

Federal Lobbying by Audit Firms:
Does It Confer Competitive Advantage?

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved January 2016 by the
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ARIZONA STATE UNIVERSITY

May 2017

ABSTRACT

Given that lobbying activity by audit firms constitutes a potential advocacy threat to auditor independence, this paper seeks to provide an economic rationale for audit firm lobbying behavior. Specifically, I examine whether federal lobbying activity by audit firms contributes to their ability to retain existing clients and attract new clients.

Consequently, I predict and find that greater lobbying activity is associated with a lower probability of auditor switching behavior as well longer auditor tenure when the client is in an industry with high interest in lobbying. I also find that, when switching audit firms, clients tend to choose audit firms with greater lobbying activity and that companies in industries with high interest in lobbying are more likely to choose an audit firm with greater lobbying activity than their previous auditor.

DEDICATION

To my parents for their patience and the friends whose prayers and support sustained me through this process.

ACKNOWLEDGMENTS

I would like to acknowledge the help of my committee, the comments and feedback from the faculty of the School of Accountancy, and the assistance of my fellow PhD students. I want to especially thank Laura Wellman for helping to formulate the idea for this dissertation on our rides back from Tucson.

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CHAPTER 1

INTRODUCTION

Theoretical literature from political science depicts lobbying as a process of well-informed, interested parties transmitting information to relatively uninformed members of government (Potters and van Winden 1992). However, many of these presumably uninformed targets of lobbying become lobbyists themselves in the common practice of revolving door hiring, leading to the popular belief supported by reports by insiders that lobbying is primarily about contacts and access (McGrath 2006). From the information transfer perspective, all large audit firms are able to offer area expertise for tax issues and financial reporting across a number of industries. However, under the contacts and access model, frequent lobbying of the same individuals allows familiarity to develop, leading to better access. For this reason, I propose that greater intensity of lobbying (total lobbying activity reported in dollars) by an audit firm makes that firm more attractive to potential clients that find lobbying relevant. Accordingly, I find that potential clients in industries with the greatest interest in lobbying gravitate to audit firms that engage in more lobbying activity.

While prior work in auditor switching has focused on vertical switching to/from a lower tier audit firm from/to a higher tier audit firm (Shu 2000; Landsman et al. 2009, etc.), the vast majority of client firms in the population utilized by archival audit researchers receive their audit from a Big N auditor. My study addresses this deficiency in the literature by providing some insight on lateral auditor switching within the Big N tier.

The remainder of this paper is organized as follows: Chapter 2 provides background information about the history of auditor political activity and federal lobbying in general. Chapter 3 presents the development of my hypothesis. Chapter 4 presents the research design to test my hypotheses. Chapter 5 describes how the sample was constructed and presents descriptive statistics. Chapter 6 discusses the results of the hypothesis tests, and Chapter 7 concludes the paper.

CHAPTER 2

BACKGROUND

Lobbying Background

From its inception as a regulated practice, the accounting profession has developed and maintained a relationship with government through various means. The Big N audit firms have had a long and significant presence among those lobbying the federal government, consistently placing within the top ten percent of organizations in terms of lobbying activity going back to the first year that data is available¹. Although 1998 is the first year for which lobbying data is readily and publicly available (an outcome of the Lobbying Disclosure Act of 1995), lobbying as an activity has occurred virtually since the existence of a federal government to lobby.²

While petitioning government is protected by the Constitution as free speech, abuses, scandals, and general public mistrust caused the government to put in place the Lobbying Disclosure Act to clarify who needed to register as a lobbyist, what needed to be reported, and how frequently it had to be reported. At the same time, the act made provisions for investigating and penalizing non-compliance. Lobbying activity reported under the Act includes contact made with members of Congress, officials in the Executive Branch (including those in bureaus falling under the Executive Branch such as officials in the Internal Revenue Service), and influential members of independent

¹ The Big N (the current Big 4 plus Andersen) are the only audit firms that appear as registered lobbyists in the federal disclosure forms as made available by the Center for Responsive Politics. A few other audit firms appear in the lobbying data as clients of other outside lobbyists.

² Per the Center for Responsive Politics website, the first known lobbyist in the United States was hired in 1792 by the Virginia veterans of the Continental Army to lobby Congress for additional compensation.

agencies such as the SEC. According to the Act, any individual with more than one contact with a covered government official and who is compensated to spend 20 percent or more of their time lobbying or in support of their lobbying during any three month period must register as a lobbyist. Lobbying firms that employ such lobbyists are required to file a separate registration for each client in which they detail lobbying income received from the client, which individual lobbyists were used for that client, what issues were lobbied for, and which house of Congress or federal agency was lobbied. In addition to “hired gun” lobbyists, the registration requirements also apply to individuals employed in-house by the entity seeking to lobby the federal government. In these cases, the entity with lobbying interests self-files, and the dollar amounts reported represent lobbying expenditures as opposed to lobbying income.

