



Corporate governance and lobbying strategies

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ABSTRACT

The paper extends the recent research on corporate non-market actions (Fernández & Usero, 2010, and Usero & Fernández, 2009). Specifically, we study whether corporate governance, in terms of managerial entrenchment, determines the choice and degree of lobbying engagements as a non-market strategy and with what impact on firm value. The results indicate that firms with more entrenched management have a greater tendency to engage in lobbying activities. Within the group of firms that lobby, there is a negative relation between the degree to which management is entrenched and lobbying intensity. In addition, there is a positive relation between lobbying intensity and value added by lobbying firms. Overall, the evidence suggests that corporate lobbying is not agency driven and may, in fact, create value.

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1. Introduction

In an article published in *Fortune* magazine in 2006, Matt Miller writes, “A company’s return on lobbying and campaign contributions – let’s call it return on political investment, or ROPI – is astronomically higher than any real investment it can make.”

In a corporate world with no agency conflict between managers and shareholders, shareholders may rejoice at this report. However, given the lack of transparency, weak corporate democracy, and divergence between management and shareholder objectives, it may be a cause for concern for investors. Two main reasons for this concern come to mind. First, in the real world, characterized as it is by performance-linked compensation plans and information asymmetries, management may be motivated to undertake lobbying investments that may boost short run performance – and hence their payoff – at the cost of long term value creation for shareholders. The second reason for the concern is that in the pursuit of personal interests – political connections and positions, promoting political ideologies/preferences, etc. – management may use lobbying expenses in a wasteful manner, yielding neither short term nor long term value gains.

Recent evidence (Fernández and Usero, 2010; Ozer, 2010; Usero and Fernández, 2009) suggests that the composition and orientation of top management influences corporate political activities. Agency theory argues that more powerful and entrenched management teams pursuing their personal interests may distort the expected positive link between

corporate lobbying and value creation. By studying the link between corporate lobbying and balance of power between shareholders and management, this paper seeks to enhance our understanding of the motivations behind corporate lobbying and its shareholder value relevance.

Brasher and Lowery (2006) suggest that most of the research on political engagements of businesses focuses on corporate campaign contributions through political action committees (PACs) rather than lobbying. They opine, “Unfortunately, the literature does not provide very clear and consistent answers about why some organizations lobby and other do not... [and] ...the literature on lobbying impact has generated an equally confusing and inconsistent set of empirical results.”

This paper addresses the above gaps in our understanding by studying management entrenchment as one possible explanation for corporate lobbying and how entrenchment and lobbying strategies interactively impact corporate performance. Analyzing the corporate political strategies in terms of lobbying behavior is valuable as not only the lobbying outlays are significantly larger (Milyo et al. (2000)), the number of lobbying entities is also bigger compared to the number of active PACs (Brasher and Lowery (2006)).

The purpose of this paper is to seek answers to the following questions:

1. What, if any, is the relation between proclivity and intensity of corporate lobbying and management entrenchment?
2. Does lobbying relate to corporate value creation?
3. Is the value relevance of lobbying conditioned by management entrenchment?

Our results suggest that firms with more entrenched management (weaker shareholder rights) have a greater tendency to engage in

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lobbying activities. Within the group of firms that lobby, there is a negative relation between the degree to which management is entrenched and the lobbying intensity. In addition, the evidence suggests that after controlling for variations in shareholder rights and industry effects, there is a positive relation between lobbying intensity and value added by lobbying firms.

The paper proceeds as follows: in the next section we discuss the theoretical and empirical framework and develop our hypotheses. Section 3 describes data sources and sample selection as well as explains the variables used in the analysis; Section 4 presents the discussion of our results and Section 5 concludes the paper.

2. Literature review

2.1. Corporate lobbying leads to higher shareholder value

Why do firms lobby? One stream of thought holds the view that corporations value political connections. Studying over twenty thousand firms in forty-seven countries, Faccio (2006) concludes that firms, on average, experience about a two percent increase in shareholder wealth at the time of announcement of their executive or large shareholder joining politics. Similar evidence provided by Faccio and Parsley (2009) suggests a value loss of about two percent at the time of an event that disrupts a political connection. Therefore, we expect that management at value-maximizing corporate entities – with effective governance mechanisms in place – would pursue lobbying as a nonmarket strategy to create value.

2.2. Lobbying results in favorable influence on policy outcomes

Lord (2000) reports that the congressional staff perceived professional lobbying as the most effective way to influence congressional legislative policy provisions. With respect to influence of public policy on firm performance, while Banker et al. (1997) study airline carriers, Bowman et al. (2000) look at pharmaceutical firms. Given that both of the studies report that expected policy changes impact market value, it is plausible to argue that lobbying activities aimed at swaying policy outcomes influences the value of the firm. Lo's (2003) analysis of the 1992 revision of executive compensation disclosure rules suggests that firms who lobbied against the proposed regulation experienced positive abnormal stock returns of about six percent.

