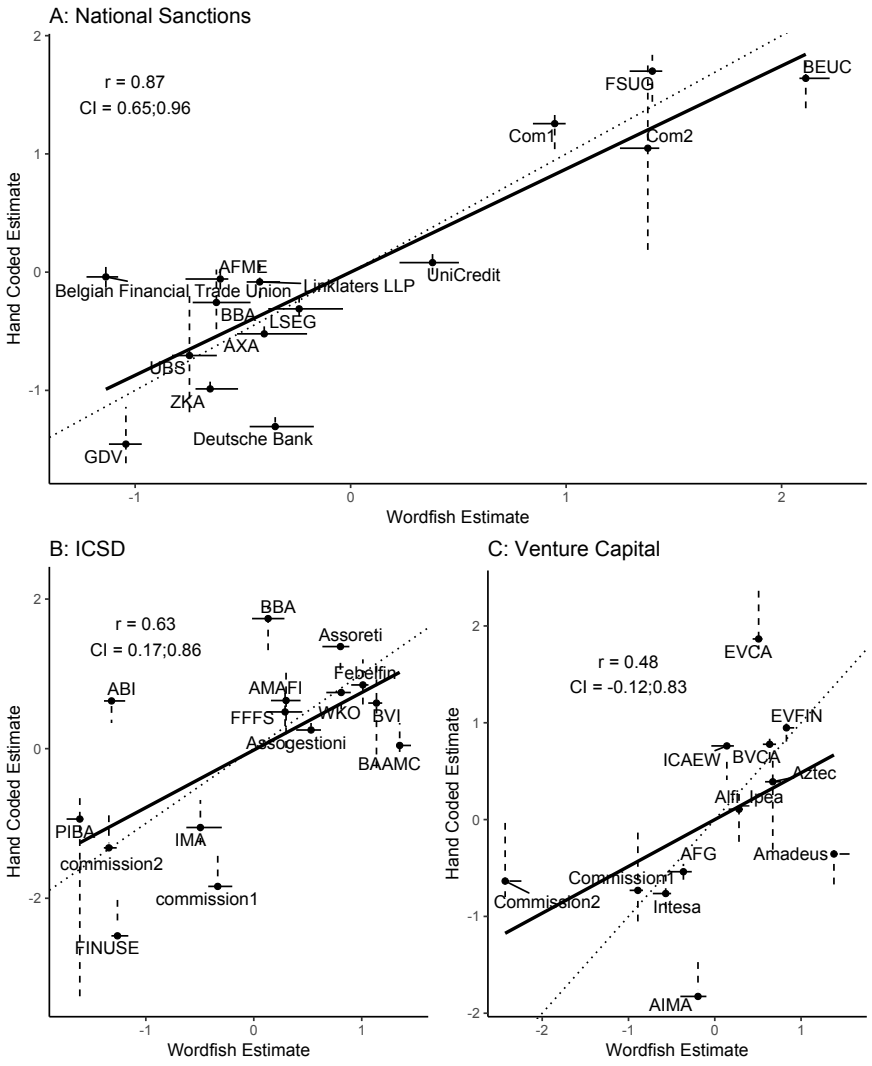

Figure 1: Validating Wordfish Estimates. *Note: Horizontal lines are 95 percent poisson bootstrapped confidence intervals around the Wordfish estimates. Dashed vertical lines are 95 percent non-parametric bootstrapped confidence intervals round hand-coded estimates. 500 samples drawn with replacement in both cases. Solid line is the linear fit, dotted line is the 45 degree diagonal.*

should never go below $\approx$ 1,500 words, and single documents should never be less than 800-1000 words in length. Average correlations between word usage in the corpus should not go below r $\approx$ 0.55. Lastly, stopwords should be removed. Our results suggest that going below these limits will hurt Wordfish performance.

When proceeding to estimate the positions of the remaining actors, in the non-validation sample, we estimate Wordfish on a consultation-by-consultation basis to optimize similarity, and include in each estimation the texts, which ensures that we meet the above mentioned criteria. At times this entailed trading off potential selection biases

against Wordfish performance, which in some consultations required including documents from specific companies that contained below 800-1000 words. We did this, as we would rather have random noise from a poor Wordfish performance that systematic selection bias from excluding specific types of companies that send in short position papers. We pre-processed the corpus by stemming the words using the Porter algorithm and removing numbers, punctuation as well as special characters.

3.4 An Econometric Model of Lobbying Success

Measuring Market Performance

We use corporate revenue as our main independent variable, since this measures how well the company is performing financially right now. This captures important aspects of all three theories of why high-performance firms should be most successful in shaping the Commission's policy proposals: high-revenue firms 1) are the ones, who will be able to make the largest *future* investments, 2) are their market's leaders, which will imply that they have important information on how best to construct policy to regulate the market, 3) will have money to spend on lobbying campaigns.