However, reported lobbying activity represents just the tip of the iceberg. Amounts under reporting thresholds are not required to be reported, which are currently \$3,000 in income per client for lobbying firms and \$12,500 in expenditure for self-lobbying (internal) entities. Meanwhile, efforts by the Honest Leadership and Open Government Act of 2007 to create a longer “cooling off” period between leaving office and engaging in lobbying for lawmakers and high-level staff members seem to have only further obscured the true amount and nature of lobbying activity. Anecdotal evidence indicates that one consequence of the longer “cooling off” period has been the rise of the “policy advisor” position. While employed as a “policy advisor” or another non-lobbyist position, it is possible for individuals to escape registration and reporting requirements but still make use of their personal contacts (Auble 2013). In addition, even for reported lobbying activity, the end beneficiaries are often obscured by client names that are trade

organizations or coalitions. There are currently no regulations requiring such groups to report their membership, leaving open the possibility that a “coalition” may have only a single member and the group is being purposefully used to conceal the name of a client that may trigger scrutiny, such as in the case of an audit firm lobbying for an audit client.

In order to understand the mechanism by which audit firm lobbying activity can serve as a valuable asset in attracting and retaining clients, it is helpful to have a framework for understanding the role of lobbyists in general. Prior to the work of Bertrand et al. (2013), discussion of lobbying within political science literature focused on using an information transfer model to explain lobbying behavior. In the information transfer model of lobbying, information is transferred from lobbyists, who serve as knowledgeable experts, to legislators and regulators to help inform policy decisions. The fact that the regulators at the Securities and Exchange Commission, a frequent target of lobbying activity, actively seek out input from experts and stakeholders through the Comment Letter process demonstrates the need for such information transfer.

Under the information transfer model, a lobbyist's value is tied to her ability to speak authoritatively and persuasively about the issue. However, as lobbying activity has exploded, access becomes more critical. Legislators and regulators have a finite amount of time to meet with an increasing number of lobbyists competing for their time. Without access, information transfer is not possible, and subject area expertise becomes irrelevant. Not only is the concept intuitive, but Bertrand et al. (2013) were also able to validate empirically the importance of the relational element of lobbying. I apply their findings to auditor lobbying, treating audit firms as extensions of the individual lobbyists they employ. Based upon this understanding, the benefit that audit firm lobbying can provide

to clients is a function of the audit firms' long-standing relationships with legislators and regulatory bodies, developed over their years of lobbying.

Auditor Political Activity

In the nascent days of the empirical study of auditor lobbying, Watts and Zimmerman (1982) examined this relationship via comment letters, focusing on how positions endorsed by audit firms either agreed or disagreed with those favored by clients as a function of the position's relative wealth effect for the audit firm. Watts and Zimmerman (1982) were among the first to establish empirically that audit firms acted in their own economic interests when interacting with rule-setting bodies, upending the prevailing conventional wisdom that auditors simply functioned as mouthpieces for their clients, as Watts and Zimmerman (1982) put it, "coerced" to take their client's position by their client's ability to hire or fire the auditor, referencing Sterling (1973). They found that the positions audit firms took in their comment letters to the Financial Accounting Standards Board and its predecessor the Accounting Principles Board were those expected to yield positive economic outcomes for auditors through increased voluntary or mandated demand for auditor services.

Work with comment letters, however, had drawbacks in that sample sizes were small and the degree of judgment needed to code the content. When new data about auditor political activity became available in the form of corporate Political Action Committee (PAC) campaign contributions, Thornburg and Roberts (2008) were able to find additional support for the argument that audit firms use political activity to further their own economic well-being. The shift in focus to PAC contributions also brought with it the concept of looking at political activity from the standpoint, taken from political

science literature (especially Milyo et al. 2000), of relationship building as opposed to the contribution representing support for a particular political position.

In a similar fashion, my examination of the lobbying activity of audit firms is not focused on the positions taken or the legislative/regulatory outcomes of the lobbying but rather the economic consequences of engaging in lobbying activity.

Regulation of Non-audit Services

The provision of other services to audit clients has long been a concern to regulators.³ The dramatic growth of revenues from the Big 5's consulting practices in the late 1990s brought about "significant changes" to the structure of the firms (SEC 2000), prompting the Securities Exchange Commission to revise its auditor independence requirements in November 2000. To address economic bonding concerns, the revised requirements required filers to disclose all non-audit service fees paid to their auditor. In addition, the Commission sought to prevent audit firms from taking on roles incompatible with independence by expressly limiting or outright prohibiting auditors from performing services for clients in specific areas. A number of the specified areas were minimal sources of revenue for the, at the time, Big 5 (such as bookkeeping services), but represented audit firms being in the position of auditing their own work. However, auditor lobbying, in spite of being a similar conceptual threat to independence and minimal source of revenue, managed to escape mention as a prohibited service.

³ The 2000 report by the Panel on Audit Effectiveness, which was commissioned by the SEC to assess the effects of recent trends in auditing on the quality of audits for publicly traded companies, noted that debate over the issue could be traced as far back as the 1950s.

Auditor Choice and Differentiation Theory

Prior work in the area of auditor switching has only been able to shed partial light on the factors that influence a client's auditor selection decision. Johnson and Lys (1990) approached the question by viewing audit firms of similar size as undifferentiated and assuming that clients' primary concern was obtaining the lowest cost audit possible. They found that growing clients realigned with larger audit firms presumed to have already invested in the specialized assets (disbursed offices, experience with voluminous and complex transactions, SEC compliance expertise, etc.) needed to deliver the required audit efficiently and cost-effectively. Landsman et al. (2009) in examining auditor switches in the post-Enron/SOX era made a similar finding that economically mismatched clients realigned with smaller audit firms when the audit market was faced with the supply pressure of having to absorb former Andersen clients and the increased work required by SOX 404. Both of these studies, however, were limited to providing insight into vertical switching, that is switching up (down) from a non-Big N (Big N) to a Big N (non-Big N).