Thus, at value maximizing firms corporate management is expected to lobby to favorably influence public policy.

2.3. Managerial entrenchment influences lobbying strategy

There are several theoretical arguments as to why management entrenchment is expected to influence decision to lobby and lobbying intensity. With respect to the propensity to lobby, the first argument is in terms of managerial risk aversion. This line of reasoning suggests that managerial power intensifies managerial risk aversion (Grinstein and Hribar (2004)) and that a more powerful management is more likely to engage in lobbying as a risk-reducing strategy. Repetto (2006, pp 4) argues that, "Executives see much of their lobbying activity as essentially defensive efforts to ward off potential threats."

The second argument is in terms of agency-conflict-driven managerial self-interest. Extending the political-contributions-as-managerial-consumption (Ansolabehere et al. (2003)) perspective to lobbying, agency theorists (Jensen (1986)) argue that management may engage in lobbying for furthering their entrenchment. There exists evidence that management team heterogeneity – that in turn determines management power relative to board of directors – is an important influence on corporate strategic decisions in general (Auh & Menguc, 2006; Cho, 2006) and political strategies in particular (Ozer, 2010). Thus, one can argue that entrenched managers engage in lobbying to further their own interests.

The third possible explanation is in terms of the rational myopia hypothesis (Daines & Klausner, 2001). The argument suggests that more powerful management teams can pursue longer-term non-market strategic options, such as lobbying, more effectively. Thus, in the value-maximizing framework, firms with more entrenched managements have greater likelihood to engage in lobbying and with a greater expected positive value impact.

The above discussion also suggests that the impact of lobbying on corporate value may be positive or negative. One possibility is that lobbying is value destroying as it misallocates resources away from potentially productive usage. Additionally, agency driven managers may lobby for promoting public policies that create a power balance favorable to management relative to shareholders. The second possibility is that lobbying may be value enhancing, as well as promoting personal interests of management. That is, lobbying may well be consistent with management-shareholders interest alignment.

There exists significant evidence suggesting a negative relation between management entrenchment and corporate value. Gompers et al. (2003) provide evidence that the greater is the managerial power relative to shareholders, the poorer is the corporate value performance. Bebchuk et al. (2004) and Bebchuk and Cohen (2005) provide complementary evidence. Several studies extend this line of research by studying corporate strategies and their value impact as conditioned by managerial entrenchment. For instance, Jiraporn et al. (2006) report that firms with more powerful management have a greater propensity to engage in corporate diversification and that these firms face a greater diversification discount.

In sum, evidence on agency conflict suggests that managements may pursue their own objectives to the detriment of shareholders' interests, and that the likelihood of their doing so is greater when they have more power. However, in case lobbying serves their interest and is shareholder value adding too, then the managers have greater incentive to engage in lobbying. In either case, it is plausible to argue that management at firms with greater managerial power would have greater propensity to engage in lobbying. This argument forms the basis of hypothesis H1A below:

Hypothesis H1A. Firms with greater degree of management entrenchment are more likely to engage in lobbying activities.

Despite the above discussion suggesting a positive relation between propensity to lobby and managerial entrenchment, we need to recognize at least two possibilities that may result in a negative relation between the intensity of lobbying and entrenchment. The first possibility concerns the corporate reputation. For instance, citing the Boeing example, Repetto (2006, p. 8) suggests, "Business lobbying can lead to adverse publicity and reputational and other losses...". The second possibility resulting in a negative relation between lobbying intensity and managerial entrenchment emanates from the need to contain corporate risks arising from judgment errors (Repetto, 2006) in management decisions. Given our previous discussion that stronger managements become more risk averse, we argue that more powerful managements will deliberately limit their exposure to lobbying related risks. Thus, we expect a negative relation between the degree of management entrenchment and lobbying intensity. This discussion forms the basis of the next hypothesis.

Hypothesis H1B. Firms with a greater degree of management entrenchment lobby less intensely in terms of lower lobbying outlays and lesser number of lobbyists hired.

2.4. Managerial entrenchment may moderate the lobbying–corporate value link

There exists material evidence of a positive relation between political engagements and corporate performance (see for example, Shaffer et al. (2000), Claessens et al. (2008), Richter et al. (2009),

and Cooper et al. (2010) among others). However, evidence reported by Goldman et al. (2009) and Aggarwal et al. (2007) casts doubt on value relevance of corporate political engagements. Specific to lobbying, Chen et al. (2009) report that corporate lobbying expenses relate positively to accounting-based as well as market-based performance.