Controls

The full model includes a range of microeconomic indicators as means of control. First of all, we incorporate measures of the firm's total assets, number of employees, whether a majority of it is publicly owned, and a set of dummy variables for industry, service and financial firms. As a last microeconomic control, we also use the difference between fixed and total assets to get a measure of how much of the firm's assets that are not tied up in fixed assets – its liquidity. Data on all firm-level economic variables are taken from the Bureau van Dijk's Orbis database. As a country-level economic control, we include the GDP per capita of the corporation's country of origin. We have downloaded this data from the World Bank's World Development Indicators.

To proxy the salience of a given issue to the interest group community, we include a count of the number of submitted consultation papers in a given consultation round,

excluding documents submitted by individuals. Moreover we control for the size of a lobbying camp and degree of conflict inherent in the issue (Klüver 2011; Mahoney 2007; Michalowitz 2007). We use Wordfish to proxy these concepts. The size of the side is measured using the number of firms on each side of the Commission. The degree of conflict is operationalized as the distance between the positions of the firms at first and the third quartile in the Wordfish estimation.

This represents the first dataset linking firm-level characteristics to their likelihood of shaping outcomes of a legislative process, particularly the EU Commission's policy proposals. Descriptive statistics are shown in Table 1.

Table 1: Descriptive Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Success	540	0.57	0.50	0.00	1.00
Revenue	489	28,771	54,653	0.29	470,171
Total Assets	512	552,820,182	826,703,701	5.176	2,964,320,552
Liquidity	509	536,697,020	826,587,039	−9.000	2,939,749,672
Employees	440	61,837	79,545	4	423,502
Responses	432	144	144	11	688
Country GDP	531	42.4	8.9	1.5	83.1
Conflict	541	1.250	0.45	0.24	1.95
Public	533	0.03	0.17	0.00	1.00

We estimate the association between revenue and preference attainment with a linear probability model (LPM), where we use robust standard errors clustered at the consultation level to deal with heteroskedasticity and the hierarchical nature of the data. We do this, because the logit estimator is biased in the presence of many parameters and few observations, but we show that our results are very robust to the choice of estimator.

4 Results

In Figure 2 we have plotted our binary dependent variable, lobbying success, against our predictor of interest, a log-transform of operating revenue. To show that our results do not depend on our choice of LPM as primary estimator, we have fitted lines from both a logit and an OLS regression. The results are as good as indistinguishable. Substantively

the correlation is moderate to strong – in our sample, firms with the largest revenue have a likelihood of being successful of approximately 62 percent, whereas firms with the smallest revenue have lobbied successfully in approximately 45 percent of the time. This is about a 17 percentage point difference in the chances of lobbying successfully.

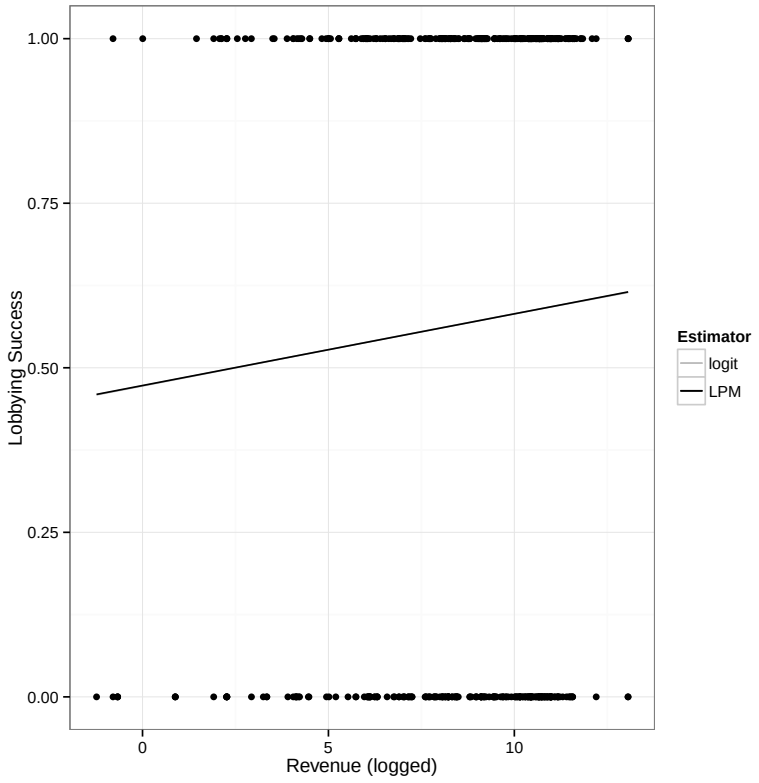

Figure 2: Lobbying Success and Operating Performance.