However, looking within the Big N market space, Mayhew and Wilkins (2003) applied the five forces model in Porter's (1985) treatise on competitive advantage and found that audit firms that successfully differentiated themselves from their competitors were able to command a premium for their services. Their measure of differentiation was having the highest market share in an industry by ten percent or more than their nearest competitor.

CHAPTER 3

HYPOTHESIS DEVELOPMENT

While Mayhew and Wilkins (2003) found that audit firms were able to use industry concentration as a successful strategy to make themselves attractive to clients to the point of price insensitivity, they did not attempt to propose a mechanism by which an audit firm becomes a successfully differentiated industry specialist. Since interest in lobbying varies by industry, I propose that lobbying activity is an effective method to target and grow business within an industry. Because audit firms repeatedly lobby the same politicians and agencies, even when working for different clients or lobbying on their own behalf, it is reasonable to consider total lobbying activity in an audit firm's ability to convey "political clout" to potential clients.

I hypothesize that lobbying activity allows an audit firm to leverage existing government relationships which can be expanded or deepened with relatively minimal investment to offer potential clients both industry knowledge and access to key government officials. The ability to offer this knowledge and access to clients provides an audit firm with a competitive advantage over other firms that have comparatively less extensive government relationships. As relationships form the source of this competitive advantage, it follows that its realization would be relational in nature, namely in the ability to retain and attract clients. It also follows that the competitive advantage conferred by greater lobbying activity would appeal primarily to clients in industries for which lobbying has greater relevance.

Consequently, my hypotheses are as follows:

H1a: Clients in lobbying intensive industries are less likely to switch away from audit firms with greater lobbying activity.

H1b: Clients in lobbying intensive industries retain audit firms with greater lobbying activity for longer periods.

H2: A client's membership in a lobbying intensive industry is positively associated with its choice of an audit firm that lobbies more than its previous audit firm.

In the next chapter, I discuss the empirical models used to test the above hypotheses.

CHAPTER 4

RESEARCH DESIGN

To test whether audit firms with greater lobbying activity are better able to retain clients in lobbying intensive industries, I separately test the effect of relative lobbying activity on the probability of an auditor switch (H1a) and on auditor tenure (H1b) using the same independent variables. To test H1a, I use the dependent variable $SWITCH_{jt}$, an indicator variable equal to 1 if the client firm switched auditors in the current fiscal year or 0 otherwise, to estimate the following logistic regression model:

$$\begin{aligned} SWITCH_{jt} = & \beta_0 + \beta_1 GROWTH_{jt-1} + \beta_2 ABSDACC_{jt-1} + \beta_3 INVREC_{jt-1} + \beta_4 ROA_{jt-1} + \\ & \beta_5 LOSS_{jt-1} + \beta_6 LEVERAGE_{jt-1} + \beta_7 CASH_{jt-1} + \beta_8 MODOP_{jt-1} + \beta_9 MERGER_{jt-1} + \\ & \beta_{10} SIZE_{jt-1} + \beta_{11} LAG_AU_MKT_SH_{jt-1} + \beta_{12} (\text{lobbying intensive industry} \\ & \text{indicator}_{jt}) + \beta_{13} (\text{auditor}_t \text{ lobbying activity measure}_{t-1}) + \beta_{14} (\text{lobbying} \\ & \text{intensive industry indicator}_{jt} * \text{auditor}_t \text{ lobbying activity measure}_{t-1}) + \\ & \beta_{15..27} (\text{year fixed effects}) + \varepsilon \end{aligned} \quad (1)$$

To test H1b, I perform an ordinary least squares regression using the dependent variable $TENURE_{jt}$ which is defined as the number of years the client has been audited by the current year auditor, capped at 10 years. The equation used in the regression is given in equation (2) as follows:

$$\begin{aligned} TENURE_{jt} = & \beta_0 + \beta_1 GROWTH_{jt-1} + \beta_2 ABSDACC_{jt-1} + \beta_3 INVREC_{jt-1} + \beta_4 ROA_{jt-1} + \\ & \beta_5 LOSS_{jt-1} + \beta_6 LEVERAGE_{jt-1} + \beta_7 CASH_{jt-1} + \beta_8 MODOP_{jt-1} + \beta_9 MERGER_{jt-1} + \\ & \beta_{10} SIZE_{jt-1} + \beta_{11} LAG_AU_MKT_SH_{jt-1} + \beta_{12} (\text{lobbying intensive industry} \\ & \text{indicator}_{jt}) + \beta_{13} (\text{auditor}_t \text{ lobbying activity measure}_{t-1}) + \beta_{14} (\text{lobbying} \\ & \text{intensive industry indicator}_{jt} * \text{auditor}_t \text{ lobbying activity measure}_{t-1}) + \\ & \beta_{15..27} (\text{year fixed effects}) + \varepsilon \end{aligned} \quad (2)$$