Given the evidence we hypothesize that lobbying will positively impact corporate value while higher degree of management entrenchment would relate negatively to firm value.

Hypothesis H2. Controlling for the degree of managerial entrenchment, there exists a positive relation between the degree of lobbying intensity and firm value.

3. Sample composition and data description

3.1. Data sources

We study the lobbying behavior of the sample firms for the period between 1998 and 2003. First, we collect annual corporate lobbying data from the database compiled by the Center for Responsive Politics (CRP). For analyzing lagged managerial entrenchment influence on lobbying intensity and interactively on firm performance, we trace governance and performance variables up to two years prior. We focus on a relatively homogenous set of U.S. firms that appear in the Stern Stewart annual list of best performing non-financial firms.

To measure the degree of shareholder rights, we utilize the Governance Index developed by Gompers et al. (2003) (GIM) and the Entrenchment Index developed by Bebchuk et al. (2004). To construct these indices, we obtain information on governance provisions from the Investor Responsibility Research Center (IRRC) database. For our control variables, we retrieve the annual accounting data from the COMPUSTAT database. When we combine the Stern Stewart, IRRC, CRP, and COMPUSTAT databases, the final set yields a sample that consists of 5,452 firm-year observations during the period of 1998 to 2003.

3.2. Measurement and description of variables

3.2.1. Test independent variables

3.2.1.1. Governance index. Using Investor Responsibility Research Center (IRRC) data on a variety of governance provisions GIM focus on twenty-four unique provisions to arrive at their governance index. GIM classify provisions into five categories: director/officer protection (Protection); tactics for delaying hostile bidders (Delay); voting rights (Voting); state laws (State); and other takeover defenses (Other). For each firm, GIM add one point for every restrictive provision that suppresses shareholder rights and increases managerial power.

The individual governance provisions included in the construction of the Governance Index are displayed in Appendix A. The Governance Index calculation involves summing individual provisions that restrict shareholder rights by protecting managers against takeover threats. The interpretation of the Governance Index is straightforward: the higher the index, the greater is the managerial power and weaker are the shareholder rights.

3.2.1.2. Entrenchment index. Bebchuk et al. (2004) construct an “Entrenchment Index” based on 6 of the 24 governance provisions used in Gompers et al. (2003). The six provisions included in the Entrenchment Index are staggered boards, limits to shareholder bylaw amendments, supermajority requirements for mergers, supermajority requirements for charter amendments, poison pills, and golden parachutes.

To ensure robustness of our results, we also utilize the Bebchuk et al. (2004) Entrenchment Index. This index has an interpretation similar to that of the GIM index.

3.2.2. Test dependent variables

3.2.2.1. Lobbying proclivity. Following Brasher and Lowery (2006) we conduct a logistic regression analysis where the binary dependent variable is equal to one if the firm reports non-zero lobbying expense and zero otherwise. We also conduct robustness tests using Tobit and Heckman’s two-stage estimation techniques.

3.2.2.2. Lobbying intensity. We consider two separate measures of lobbying intensity. The first measure consists of aggregate parent company level annual lobbying expenses reported by firms. Our second measure is in terms of the number of lobbyists hired by that firm.

3.2.2.3. Corporate value. We utilize two distinct, but related, measures of corporate value creation. The first measure is Stern Stewart’s economic value added (EVA). We also utilize Stern Stewart’s market value added (MVA) metric to assess the long-term value impact of lobbying engagements.

3.2.3. Control variables

3.2.3.1. Firm size. Hansen and Mitchell (2000) and Brasher and Lowery (2006) show that size is an important determinant of lobbying. To control for the influence of firm size, we utilize the natural log of the book value of total assets (Log of total assets) as a proxy for firm size.

3.2.3.2. Leverage. While high leverage may relate to lower lobbying because of the discipline imposed by debt, it may also relate positively to lobbying because greater lobbying may actually be a solution to problems and risks manifesting in higher leverage. We utilize the ratio of total debt to total assets (Debt to total assets ratio) as a measure of financial leverage.

3.2.3.3. Firm performance. It may be argued that poor performing firms need to lobby more to alleviate factors causing poor performance. We utilize the ratio of net income to total assets (Return on assets) as a proxy for corporate performance.

3.2.3.4. Growth opportunities. Growth opportunities not only serve as a proxy for potential to grow, but also capture uncertainty associated with growth. In both dimensions, higher growth opportunities will influence a firm’s choice to lobby. We utilize the Market to book ratio as a proxy for growth opportunities facing a firm. We also utilize the ratio of research and development expenditures to sales (R&D to sales ratio) to capture uncertainties associated with the technology-intensive nature of a firm’s business. We expect to find a positive relation between R&D intensity and propensity to lobby and level of lobbying expenditures.