We model this formally in Table 2[4], we include a host of controls. To show that our results are not driven by the use of LPM, in the first line below the main results, we include the odds-ratios from logit models replicating our primary results. Across all specifications, our results are robust to the choice of estimator.

The salience of an issue has been found to make business less influential (Godwin et al. 2012), this makes firms likely to select into consultations that are less salient and crowded (Baumgartner and Leech 2001). Also, the conflict inherent in an issue is likely to make policy change difficult (Klüver 2011; Mahoney 2007; Michalowitz 2007). Additionally, rich countries are often thought to be more influential in the EU. If those countries lobby on behalf of their largest firms, this could be driving the association. Both could bias our results. Therefore, column one includes controls for the consultation level covariates, salience and the conflict inherent in the political issue. It also holds constant public ownership and the primary sector of the corporation as well as the GDP per capita of the host country. The coefficient is sizable, but there is a lot of noise in the estimation, and the correlation is only significant at the ten percent level.

To deal with shocks to the political system, column two includes time fixed effects- The correlation between revenue and lobbying success is now statistically significant at the five percent level. It is worth noting that the negative correlation between salience and successful lobbying endeavors becomes highly significant. Since the financial and national debt crises are obvious examples of the shocks that would be absorbed by the time dummies, this could indicate that both salience and the overall odds of lobbying success decreased at the onset of these crises. Below, we return to the differential impact of these shocks.

In column three we control for a range of firm-level economic factors. In order to make sure that the correlation between revenue and political influence is not a reflection of sheer size, we control for total assets. Furthermore we include the number of employees, because firms with high operating revenue will tend to hire more people. Seeing as corporations with less assets tied up in production will be free to spend more on gaining influence, we

[4]Tables are compiled using Stargazer in R (Hlavac 2013).

Table 2: Main LPM results

	Dependent variable:		
	Binary influence		
	Ownership	Time dummies	Micro controls
	(1)	(2)	(3)
Revenue (logged)	0.024*	0.030**	0.033**
	(0.014)	(0.014)	(0.014)
Salience	−0.0004	−0.0003***	−0.0003**
		(0.0001)	(0.0001)
Conflict	−0.071	0.001	−0.033
		(0.127)	(0.130)
Publicly Owned	−0.134	−0.147	−0.164
			(0.143)
GDP/cap	0.003	0.003	0.003
			(0.003)
Total assets			0.000
Liquidity			−0.000
Employees			0.00000
Odds-ratios	1.0901*	1.1265**	1.1775**
Industry FEs?	Yes	Yes	Yes
Year FEs?	No	Yes	Yes
Observations	313	313	313
R^2	0.039	0.145	0.151

*Note: Coefficients are unstandardized LPM estimates. Robust standard errors with clustering at the consultation levels are in parentheses. *, **, and *** indicate statistical significance at the 10, 5 and 1 pct. levels, respectively.*

use the difference between total and fixed assets to proxy the liquidity of a company as a final microeconomic control. The correlation between the revenue of a corporation and its political influence increases whereas the standard error remains more or less the same.

Besides the robustness of the correlation between revenue and lobbying success, it should be noted that the coefficient of interest increases throughout the models. This hints at three different suppressing effects 1) Most publicly owned banks in our sample are bailed-out banks with high revenues, but low credibility in the political system, this finding could indicate the bail-out schemes during the crisis partly acts as suppressors of the correlation between revenue and political influence. 2) Time seems to play an important role, a finding which we will return to below. 3) Revenue correlates highly with the microeconomic controls, which in turn exhibit negative or very small correlations with political influence. Taking these factors into account, strengthens the correlation between revenue and political influence.

4.1 Robustness checks

To further check the robustness of our results, we conduct a range of sensitivity checks, which are presented in Figure 3. The first row reproduces the result from column five in Table 2 as a benchmark comparison across the sensitivity checks.

We restrict the sample by excluding corporations from politically powerful countries, who could be behind the association. First, we exclude the UK, then Germany, France and finally the US. In all cases, our results remain highly robust. This suggests that our results are not driven by few extreme firms, but hold broadly among firms from the most important countries in our sample.

Looking across the specifications, it should be noted that the point estimates exhibit very little variation, which shows us that the results are robust.