Where the control variables for both equations are defined as

$GROWTH_{jt-1}$ = Total assets of client j less beginning total assets, divided by beginning total assets for the prior year;

$ABSDACC_{jt-1}$ = Absolute value of prior year discretionary total accruals for client j ;

$INVREC_{jt-1}$ = Inventory plus receivables, divided by total assets for the prior year for client j ;

ROA_{jt-1} = The prior year's return on assets for client j , defined as net income before extraordinary items divided by average total assets;
 $LOSS_{jt-1}$ = Indicator variable equal to 1 if ROA_{jt-1} is less than zero, 0 otherwise;
 $LEVERAGE_{jt-1}$ = The prior year's ratio of total debt to total assets for client j ;
 $CASH_{jt-1}$ = Prior year cash divided by total assets for client j ;
 $MODOP_{jt-1}$ = Indicator variable equal to 1 if the audit opinion for client j in the prior year was modified for anything other than a going concern, 0 otherwise;
 $MERGER_{jt-1}$ = Indicator variable equal to 1 if the client had a merger or acquisition in the 2 prior years (any value in Compustat items AQP or AQA), 0 otherwise;
 $SIZE_{jt-1}$ = Natural logarithm of the client's prior year market value of equity (Compustat CSHO*10⁶*PRCC_F); and
 $LAG_AU_MKT_SH_{jt-1}$ = the prior year auditor's market share of the client's industry in the prior year, calculated as the sum of the square root of assets of all firms it audited that year in a given two-digit SIC code divided by the sum of the square root of all assets across all Compustat firms in the same two-digit SIC code, consistent with Hogan and Jeter (1999);
 j denotes client firm; and
 t denotes year (going forward subscripts will be omitted for clarity).

I use two different specifications to proxy for client interest in lobbying. The first is *LOBBY_DUM*, an indicator variable equal to 1 if the company's SIC code places it in one of nine industries within the Fama-French 49 classifications identified by Bertrand, Bombardini, and Trebbi (2013) as an industry with high lobbying activity.⁴ All other companies that do not fall into one of the nine industries are coded as zeros. The second measure, *LOBBY_DUM2*, is also an indicator variable which includes all the industries in *LOBBY_DUM* as well as energy (Non-Metallic and Industrial Mining: FF49# 28 and Oil and Natural Gas: FF49# 30), healthcare (Services – health: FF49# 11), and financial services (FF49# 48). The additional industries included in *LOBBY_DUM2*

⁴ The nine industries are Beer and Liquor (FF49 #4), Tobacco Products (#5), Pharmaceutical Products(#13), Aircraft (#24), Shipbuilding and Railroad Equipment (#25), Defense (#26), Precious Metals (#27), Coal (#29), and Telephone and Communication Services (#32).

reflect professed “practice areas” by Ernst & Young’s lobbying arm, Washington Council EY (Washington Council EY).

Lobbying activity by audit firms is also proxied in two different ways based upon each audit firm’s total reported federal lobbying activity in a given year. Total reported federal lobbying activity was obtained by summing all amounts reported on the federal disclosure forms as recorded by the Center for Responsive Politics where the Registrant (the entity performing the lobbying) is a Big N audit firm⁵. I also include self-lobbying and lobbying by related entities (as an example, KPMG Consulting is included in KPMG’s totals) in order to I aggregate lobbying activity as broadly as possible to compensate for underreporting and capture overall political engagement. The total reported federal lobbying activity calculated for each audit firm for each year in my sample was then used to develop a ranked measure of lobbying activity relative to the other audit firms that lobbied that year. *LAG_AU_LRANK* represents the ranked measure of prior year lobbying activity by the client’s auditor of record for the prior year, ranked from low to high such that *LAG_AU_LRANK* equals one for the audit firm with the least lobbying activity in a given year be assigned, two for the next highest, etc. Alternatively, I also use a binary variable *LAG_AU_TOP2* which equals one if the prior year auditor was either the top or second-most audit firm in terms of prior year lobbying activity, zero otherwise.

⁵ Lobby activity is measured as the sum of all amounts reported for a given year where the audit firm is listed as the Registrant (i.e. the lobbyist). Where the Registrant is also the lobbying client (“self-lobbying”), the amount is reported as a lobbying expenditure. When the lobbying client is not the Registrant, the amount is reported as lobbying revenue. However, both amounts represent lobbying activity by the Registrant, and therefore, my measure of total lobbying activity includes both types of reported amounts.

While using variables based upon broadly aggregated lobbying activity introduces noise into my measure and relying upon reported lobbying understates lobbying activity, these sources of measurement error work against me finding consistent and significant associations with lobbying activity in my regressions.

In testing hypotheses H1a and H1b, I expect to find the coefficient on the interaction term (β_{15}) to be negative and significant in equation (1) and positive and significant in equation (2).