3.2.3.5. Capital expenditure. While resources constraints are not expected to influence the decision to lobby, lack of resources may limit the actual lobbying expenses. We control for revenue adjusted capital expenditures (Capital expenditure to sales ratio) to clearly delineate the impact of resource constraints on lobbying intensity. Firms facing high capital expenditure to sales ratio are expected to have a lower level of lobbying expenses.

3.2.3.6. Delaware incorporation. The state of incorporation of a firm may be a material factor in determining the balance of power between shareholders and management (Hill, 2008), and hence, may influence choice to lobby. Thus, we test for Delaware incorporation

influence on choice to lobby by using a dummy variable (= 1 if the firm is incorporated in Delaware and = 0 otherwise).

3.2.3.7. Industry effects. Schuler et al. (2002), Andres (1985), and Masters and Keim (1985) emphasize the importance of industry economic and regulatory factors in influencing a firm's lobbying behavior. To clearly delineate the influence of a firm's governance characteristics on its lobbying strategies, we use one-digit SIC code industry dummies (Industry controls) to control for industry effects.

Table 1 provides the sample descriptive statistics. The average MVA is \$7781.3 m with a large standard deviation. The median MVA for the sample period is \$1669.9 m. Corresponding EVA numbers are at \$20.3 m and \$25.6 m. The mean governance index and entrenchment index levels at 9.32 and 2.12 are comparable to those reported in the literature on shareholder rights. The sample firms show a large variance in firm size measured in terms of market value, revenue, assets, or income. The sample firms, on average, spend \$0.54 m on lobbying and hire 1.93 lobbyists. Excluding non-lobbying firms, we find that for the subsample of lobbying firms only, the mean (median) annual lobbying expense is \$1.15 m (\$0.4 m) while the number of lobbyists engaged is 4.06 (2.00).

3.3. Methods

To test hypothesis H1A, we estimate the following logistic regression model predicting firm engagement in lobbying activities:

Dependent dichotomous Variable (=1 for Lobbying firms; =0 Otherwise)
 $= b_0 + b_1 \text{ * Governance index (Entrenchment index)}$
 $+ b_2 \text{ * Debt to total assets ratio} + b_3 \text{ * R\&D to sales ratio}$
 $+ b_4 \text{ * Return on assets} + b_5 \text{ * Log of total assets}$
 $+ b_6 \text{ * Market to book ratio} + b_7 \text{ * Delaware incorporation}$
 $+ \text{Industry controls} + \varepsilon$ (i.e., error term).

To test hypothesis H1B, we estimate the following multivariate regression model relating governance index and lobbying intensity:

$\text{Lobbying intensity} = b_0 + b_1 \text{ * Governance index (Entrenchment index)}$
 $+ b_2 \text{ * Debt to total assets ratio} + b_3 \text{ * Capital expenditure to sales ratio}$
 $+ b_4 \text{ * R\&D to sales ratio} + b_5 \text{ * Return on assets} + b_6 \text{ * Log of total assets}$
 $+ \text{Industry controls} + \varepsilon$ (i.e., error term).

Table 1
Sample descriptive statistics.

	Mean	Median	Std. deviation
Market value added (MVA) (\$ million)	7781.33	1669.94	27521.88
Cost of capital (in percent)	8.15	7.85	1.94
Economic value added (EVA) (\$ million)	20.33	24.59	939.89
Return on invested capital	12.39	8.57	117.74
Governance index (Gompers et al.)	9.37	9.00	2.76
Entrenchment index (Bebchuk et al.)	2.12	2.00	1.33
Total assets (\$ million)	17764.32	3825.07	62777.83
Sales (\$ million)	7344.68	2735.83	15903.69
Net income (\$ million)	411.38	154.37	1642.91
Debt to total assets ratio	0.27	0.26	0.20
R&D to sales ratio	0.05	0.00	0.53
Return on equity (in percent)	14.97	13.82	185.76
Return on assets (in percent)	4.20	4.35	14.14
Market value (\$ million)	17630.51	4299.92	61221.75
Lobbying expense (\$ million)	0.54	0.00	1.47
Number of Lobbyists	1.93	0.00	4.67
Number of observations = 5452			

Table 2
Mean comparison of lobbying and non-lobbying firm characteristics.