4.2 Investigating the Mechanism

We suggest multiple reasons why firms with a good operating performance should attain their preferences more often. Here, we go through a number of exploratory exercises to

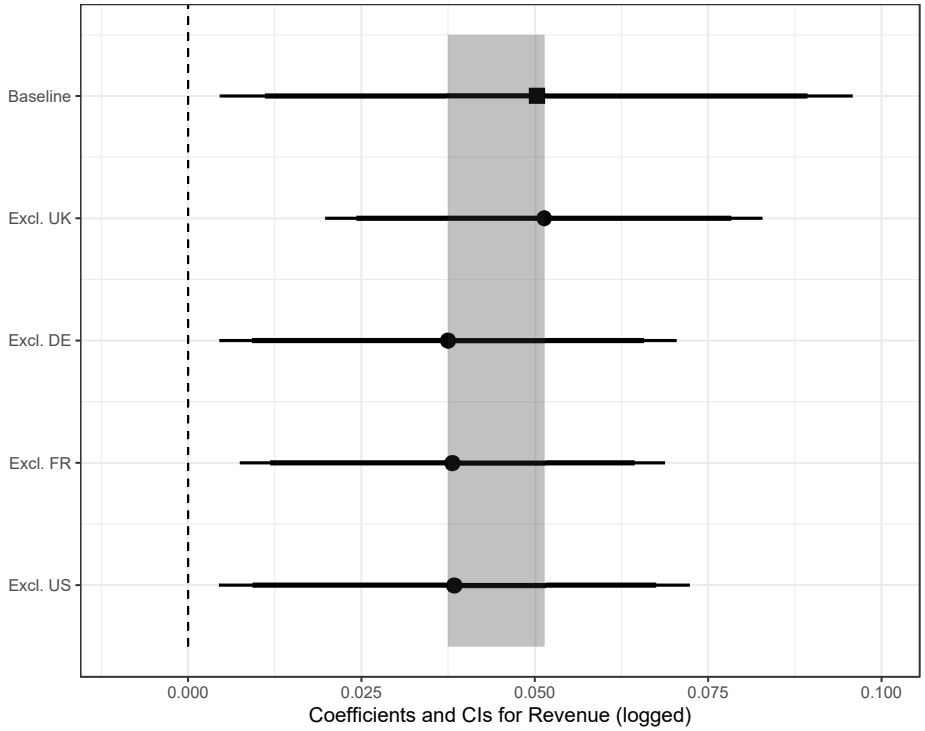

Figure 3: Sample Restrictions. *Thick and thin lines are 90 pct. and 95. pct. robust confidence intervals. The shaded area represents the range of the point estimates.*

investigate these channels. While we cannot investigate all potential mechanisms, we do provide evidence that the effects are driven by labor intensive companies.

Does Labor Intensity Drive Success?

Theoretical accounts emphasizing that the influence of business stems from structural sources (e.g. Bernhagen and Bräuninger 2005) typically argue that corporations hold sway over public policy, because they control voter welfare by being able to make large investments in employment (as in Przeworski and Wallerstein 1988). Therefore, decision-makers tailor policy to suit them in order to pander to voters (Jensen and Malesky 2018). If the influence of high-performance companies comes about, because they can use their profits to employ more workers, we would expect the effect of revenue to be driven by firms with labor intensive production – these are the firms where new investments will lead to the largest increase in new employments.

To get at this mechanism, we measure labor intensity as the ratio of the number of employees to dollars in total assets owned by the company (logged). This captures

how strongly the firm's production process is dependent on labor. Figure 4 shows the interaction between revenue and labor intensity. As we can see, the effect of revenue is strongly moderated by labor intensity – high performance clearly matters more among firms with a labor intensive production. The coefficient on the linear interaction term is 2.28, and we can reject the null of no interaction at the ten percent level. Thus, while the coefficient is very strong, it is estimated with some noise. Using the Hainmueller et al. (2018) binning estimator, which allows us to estimate local effects within predefined bins[5], we find some evidence of non-linearity, indicating that the interaction with labor intensity may be strongest for low and medium levels. The non-linearity, however, is not statistically significant.