To control for other client firm characteristics that influence the auditor-client relationship, I follow the lead of Landsman et al. (2009) and select controls that can be broadly grouped as proxies for client risk and for economic misalignment. *GROWTH* represents increased audit risk since rapidly growing firms are not likely to have internal control systems that can adequately keep pace with their increased complexity. Similarly, per Krishnan (1994), firms where inventory and receivables represent a larger percentage of total assets (*INVREC*) also have higher audit risk. Large discretionary accruals (*ABSDACC*) present either poor audit quality and thus heightened audit risk in the case of large income increasing accruals or the possibility of providing an incentive for the client to shop for a new, less conservative auditor in the case of large income decreasing accruals (DeFond and Subramanyam 1998). In the same vein, firms with other than a clean opinion (*MODOP*) represent higher risk or a motivation to shop for a more lenient auditor. *ROA*, *LOSS*, *LEVERAGE*, *CASH* represent measures of financial risk with negative financial indicators (low *ROA*, *LOSS*=1, higher *LEVERAGE*, and less *CASH*) being indicative of a riskier client.

The variables *SIZE*, which is firm size as measured by the natural logarithm of the client's prior year market value of equity, and *MERGER*, an indicator variable if the client experienced a merger or acquisition in the two prior years, are also included to control for non-lobbying related reasons for switching from or retaining the prior year auditor. Additionally, to control for audit firm characteristics that may influence a client's behavior to switch from or continue to retain a particular audit firm, I include the variable *LAG_AU_MKT_SH*, a measure of the audit firm's market share in the client's industry (*LAG_AU_MKT_SH*).

To test H2, I test the association between the choice of an auditor that lobbies more than the previous auditor and membership in a lobbying intensive industry. Using a sample of auditor changes from 1999-2012 (as determined using changes in the auditor of record in the Compustat annual file) from 1999-2012, I estimate the following logistic regression model:

$$\begin{aligned}
 MORE_LOBBY_{jt} = & \beta_0 + \beta_1 GROWTH_{jt-1} + \beta_2 ABSDACC_{jt-1} + \beta_3 INVREC_{jt-1} + \beta_4 ROA_{jt-1} \\
 & + \beta_5 LOSS_{jt-1} + \beta_6 LEVERAGE_{jt-1} + \beta_7 CASH_{jt-1} + \beta_8 MODOP_{jt-1} + \\
 & \beta_9 MERGER_{jt-1} + \beta_{10} SIZE_{jt-1} + \beta_{11} MKT_LEADER_{jt-1} + \beta_{12} (lobbying \\
 & intensive\ industry\ indicator_{jt}) + \beta_{13..25} (year\ fixed\ effects) + \varepsilon
 \end{aligned}
 \tag{3}$$

where

MORE_LOBBY_{jt} = Indicator variable equal to 1 if the client switched to an audit firm that lobbied more in the prior year (as measured by total reported federal lobbying activity) than its previous audit firm did in the same time period, 0 otherwise; and

MKT_LEADER_{jt-1} = 1 if the client's current year auditor had the largest market share of the client's industry (calculated as described in Hogan and Jeter 1999) in the prior year and its market share was at least ten percent higher than its closest competitor, 0 otherwise.

All other variables and notation are as defined for equations (1) and (2), likewise subscripts will be omitted for clarity in the remainder of the paper.

In this equation, the dependent variable *MORE_LOBBY* represents the client selecting an audit firm that lobbies more than the client's previous audit firm. It is an indicator variable equal to one if the new auditor's total reported federal lobbying activity in the prior year exceeded the previous auditor's total reported federal lobbying activity in the prior year, zero otherwise. In constructing the model and its dependent variable, I acknowledge that intensity of lobbying activity is only one of many reasons why a prospective client would choose an audit firm. For this reason, I use an ordinary logistic model to test the relative difference in lobbying activity, not whether the client firm selects the audit firm with the most lobbying activity in a given year using an ordered logit. Since I include downward switches (Big N to non-Big N) in my sample and lobbying activity equals zero dollars for all non-Big N firms, the conversion of relative lobbying activity to a binary measure helps to address the skewed distribution of the underlying lobbying activity data. Alternatively, in recognition of the fact that two of the Big N audit firms dominate auditor lobbying activity and the possibility that clients may not be swayed by small differences in lobbying activity, I also specify the dependent variable as a binary variable, *TOP2_LOBBY*, that equals one if the client switched to an auditor that was either the top or second-most audit firm in terms of prior year lobbying activity, zero otherwise.

In the same fashion as in equations (1) and (2), I use two different specifications (*LOBBY_DUM* and *LOBBY_DUM2*) for the binary variable to indicate a client's membership in a lobbying intensive industry. I expect to find the coefficient on the indicator variable for the client's membership in a lobbying intensive industry (β_{13}) to be positive and significant.

The control variables operate in a similar fashion as in equations (2) and (3); however, the market share/market specialization measure in this case (MKT_LEADER) is proxied as a binary variable equal to one when the new audit firm had a market share ten percentage points or higher than the nearest competitor in the two-digit SIC code of the client, i.e. that the audit firm was a clear market leader in the client's industry. This measure was selected as opposed to a continuous measure of market share to reflect the results of Mayhew and Wilkins (2003) which found that distinctions between the respective market shares of audit firms tended to be insignificant at levels below ten percent.

Year fixed effects are included in all three models to control for the effects of Andersen's collapse, the implementation of Sarbanes-Oxley (both initially and the effect of the delayed implementation of section 404 for non-accelerated filers), and the financial crisis of 2008.