Variable	Non-lobbying firms	Lobbying firms	Difference	p-Value
Market value added (MVA) (\$ million)	3606.72	12374.54	8767.82***	0.00
Cost of capital (in percent)	8.35	7.93	-0.42***	0.00
Economic value added (EVA) (\$ million)	12.40	29.12	16.72	0.53
Return on invested capital	14.78	9.74	-5.04*	0.09
Governance index	9.13	9.64	0.51***	0.00
Entrenchment index	2.09	2.16	0.07**	0.05
Total assets (\$ million)	7933.23	28306.98	20373.76***	0.00
Sales (\$ million)	3864.12	11077.15	7213.03***	0.00
Net income (\$ million)	179.62	659.92	480.30***	0.00
Debt to total assets ratio	0.24	0.29	0.05***	0.00
R&D to sales ratio	0.05	0.05	0.01	0.54
Return on equity	0.11	0.19	0.09*	0.09
Return on assets	0.04	0.04	0.00	0.90
Market value (\$ million)	8636.38	27149.15	18512.78***	0.00
Lobbying expense (\$ million)	0.00	1.15	1.15***	0.00
Number of lobbyists	0.05	4.06	4.00***	0.00

*, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

To test hypothesis H2 we estimate the following multivariate regression relating governance index and lobbying intensity to value added:

$\text{Value added} = b_0 + b_1 \text{ * Log of total assets} + b_2 \text{ * Debt to total assets ratio}$
 $+ b_3 \text{ * Governance index (Entrenchment index)}$
 $+ b_4 \text{ * Lobbying expenditure} + \text{Industry controls}$
 $+ \varepsilon$ (i.e., error term).

To ensure that problems of autocorrelation and reverse causality do not distort the coefficient estimates, we estimate and report yearly regressions with lagged dependent variables. Further, to ensure that selectivity bias is not distorting our results, we estimate Heckman's selection model to analyze the impact of managerial entrenchment on the decision to lobby and the lobbying intensity.

Table 3
Logistic regressions predicting firm engagement in lobbying activities.

Dependent dichotomous variable = 1 for Lobbying firms; = 0 Otherwise	Model 1 (Wald statistics)	Model 2 (Wald statistics)	Model 3 (Wald statistics)	Model 4 (Wald statistics)
Intercept	-6.453 (629.064)	-7.750 (615.800)	-7.484 (614.673)	-7.875 (606.302)
Governance index	0.062*** (30.306)	0.053*** (20.825)		0.057*** (23.302)
Entrenchment index	1.307***	0.420***	0.068*** (8.179)	0.413***
Debt to total assets ratio			0.391*** (4.399)	
R&D to sales ratio	(57.779) 1.453*** (41.807)	(5.059) 1.054*** (24.128)	(4.399) 1.020*** (22.382)	(4.885) 1.044*** (23.492)
Return on assets	1.835*** (22.467)	1.077*** (8.363)	1.120*** (8.921)	1.106*** (8.667)
Log of total assets	0.627*** (590.506)	0.843*** (704.298)	0.852*** (718.612)	0.841*** (701.489)
Market to book ratio	0.013*** (6.262)	0.016*** (7.361)	0.015*** (6.873)	0.016*** (7.291)
Delaware incorporation				0.128** (3.573)
Industry controls	No	Yes	Yes	Yes
No. of observations	5452	5452	5452	5452
Pseudo R-Square	0.21	0.28	0.28	0.28

*, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 4
Multivariate regression relating governance index and lobbying intensity.

Variable	Dependent variable— lobbying expenditure		Dependent variable— number of lobbying firms	
	Model 1 (t-statistics)	Model 2 (t-statistics)	Model 1 (t-statistics)	Model 2 (t-statistics)
Intercept	−4.05*** (−27.909)	−4.08*** (−29.541)	−10.76*** (−21.858)	−10.52*** (−22.448)
Governance index	−0.04*** (−5.645)		−0.04* (−1.867)	
Entrenchment index		−0.108*** (−8.283)		−0.225*** (−5.075)
Debt to total assets ratio	−0.33*** (−3.297)	−0.30** (−2.994)	−0.48 (−1.416)	−0.42 (−1.259)
Capital expenditure to sales ratio	−0.33*** (−5.405)	−0.32*** (−5.203)	−0.87*** (−4.173)	−0.84*** (−4.022)
R&D to sales ratio	0.52*** (6.089)	0.50*** (5.906)	1.41*** (4.816)	1.36*** (4.658)
Return on assets	0.42** (2.819)	0.38*** (2.610)	1.51*** (3.012)	1.43*** (2.864)
Log of total assets	0.60*** (42.975)	0.59*** (42.621)	1.55*** (32.756)	1.54*** (32.609)
Industry controls	Yes	Yes	Yes	Yes
No. of observations	5092	5092	5059	5059
Model p-value	(<0.001)	(<0.001)	(<0.001)	(<0.001)
Adjusted R-Square	0.3180	0.3230	0.214	0.217

*, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

4. Empirical findings and discussion of results

4.1. Mean comparison tests: comparing lobbying and non-lobbying firms

The results displayed in Table 2 suggest that lobbying firms are significantly more value generating – in terms of both the market value added and economic value added – than non-lobbying firms. While return on invested capital is lower for lobbying firms, a significantly lower cost of capital results in their higher MVA relative to non-lobbying firms. Our data indicate that lobbying firms are larger and have greater financial leverage. Next, we turn to our main test variables. The evidence suggests that lobbying firms have greater managerial entrenchment. Lobbying firms are placed higher on the Gompers et al. (2003) Governance Index and the Bebchuk et al. (2004) Entrenchment Index. The conclusion from the statistics in Table 2 is that while, consistent with hypothesis 1A, lobbying firms have weaker shareholder rights, consistent with hypothesis 2 they outperform non-lobbying firms in terms of value added.