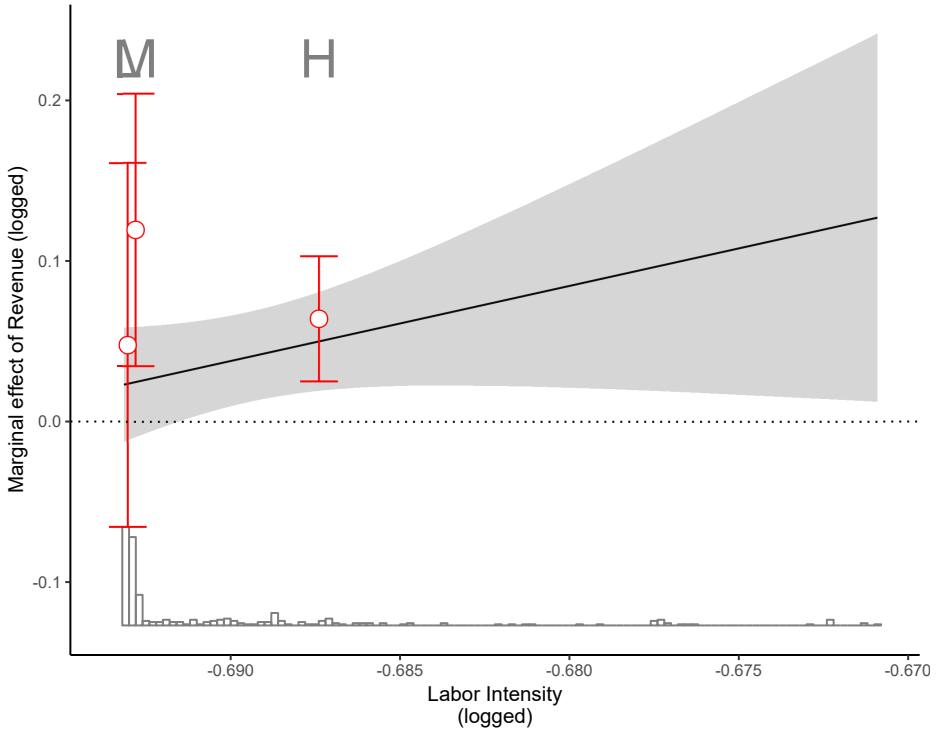

Figure 4: Labor Intensity Moderates Revenue. *Note: The solid line shows the linear interaction, while dots and whiskers show potential non-linearities estimated using the Hainmueller et al. (2018) binning estimator – 25th, 50th and 75th percentiles used for bins. Robust standard errors and 95 percent confidence intervals are used.*

[5]Here, we simply estimate effects within the 25th, 50th and 75th percentiles of labor intensity.

Does Information Drive Success?

As we outlined previously, informational resources of high-performance companies may be an important source of their political success. We provide two proxies of this – expenditure on research and development (R&D) and the number of patents owned by firm. Data on this is from the Orbis database. These to measures are imperfect in that they capture innovation rather than information more broadly. However, missing data on these variables forces us to constrain our attention to the few highly technical companies that invest strongly in R&D and patents. Importantly, among companies with highly technical knowledge, these two variables should be important in distinguishing between high and low information actors: on markets where innovation matter, investing on R&D and patents will be an important correlate of more broad based information.

Results are reported in Table 3, where the models only include 69 observations in total. Column one shows the relationship between R&D and revenue, column two models preference attainment as a function of R&D. Columns three and four repeats this exercise using patents. As we can see, revenue correlates very strongly and significantly – in statistical terms – with both our measures of innovation. Neither R&D nor patents, however, correlate with preference attainment – the point estimates are very small – for R&D negative – and statistically insignificant at conventional levels. Because it would cause post-treatment bias, we do not include our measures of innovation as controls in the main model. We have, however, done so, and it does not change the results. We have also interacted revenue and our measures of innovation to test whether high performance only matters if a firm also is innovative. We find no evidence of an interaction.

Most narrowly understood, this shows that companies, who invest the most in innovating, are not more politically successful. However, because we focus only on companies that value technical innovation, this could suggest that being a high-knowledge, high-information firm is not driving our results.

Table 3: Revenue, Innovation and Preference Attainment

	Dependent variable:			
	R&D (logged)	Success	Patents (logged)	Success
	(1)	(2)	(3)	(4)
Revenue (logged)	1.797***		0.836***	
	(0.249)		(0.203)	
R&D (logged)		−0.004		
		(0.009)		
Patents (logged)				0.008
				(0.013)
Constant	−7.674***	0.673***	−4.190**	0.606***
	(2.427)	(0.104)	(1.975)	(0.077)
Observations	69	69	69	69
R^2	0.437	0.003	0.202	0.006

*Note: Coefficients are unstandardized LPM estimates. Robust standard errors with clustering at the consultation levels are in parentheses. *, **, and *** indicate statistical significance at the 10, 5 and 1 pct. levels, respectively.*

Corporate Preference Attainment in Times of Crisis

A red thread through the varying theoretical reasons for why high-performance firms should be more likely to attain their preferences is that they compete with smaller companies, other groups and the voting public at large for influence. In situations with strong economic turmoil and highly salient legislation on the agenda, decision-makers are likely to put less weight on the preferences of high-performance businesses, because opposing interests mobilize. To investigate this, we leverage the onset of the Great Recession in an exploratory exercise: because the stakes were extremely high for the legislation dealing with the fallout from the economic crisis, we could expect the pattern to be disrupted in this period.

In Figure 5, we present results using the Hainmueller et al. (2018) binning estimator to model a non-linear interaction with time. This allows us to estimate local marginal effects of revenue within pre-defined bins of the moderator – in this case; time. We set the bins to range from 2005 until 2009, from 2010 through 2011, and 2012 through 2013. As we can see, there is a very marked dip in effect sizes in the middle bin (2009, 2010 and 2011), when most of the crisis legislation was proposed by the Commission. After this

period, the coefficient on revenue returns to its pre-crisis level.