CHAPTER 5

DATA

Sample Selection and Data Used

As outlined in Table 1, the sample was constructed beginning with all firms in Compustat for the years 1999-2012, since lobbying data is only available beginning in 1998 and my measures of lobbying activity require a one year lag. The data was further limited to only firms that switched from one Big N auditor to another Big N auditor (Andersen appears in the sample from 1998-2002). Auditor switches from one non-Big N firms to another non-Big N firm are excluded from my sample because no non-Big N firms report activity as registered lobbyists during the sample period, and therefore, switching activity between these non-Big N firms cannot be influenced by auditor lobbying activity. After further eliminating firm year observations missing the data need to calculate my control variables, I am left with a final sample of 36,719 firm year observations for my H1 tests. Further limiting my sample to only those firm-years that involved a change in auditor for my test of H2 leaves me with 2,482 observations for model (3). All data for control variables was obtained from Compustat, while data regarding total annual lobbying activity needed to calculate the variables *LAG_AU_LRANK* and *MORE_LOBBY* were obtained from publically available data gathered from federal disclosure forms by the Center for Responsive Politics.

Table 1

Sample Construction

	<u>Firm years</u>
All Compustat firm-years 1999-2012	134,366
Eliminate firm-years involving non-Big N auditors	(57,117)
Less firm-years missing variable data	<u>(40,530)</u>
<i>SWITCH/TENURE Regression Sample</i>	36,719
Eliminate firm-years not experiencing an auditor switch	<u>(34,237)</u>
<i>MORE_LOBBY/TOP2_LOBBY Regression Sample</i>	2,482

Descriptive Statistics

Table 2 presents a summary of lobbying expenditures by audit firm for all years in my sample. Of note in the summary of auditor lobbying activity in Table 2 is the clear division in the level of lobbying activity between the two firms of Ernst & Young and PriceWaterhouse Coopers and the three other Big N firms in my sample (Arthur Andersen, had it existed for the rest of my sample period and maintained the same level of activity as it did for the years 1998-2001, would have a profile similar to KPMG). Deloitte had the least lobbying activity and took on the fewest outside clients which may reflect the possibility that Deloitte’s political activity may be channeled through their consulting arm’s specialized group located in Washington D.C.

Table 2

Summary of Lobbying Expenditures 1998-2012

<u>Audit Firm</u>	<u>Reports filed^a</u>	<u>Unique Clients^b</u>	<u>Total Expenditures</u>	<u>Self-Lobbying^c</u>
Ernst & Young	1,131	211	89,806,487	30.6%
PriceWaterhouse Coopers	586	130	75,309,084	46.3%
Deloitte	70	15	23,229,685	97.5%
KPMG	293	55	27,734,929	73.5%
Arthur Andersen ^d	44	14	<u>8,820,000</u>	81.9%
			224,900,185	

^a Reflects the number of reports filed where the audit firm is listed as the lobbying firm from the OpenSecrets database; the sum will not correspond to the number of regression observations which is composed of client observations from Compustat.

^b The number of unique entities reported in the "ultorg" field, i.e. consolidates clients by their parent companies. For counting purposes, coalitions represented by an audit firm where the audit firm is listed as the "ultorg" are not reflected separately in this number.

^c Only reflects amounts reported where the audit firm is listed as both the lobbying firm and the client. Lobbying work on the behalf of a coalition where the audit firm is listed as the "ultorg" is not included.

^d Appears in the sample 1998-2002

Table 3 presents the yearly breakdown of lobbying activity which shows that total lobbying activity for all audit firms built up to a peak in 2001, after which PriceWaterhouseCoopers relinquished its position as the top auditor lobbyist to Ernst & Young, which has maintained that position ever since, albeit at levels comparatively subdued from its high of over \$8 million in 2003. The lower auditor lobbying activity in the later years of my sample is consistent with a general decline in lobbying activity over that same time period (Auble 2013).

Table 3

Lobbying Expenditures by Sample Year

Year	Ernst & Young	PriceWaterhouse	Deloitte	KPMG	Arthur Andersen	All Firms
1998	1,910,000	4,470,000	360,000	1,938,220	2,060,000	10,738,220
1999	7,160,000	9,230,000	714,000	1,280,000	1,600,000	19,984,000
2000	5,740,000	8,080,000	2,764,000	1,656,209	2,860,000	21,100,209
2001	7,100,000	9,690,000	574,230	1,955,000	1,940,000	21,259,230
2002	7,803,860	5,885,000	1,127,455	1,790,000	360,000	16,966,315
2003	8,090,000	4,810,000	720,000	1,739,500		15,359,500
2004	7,920,000	3,860,000	900,000	1,598,000		14,278,000
2005	6,242,140	4,400,000	860,000	1,020,000		12,522,140
2006	5,321,500	4,873,500	1,200,000	1,813,000		13,208,000
2007	7,130,480	3,570,584	1,660,000	3,520,000		15,881,064
2008	5,083,056	3,020,000	1,700,000	2,525,000		12,328,056
2009	5,859,201	3,220,000	1,950,000	2,180,000		13,209,201
2010	5,766,250	3,770,000	2,410,000	1,800,000		13,746,250
2011	4,660,000	3,200,000	3,010,000	1,590,000		12,460,000
2012	4,020,000	3,230,000	3,280,000	1,330,000		11,860,000
Total	89,806,487	75,309,084	23,229,685	27,734,929	8,820,000	224,900,185