4.2. Multiple regression results

4.2.1. Predictors of decision to lobby

To clearly delineate the role of management entrenchment in predicting corporate lobbying behavior we analyze our data in a multivariate logistic regression framework. Our dependent binary variable assumes a value of 1 for lobbying firms and 0 for non-lobbying firms. We estimate four different regression models. The results are presented in Table 3. Coefficient estimates in Model 1 support hypothesis 1A with the Governance index associating significantly positively with the likelihood of management choosing to lobby. One interpretation is that the results are consistent with agency theory. The positive coefficient of Governance index implies that firms with more powerful management (weaker shareholder rights) have greater tendency to lobby.

With respect to the control variables, the results indicate that highly levered firms have a greater tendency to lobby. Further, firms with higher levels of R&D intensity tend to engage in lobbying with greater probability. It may be reflective of firms engaging in informational lobbying typically needed to facilitate informed policy making in R&D-intensive industries. It may also be reflective of lobbying

efforts aimed at protecting patents and other knowledge capital from actual or potential competition. We also find that larger and well performing firms are more likely to lobby. Finally, we report that firms with greater growth opportunities have a greater tendency to engage in lobbying. In Model 2, we control for industry effects. The results indicate that even after controlling for industry level variations, managerial entrenchment is a significant positive predictor of a firm's decision to lobby. In Model 3, with the Bebchuk et al. (2004) Index as a measure of managerial entrenchment, the results also suggest that firms with relatively more powerful management are more likely to lobby.

While it may be argued that more entrenched managers lobby with personal gain in mind, the positive relation between lobbying and managerial power may not be agency driven and may actually reflect on lobbying as aligning shareholders and management interests.

Table 5
Heckman's selection model relating governance index propensity to lobby and lobbying intensity.

Dependent dichotomous variable	Model 1	Model 1 marginal impact	Model 2	Model 2 marginal impact
Panel A Probit (Heckman selection equation) regressions predicting firm engagement in lobbying activities.				
= 1 for Lobbying firms; = 0 Otherwise	(Z statistics)	$\varphi(Z\gamma)/\gamma_j$	(Z statistics)	$\varphi(Z\gamma)/\gamma_j$
Intercept	−3.843*** (14.12)	−	−3.664*** (13.79)	−
Governance index	0.028*** (4.16)	0.012*** (4.16)		
Entrenchment index			0.043*** (3.03)	0.015*** (3.03)
Debt to total assets ratio	0.310*** (2.90)	0.112*** (2.90)	0.291*** (2.72)	0.105*** (2.72)
R&D to sales ratio	0.648*** (5.22)	0.245*** (5.22)	0.635*** (5.09)	0.236*** (5.09)
Return on assets	0.552*** (2.97)	0.243*** (2.97)	0.580*** (3.09)	0.252*** (3.09)
Log of total assets	0.486*** (29.95)	0.194*** (29.95)	0.490*** (30.16)	0.196*** (30.16)
Market to book ratio	0.008*** (2.44)	0.003*** (2.44)	0.007*** (2.29)	0.003*** (2.29)
Industry controls	Yes	Yes	Yes	Yes
No. of observations	5075		5075	
Pseudo R-Square	0.17		0.17	

Panel B Heckman outcome equation regressions explaining intensity of lobbying activities.

Variable	Dependent variable— lobbying expenditure		Dependent variable— number of lobbying firms	
	Model 1 (z-statistics)	Model 2 (z-statistics)	Model 1 (z-statistics)	Model 2 (z-statistics)
Intercept	−2.44*** (−6.87)	−2.55*** (−7.79)	−4.33*** (−3.66)	−3.75*** (−3.43)
Governance index	−0.07*** (−5.01)		−0.10** (−2.18)	
Entrenchment index		−0.18*** (−6.70)		−0.47*** (−5.10)
Debt to total assets ratio	−0.33 (−1.64)	−0.27 (−1.38)	0.03 (0.04)	0.09 (0.14)
Capital expenditure to sales ratio	−0.42*** (−3.31)	−0.39*** (−3.08)	−0.89** (−2.06)	−0.76* (−1.78)
R&D to sales ratio	0.62*** (3.36)	0.58*** (3.15)	1.36*** (2.18)	1.18** (1.90)
Return on assets	1.52** (3.99)	1.43*** (3.77)	4.75*** (3.73)	4.62*** (3.64)
Log of total assets	0.55*** (18.44)	0.53*** (17.69)	1.18*** (11.84)	1.12*** (11.14)
Industry controls	Yes	Yes	Yes	Yes
No. of observations	5075	5075	5042	5042
Model p-value	(<0.001)	(<0.001)	(<0.001)	(<0.001)
Adjusted R-Square	0.24	0.24	0.16	0.17