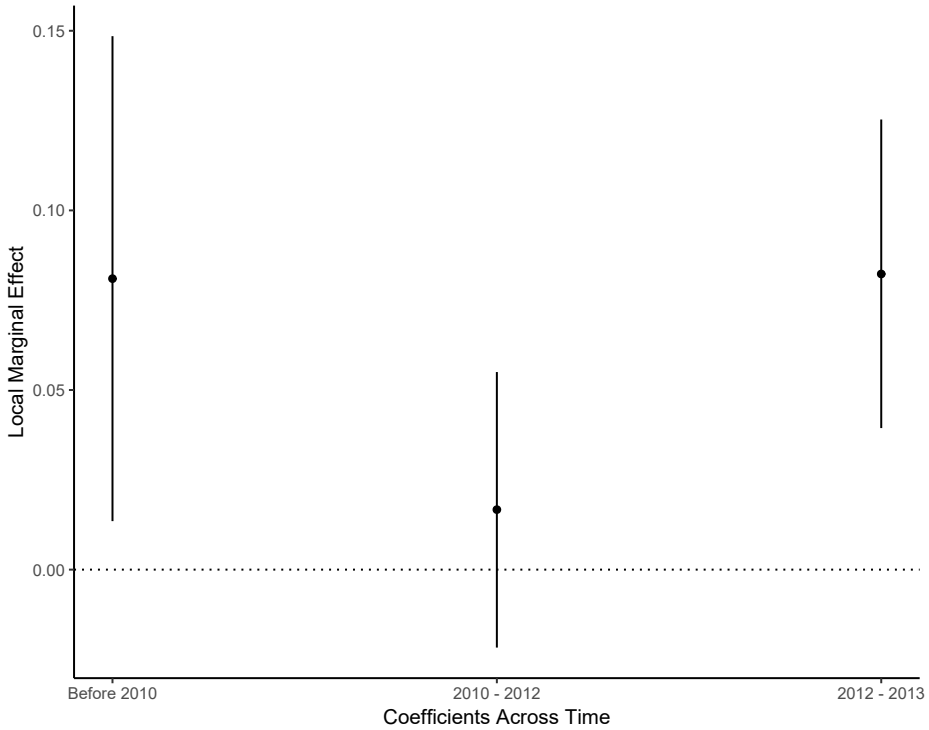

Figure 5: Varying Effects Before, During and After the Great Recession. *Note: Effects are allowed to vary depending on whether it is in the years during which the Commission proposed its major legislation dealing with the fallout of the Great Recession. The Hainmueller et al. (2018) binning estimator is used to allow effects to vary non-linearly across time.*

This could suggest that the onset of the crisis redistributed – however briefly – political power away from high-performance businesses. This could happen for a number of reasons. Maybe decision-makers trusted the information they held less during the crisis, or maybe the mobilization og opposing interests, and the strength with which public opinion turned against big business during the crisis forced decision-makers to change the way they trade off preferences of groups against each other. While it is beyond the scope of the paper to investigate why this change happens, these findings speak directly to the literature on interest group politics more broadly, which suggests that business is less likely to be influential on highly salient issues (Dür and Mateo 2014; Rasmussen and Carroll 2014; Woll 2013).

5 Concluding remarks and implications

Commenting on the distributional conflict among special interest groups, Mancur Olson (1982, p. 44) once noted that instead of using the familiar allegory of "slicing the social pie" to describe the situation, a more apt portrayal would be that of "wrestlers struggling over the contents of a china shop", destroying more of the shop's content than what they can steal for themselves. In this paper, we have sought to model – what we believe to be – a crucial determinant of the outcome of the corporate wrestling match for political influence. Namely, corporate market performance, which we proxied using revenue. We did so by constructing the first dataset linking corporate financial characteristics to firm-level probability of changing a policy proposal. This dataset was comprised of all corporations who partook in at least one consultation at the DG Internal Market from 2005 to 2013.

We can highlight three main findings. First, looking across the corporations in our data set, companies with larger turnovers are more likely to gain influence on the legislative proposals set forth from the DG Internal Market. Thus, when comparing high and low performance companies, big businesses are more politically influential. Second, the association between revenue and preference attainment was concentrated among companies with the most labor intensive production process. Among these firms, investing current turnover will give the largest rise in terms of employees – and, conversely, disinvesting will produce the most layoffs. This suggests that decision-makers are more responsive to high-performance companies, because they are pivotal for voter welfare. Decision-makers did no respond more strongly to high-information firms. Third, in modeling the dynamic aspects of the game of influence, we found that the association between corporate turnover and the firm's likelihood of attaining its preferences was suppressed by a large shock to the system, which was temporally overlapping with the onset of the financial and economic crisis of 2008/2009. We found that during the time, when the Commission formulated the proposals that dealt with the fallout of the financial crisis, the association between market performance and lobbying success disappeared.