In examining the top clients of audit firm lobbyists as presented in Table 4, I find that audit firms lobbying on their own behalf (self-lobbying) constitutes the single largest client for all five of the Big N audit firms. Consistent with their positions as the top lobbying audit firms, the vast majority of the top outside clients are split between PriceWaterhouseCoopers and Ernst & Young with two clients switching from PriceWaterhouseCoopers to Ernst & Young around the same time that Ernst & Young overtook PriceWaterhouseCoopers as the dominant audit firm in lobbying. The amounts reported for outside clients are much smaller than for self-lobbying and represent a small portion the total lobbying activity by auditing firms when compared to the amounts reported in Table 2. Another item of note is that a number of the clients are coalitions or alliances that represent multiple firms. Many of the names of these multi-firm groups

imply that the purpose of these groups is to lobby on tax issues (e.g. Ernst & Young's R&D Credit Coalition and PwC's Leasing Coalition).

Table 4

Top 25 Clients of Audit Firm Lobbyists

(Includes Self-Lobbying)

Client Name	Lobbyist	Total Expenditures 1998-2012
PriceWaterhouseCoopers	PriceWaterhouseCoopers	34,844,668
Ernst & Young	Ernst & Young	27,502,737
Deloitte	Deloitte	22,645,685
KPMG LLP	KPMG	20,393,000
Arthur Andersen LLP	Arthur Andersen	7,220,000
FSC 2000 Coalition	PriceWaterhouseCoopers	2,840,000
Sara Lee Corp	KPMG	2,778,000
Weatherford International	PriceWaterhouseCoopers	2,580,000
Directors Guild of America	Ernst & Young	2,455,000
R&D Credit Coalition	Ernst & Young	2,410,000
PwC Leasing Coalition	PriceWaterhouseCoopers	2,360,000
US Biomass Power Producers Alliance	Ernst & Young	2,225,000
Contract Manufacturing Coalition	PriceWaterhouseCoopers	1,960,000
AK Steel	Ernst & Young	1,820,000
Law Office of John T O'Rourke	PriceWaterhouseCoopers	1,640,000
Ziff Investors Partnership	Ernst & Young	1,490,000
Independent Sector	Ernst & Young	1,470,000
Plum Creek Timber	PriceWaterhouseCoopers / Ernst & Young ^a	1,420,000
Eaton Vance Corp	Ernst & Young	1,380,000
Charter Brokerage	Ernst & Young	1,360,000
Recapture Bond Coalition	Ernst & Young	1,360,000
Puerto Rico Industrial Development Co	PriceWaterhouseCoopers	1,330,000
Carrix Inc	Ernst & Young	1,280,000
Prudential Insurance	PriceWaterhouseCoopers / Ernst & Young ^b	1,280,000
Multinational Tax Coalition	PriceWaterhouseCoopers	1,140,000

^a Plum Creek Timber switched lobbyists from PriceWaterhouseCoopers to Ernst & Young in 2002. Total lobbying expenditures with PriceWaterhouseCoopers were \$800,000, with the remaining \$620,000 going to Ernst & Young.

^b Prudential engaged PriceWaterhouseCoopers as its lobbyist from 2001-2002, expending \$300,000. The remaining \$980,000 went to Ernst & Young beginning in 2005.

Looking at gains in audit clients in lobbying intensive industries in Table 5, consistent with their position as the two audit firms with the most lobbying activity, PriceWaterhouseCoopers and Ernst & Young gained the most clients in lobbying

intensive industries. Ernst & Young was the most successful in gaining these clients following the dissolution of Arthur Andersen.

Table 5

Audit Client Gains in Lobbying Intensive Industries by Year

<u>Year</u>	<u>E&Y</u>	<u>PwC</u>	<u>Deloitte</u>	<u>KPMG</u>	<u>Arthur Andersen</u>	<u>All Firms</u>
1999	3	2	-	1	3	9
2000	7	3	4	5	2	21
2001	6	5	2	3	3	19
2002	20	14	7	17		58
2003	5	4	1	2		12
2004	5	3	6	2		16
2005	6	2	2	3		13
2006	9	6	5	3		23
2007	9	7	-	-		16
2008	8	1	1	-		10
2009	8	3	1	2		14
2010	8	3	2	3		16
2011	3	2	-	4		9
2012	6	3	1	1		11
Total	103	58	32	46	8	247

Table 6 reports the results of a univariate analysis of the mean difference in lobbying activity for the year prior to an auditor switch between the new and old audit firms. I find that on average, firms in lobbying intensive industries switch to an auditor with approximately \$909,622 more in lobbying activity than their previous auditor. This mean value is significantly different from zero; its positive value illustrates the tendency for firms in lobbying intensive industries to move to an auditor with greater lobbying

activity than their previous auditor. The difference between the means for clients in lobbying intensive industries and those not in lobbying intensive industries is also statistically significant (p-value = 0.0732), a finding consistent with auditor lobbying activity being more relevant for firms in lobbying intensive industries.