To ascertain as to what this relation actually reflects – agency or interest alignment – we look at the value consequence of lobbying, later in the paper, and find that lobbying adds to corporate value.

Finally, given that the state of incorporation of a firm may be a material factor in determining the balance of power between shareholders and management (Hill, 2008) and firm performance (Daines, 2001), we test for Delaware incorporation influence and find that (Model 4) Delaware incorporated firms are more likely to engage in lobbying.

4.2.2. Lobbying intensity and management entrenchment

To estimate the degree to which managerial entrenchment may influence lobbying intensity, we estimate four multiple regression models. The results in Table 4, with the significant negative coefficient of the GIM index (Model 1), imply that firms with a greater degree of management entrenchment lobby less intensely. Bebchuk et al. (2004) entrenchment measure in Model 2 is also related significantly negatively to lobbying intensity. In Models 3 and 4, we use the number of lobbyists engaged by a firm as the dependent variable. In both models, the management entrenchment test variables appear with significant negative coefficients. Thus, for all variations of the model, the results indicate that firms with greater managerial entrenchment spend relatively less on lobbying. If, as generally accepted, relatively powerful managements are more likely to engage in agency behavior, and if lobbying is considered wasteful, we should expect a positive relation between entrenchment and lobbying intensity. However, our first tests reveal that the degree of managerial entrenchment and lobbying intensity are negatively related. As discussed earlier, the results may be reflective of

management strategy to minimize judgment error risk (Repetto, 2006) by limiting lobbying expenses on any one particular strategic stance. In addition, management may limit lobbying intensity for fear of being branded as too political.

With respect to control variables, we find that firms with a greater degree of financial leverage lobby less. One possible interpretation is that higher leverage may act as a limiting factor on lobbying outlays. The negative relation between capital expense and lobbying intensity may be reflective of resources constraint imposed by high capital expenditures. As expected, firms with greater investments in R&D lobby more. Also, larger and better performing firms seem to have greater lobbying intensity measured in terms of either lobbying expense or the number of lobbyists engaged. Overall, the results in Table 4 suggest that a higher degree of lobbying may not correlate with a greater degree of managerial entrenchment.

Next, we estimate a Heckman's selection model to establish that our results are not marred by selection bias. The Heckman model results are presented in Table 5. While in Panel A we report the probit model estimates of the lobbying choice made by a firm, Panel B contains the second stage estimates of the degree of lobbying model. The results are consistent with the earlier results reported in Tables 3 and 4. To reiterate, probit estimates in Panel A suggest that a higher degree of managerial entrenchment predicts a greater propensity to engage in lobbying. Panel B results support the conclusions reached in Table 4. That is, conditional upon choosing to lobby, firms with a higher degree of managerial entrenchment spend less on lobbying activities. The corresponding control variable estimates in panels A and B are also consistent, respectively, with those reported in Tables 3 and 4.

Table 6
Multivariate regression relating governance index and lobbying intensity to value added.