These results support our main hypothesis – that political decision-makers are dependent upon the economic elites. The office- and rent-seeking politician relies on the

investment choice of the corporations to obtain re-election and to cover the fiscal demands of their preferred policy. But our results also indicate that the dependency is historically specific and conditional on pressure from other groups. This is likely, because the salience of the new legislation was extremely high, and there was a strong counter-mobilization from other groups. This could very well be what shifted the balance of power away from high-performance firms. However, in the aftermath of the crisis, the association between financial resources and preference attainment was restored.

It is widely accepted that the most important purpose of corporate political action is to bring about regulation that allows both higher prices and entrance barriers on the market in which the corporation acts (Stigler 1971). We also know that policy-makers can act as discriminating monopolists, granting these economic elites their much sought after protection against the free market (see North 1990). This distributional conflict not only causes dead-weight losses through inefficient economic regulation, but is also likely to inhibit the implementation of technological innovations (Olson 1982, ch. 3). It is through these mechanisms that distributional conflict among rent-seeking elites can ultimately lead to the adoption of institutions that cause less investment and technological growth than would have been the case otherwise. In the long run this might leave us all in a considerably poorer state (e.g. Acemoglu and Robinson 2006; Olson 1982).

While recent research suggests that corporate political activities may decrease aggregate productivity in the U.S. by more than 20 percent (Huneeus and Kim 2018), little is known about how the distributional conflict between corporate elites in the EU affects economic well-being. This is a fruitful future venue of investigation.

References

Acemoglu, Daron and James Robinson (2006). "Economic backwardness in political perspective". In: *American Political Science Review* 100.01, pp. 115–131.

Bates, Robert H and Da-Hsiang Donald Lien (1985). "A note on taxation, development, and representative government". In: *Politics & Society* 14.1, pp. 53–70.

Baumgartner, Frank et al. (2009). *Lobbying and policy change: Who wins, who loses, and why*. University of Chicago Press.

Baumgartner, Frank R and Beth L Leech (2001). "Interest niches and policy bandwagons: Patterns of interest group involvement in national politics". In: *Journal of Politics* 63.4, pp. 1191–1213.

Bennedsen, Morten, Sven Feldmann, and David Dreyer Lassen (2011). "Lobbying and bribes-A survey-based analysis of the demand for influence and corruption". In:

Berkhout, Joost and David Lowery (2010). "The changing demography of the EU interest system since 1990". In: *European Union Politics* 11.3, pp. 447–461.

Bernhagen, Patrick and Thomas Bräuninger (2005). "Structural power and public policy: A signaling model of business lobbying in democratic capitalism". In: *Political Studies* 53.1, pp. 43–64.

Bernhagen, Patrick and Neil Mitchell (2009). "The determinants of direct corporate lobbying in the European Union". In: *European Union Politics* 10.2, pp. 155–176.

Beyers, Jan et al. (2014). "Policy-centred sampling in interest group research: Lessons from the INTEREURO project". In: *Interest Groups & Advocacy* 3.2, pp. 160–173.

Bouwen, Pieter (2002). "Corporate lobbying in the European Union: the logic of access". In: *Journal of European Public Policy* 9.3, pp. 365–390.

Bunea, Adriana and Raimondas Ibenskas (2015). "Quantitative text analysis and the study of EU lobbying and interest groups". In: *European Union Politics* 16.3, pp. 429–455.

Campos, Nauro and Francesco Giovannoni (2007). "Lobbying, corruption and political influence". In: *Public Choice* 131.1-2, pp. 1–21.

Chen, Hui, David Parsley, and Ya-Wen Yang (2010). "Corporate lobbying and financial performance". In:

Drutman, Lee (2015). *The business of America is lobbying: How corporations became politicized and politics became more corporate*. Oxford University Press.

Duch, Raymond and Randolph Stevenson (2008). *The economic vote: How political and economic institutions condition election results*. Cambridge University Press.

Dür, Andreas (2008). "Measuring interest group influence in the EU: A note on methodology". In: *European Union Politics* 9.4, pp. 559–576.

Dür, Andreas and Gemma Mateo (2014). "Public opinion and interest group influence: how citizen groups derailed the Anti-Counterfeiting Trade Agreement". In: *Journal of European Public Policy* 21.8, pp. 1199–1217.

Dür, Andreas, Patrick Bernhagen, and David Marshall (2015). "Interest group success in the European Union: When (and why) does business lose?" In: *Comparative Political Studies* 48.8, pp. 951–983.

Godwin, Ken, Scott Ainsworth, and Erik Godwin (2012). *Lobbying and policymaking*. Cq Press.

Gordon, Sanford and Catherine Hafer (2007). "Corporate influence and the regulatory mandate". In: *Journal of Politics* 69.2, pp. 300–319.

— (2005). "Flexing muscle: Corporate political expenditures as signals to the bureaucracy". In: *American Political Science Review* 99.02, pp. 245–261.

Greenwood, Justin (2011). *Interest representation in the European Union*. Macmillan International Higher Education.

Grossman, Gene and Elhanan Helpman (2001). *Special Interest Politics*. MIT press.

Hainmueller, Jens, Jonathan Mummolo, and Yiqing Xu (2018). "How much should we trust estimates from multiplicative interaction models? Simple tools to improve empirical practice". In: *Political Analysis*.

Hall, Richard L and Alan V Deardorff (2006). "Lobbying as legislative subsidy". In: *American Political Science Review* 100.1, pp. 69–84.

Hjorth, Frederik et al. (2015). "Computers, coders, and voters: Comparing automated methods for estimating party positions". In: *Research & Politics* 2.2, p. 2053168015580476.

Hlavac, Marek (2013). "stargazer: LaTeX code and ASCII text for well-formatted regression and summary statistics tables". In: *URL: http://CRAN. R-project. org/package= stargazer*.

Huneeus, Federico and In Song Kim (2018). "The Effects of Firms' Lobbying on Resource Misallocation". In:

Jensen, Nathan M and Edmund J Malesky (2018). *Incentives to pander: How politicians use corporate welfare for political gain*. Cambridge University Press.

Joos, Klemens (2011). *Lobbying in the new Europe*. John Wiley & Sons.

Junk, Wiebke (2017). "Coalitions arm the weak: The conditional effect of lobbying coalitions on preference attainment". In: *paper presented at the Annual Meeting of the American Political Science Association*.

Klüver, Heike (2012a). "Biasing politics? Interest group participation in EU policy-making". In: *West European Politics* 35.5, pp. 1114–1133.

— (2012b). "Informational lobbying in the European Union: The effect of organisational characteristics". In: *West European Politics* 35.3, pp. 491–510.

— (2009). "Measuring interest group influence using quantitative text analysis". In: *European Union Politics* 10.4, pp. 535–549.

— (2011). "The contextual nature of lobbying: Explaining lobbying success in the European Union". In: *European Union Politics* 12.4, pp. 483–506.

Lowery, David (2013). "Lobbying influence: Meaning, measurement and missing". In: *Interest Groups & Advocacy* 2.1, pp. 1–26.

Mahoney, Christine (2007). "Lobbying success in the United States and the European Union". In: *Journal of Public Policy* 27.1, pp. 35–56.

McCarty, Nolan (2013). "Complexity, capacity, and capture". In: *Preventing regulatory capture: Special interest influence and how to limit it*, pp. 99–123.

Michalowitz, Irina (2007). "What determines influence? Assessing conditions for decision-making influence of interest groups in the EU". In: *Journal of European Public Policy* 14.1, pp. 132–151.

North, Douglass (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge university press.

Olson, Mancur (1982). *The rise and fall of nations: Economic growth, stagflation and social rigidities*. New Haven: Yale University Press.

Przeworski, Adam and Michael Wallerstein (1988). "Structural dependence of the state on capital". In: *American Political Science Review* 82.1, pp. 11–29.

Przeworski, Adam and Michael Wallerstein (1982). "The structure of class conflict in democratic capitalist societies". In: *American Political Science Review* 76.2, pp. 215–238.

Rasmussen, Anne and Brendan Carroll (2014). "Determinants of upper-class dominance in the heavenly chorus: Lessons from European Union online consultations". In: *British Journal of Political Science* 44.2, pp. 445–459.

Richter, Brian Kelleher, Krislert Samphantharak, and Jeffrey F Timmons (2009). "Lobbying and taxes". In: *American Journal of Political Science* 53.4, pp. 893–909.

Schneider, Gerald and Konstantin Baltz (2003). "The power of specialization: How interest groups influence EU legislation". In: *Rivista di Politica Economica*.

Shaffer, Brian, Thomas Quasney, and Curtis Grimm (2000). "Firm level performance implications of nonmarket actions". In: *Business & Society* 39.2, pp. 126–143.

Slapin, Jonathan B and Sven-Oliver Proksch (2008). "A scaling model for estimating time-series party positions from texts". In: *American Journal of Political Science* 52.3, pp. 705–722.

Stigler, George (1971). "The theory of economic regulation". In: *The Bell Journal of Economics and Management Science*, pp. 3–21.

Tilly, Charles (1985). "War making and state making as organized crime". In: *Violence: A reader*, pp. 35–60.

Woll, Cornelia (2013). "Lobbying under Pressure: The Effect of Salience on E uropean U nion Hedge Fund Regulation". In: *JCMS: Journal of Common Market Studies* 51.3, pp. 555–572.

Wonka, Arndt et al. (2010). "Measuring the size and scope of the EU interest group population". In: *European Union Politics* 11.3, pp. 463–476.