	Dependent variable: MVA				Dependent variable: EVA			
	Model 1 (t-statistics)		Model 2 (t-statistics)		Model 1 (t-statistics)		Model 2 (t-statistics)	
<i>Panel A Year 1998</i>								
Intercept	2.09**	(2.215)	2.38***	(2.671)	-1.22	(-1.353)	-0.94	(-1.112)
Log of total assets	0.75***	(11.555)	0.75***	(11.573)	0.57***	(9.497)	0.56***	(9.410)
Debt to total assets ratio	-1.83***	(-4.538)	-1.74***	(-4.348)	-0.57	(-1.457)	-0.48	(-1.258)
Governance index	-0.02	(-0.783)			-0.02	(-0.773)		
Entrenchment index			-0.18***	(-3.448)			-0.16***	(-3.298)
Lobbying expenditure	0.17***	(3.002)	0.15***	(2.632)	0.23***	(3.992)	0.21***	(3.610)
Industry controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	421		421		320		320	
Model p-value	0.000		0.000		0.000		0.000	
Adjusted R-Square	0.407		0.419		0.435		0.446	
<i>Panel B Year 2000</i>								
Intercept	2.18**	(2.580)	3.46***	(7.339)	-0.34	(-0.708)	-0.39	(-0.859)
Log total assets	0.74***	(12.445)	0.64***	(912.964)	0.64***	(12.741)	-1.49***	(-4.379)
Debt to total assets ratio	-2.15***	(-5.343)	-0.99***	(-3.382)	-1.59***	(-4.678)	0.63***	(12.619)
Governance index	-0.05**	(-2.257)			-0.04**	(-2.139)		
Entrenchment index			-0.17***	(-4.153)			-0.15***	(-3.685)
Lobbying Expenditure	0.11**	(2.474)	0.12***	(2.816)	0.19***	(3.911)	0.18***	(3.744)
Industry controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	382		382		389		389	
Model p-value	0.000		0.000		0.000		0.000	
Adjusted R-Square	0.458		0.386		0.497		0.504	
<i>Panel C Year 2002</i>								
Intercept	2.41**	(2.485)	2.08**	(2.320)	-1.94	(-1.330)	-1.99	(-1.424)
Log total assets	0.57***	(7.699)	0.56***	(7.570)	0.71***	(9.123)	0.69***	(8.769)
Debt to total assets ratio	-1.80***	(-3.613)	-1.73**8	(-3.463)	-0.52	(-1.044)	-0.40	(-0.809)
Governance index	-0.08***	(-2.756)			-0.05*	(-1.695)		
Entrenchment index			-0.21***	(-3.578)			-0.16***	(-2.793)
Lobbying Expenditure	0.22***	(3.685)	0.21***	(3.557)	0.13*	(2.039)	0.13*	(2.075)
Industry controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	338		338		236		236	
Model p-value	0.000		0.000		0.000		0.000	
Adjusted R-Square	0.433		0.438		0.489		0.497	

*, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

In terms of the economic significance of our results, we find that several firm-specific factors determine a firm's propensity to lobby. We analyze Heckman's first step probit estimates reported in Panel A of Table 5 to examine the marginal impact of independent variables on a firm's probability to lobby. The coefficient of the governance index (entrenchment index) suggests that an additional governance provision, restricting shareholder rights, increases the probability of lobbying by a firm by 1.2 (1.5) percentage points. Next, to quantify the economic effects of managerial entrenchment on lobbying expenses, we analyze the outcome equation (Panel B) in our Heckman's model estimates. Conditional upon the decision to lobby, a firm with a median governance index (entrenchment index) of 9 (2) spends \$63,000 (\$36,000) less than the average sample firm. A one standard deviation increase in the index leads to that amount being lowered by about \$19,000 (\$24,000).

4.2.3. Managerial entrenchment, lobbying, and value creation

The important question pertains to the individual and interactive effects of entrenchment and lobbying on value creation. To explore this issue we use a multiple regression framework. The results of this analysis are presented in Table 6. The estimated coefficients for lobbying variables are significantly positive for all twelve models estimated. For the entire sample period, lobbying positively influences value creation whether measured in MVA or EVA terms. In combination with the previously reported negative relation between managerial entrenchment and lobbying intensity, we may interpret our results as rejecting the agency explanation of lobbying.

Our results also indicate that, consistent with the existing empirical evidence provided by several studies (Bebchuk et al., 2004, among others); Gompers et al., 2003, there is a significant negative relation between value creation and managerial entrenchment. Entrenchment proxies carry a negative significant coefficient for ten out of twelve models estimated.

5. Conclusion

The paper extends the recent research on corporate non-market strategies. While corporate lobbying has long been argued to be a value relevant strategy, we explore whether corporate governance, in terms of managerial entrenchment, determines the choice and the degree of lobbying engagements and with what impact on firm value. The results indicate that firms with more entrenched management have a greater tendency to engage in lobbying activities. Within the group of firms that lobby, there is a negative relation between the degree to which management is entrenched and the lobbying intensity. Further, there is a positive relation between lobbying intensity and firm performance. Overall, the findings suggest that lobbying is not agency driven.

Our findings have significant implication for policy makers. Lobbying activities promote corporate value creation through several channels. In its informational role, it may facilitate better-informed legislation for promoting economic productivity and growth. Our findings also indicate that lobbying serves as an instrument aligning management and shareholder interests, thereby enhancing corporate performance. Thus, any attempt to limit lobbying activities must weigh the positive value consequences of lobbying. Finally, our results hold implications for strategic decisions by corporate management. First and foremost, non-market strategies have significant potential for value creation. Specifically, lobbying contributes positively to corporate performance. It may be an efficient way to gain competitive advantage through non-market strategic actions. Finally, it is important for the boards of directors to realize that to the extent lobbying promotes both managerial interests and shareholder value, it may be an effective corporate governance mechanism to reduce agency conflict.

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