Table 6

Univariate Analysis of Lobbying Expenditures

(N=2,482)

	<u><i>LOBBY_DUM</i></u> <u>= 1</u>		<u><i>LOBBY_DUM</i></u> <u>= 0</u>		<u>Difference</u> <u>p-value</u>
Mean lobbying difference	909,622 ***		410,323 ***		0.0732

*** Indicates different from zero at greater than 1% significance, using two-tailed tests. "Mean lobbying difference" equals the mean value for the current year auditor's lobbying expenditures in the prior year less the predecessor auditor's lobbying expenditures in the same period. "Difference p-value" represents the difference between the means for firms in a lobbying intensive industry versus those not in a lobbying intensive industry.

Tables 7 and 8 present descriptive statistics for the variables in the multivariate models. Table 7 presents the descriptive statistics for the variables of equations (1) and (2).

Table 7

SWITCH / TENURE Models Descriptive Statistics

(N=36,719)

Variable	Mean	25th Percentile	Median	75th Percentile
<i>SWITCH</i>	0.063	0.000	0.000	0.000
<i>TENURE</i>	5.992	3.000	6.000	10.000
<i>LAG_AU_LRANK</i>	3.496	2.000	4.000	5.000
<i>LAG_AU_TOP2</i>	0.534	0.000	1.000	1.000
<i>LOBBY_DUM</i>	0.151	0.000	0.000	0.000
<i>LOBBY_DUM2</i>	0.217	0.000	0.000	0.000
<i>LAG_AU_MKT_SH</i>	0.231	0.169	0.220	0.281
<i>GROWTH</i>	0.302	-0.048	0.059	0.207
<i>ABSDACC</i>	0.079	0.018	0.043	0.093
<i>INVREC</i>	0.243	0.089	0.208	0.355
<i>ROA</i>	-0.049	-0.063	0.028	0.074
<i>LOSS</i>	0.368	0.000	0.000	1.000
<i>LEVERAGE</i>	0.226	0.010	0.174	0.352
<i>CASH</i>	0.226	0.034	0.126	0.349
<i>MODOP</i>	0.358	0.000	0.000	1.000
<i>MERGER</i>	0.067	0.000	0.000	0.000
<i>SIZE</i>	19.818	18.403	19.857	21.232

Where SWITCH is an indicator variable equal to 1 if the client firm switched auditors in the current fiscal year, 0 otherwise; TENURE =number of years audited by the current year auditor, capped at 10 years;LAG_AU_LRANK=the prior year auditor's rank order from low to high of prior year lobbying activity (measured in dollars), i.e. the audit firm with the least lobbying activity in a given year will be assigned 1, the next highest 2, etc; LAG_AU_TOP2= Indicator variable equal to 1if the prior year auditor was either the top or second-most audit firm in terms of prior year lobbying activity, 0 otherwise; LOBBY_DUM=Indicator variable equal to 1 if the client firm is classified in an industry with high lobbying activity (FF49 #'s 4, 5, 13, 24, 25, 26, 27, 29, 32), 0 otherwise; LOBBY_DUM2=Indicator variable equal to 1 if the client firm is classified any of the industries included in LOBBY_DUM or in any of an additional 5 industries (FF49 #'s 28, 30, 11, 48); LAG_AU_MKT_SH=the prior year auditor's market share of the client's industry in the prior year, calculated as the sum of the square root of assets of all firms it audited that year in a given two-digit SIC code divided by the sum of the square root of all assets across all Compustat firms in the same two-digit SIC code, consistent with Hogan and Jeter (1999) and Mayhew and Wilkins (2003); GROWTH=Prior year percent growth in assets calculated as total assets (Compustat field AT) less beginning total assets, divided by beginning total assets; ABSDACC =Absolute value of prior year total discretionary accruals; INVREC =Inventory (Compustat field INVT) plus receivables (Compustat field RECT), divided by total assets for the prior year; ROA=The prior year's return on assets, defined as net income before extraordinary items (Compustat field IB) divided by average total assets; LOSS =Indicator variable equal to 1 if ROA_tm1 is less than zero, 0 otherwise; LEVERAGE= Ratio of debt (Compustat items DLTT+DLC) to total assets for the prior year; CASH =Prior year cash (Compustat item CHE) scaled by prior year total assets; MODOP=Indicator variable equal to 1 if the audit opinion in the prior year was modified for anything other than a going concern (value for Compustat item AUOP anything other than 1), 0 otherwise (AUOP=1); MERGER =Indicator variable equal to 1 if the client had a merger or acquisition in the 2 years prior to switching auditors (any value in Compustat items AQP or AQA), 0 otherwise; and SIZE=Natural logarithm of the client's prior year market value of equity (Compustat CSHO*10⁶*PRCC_F)

Table 8

MORE_LOBBY / TOP2_LOBBY Model Descriptive Statistics

(N=2,482)

Variable	Mean	25th Percentile	Median	75th Percentile
<i>MORE_LOBBY</i>	0.410	0.0000	0.0000	1.0000
<i>TOP2_LOBBY</i>	0.500	0.0000	0.0000	1.0000
<i>LOBBY_DUM</i>	0.073	0.0000	0.0000	0.0000
<i>LOBBY_DUM2</i>	0.240	0.0000	0.0000	0.0000
<i>MKT_LEADER</i>	0.064	0.0000	0.0000	0.0000
<i>GROWTH</i>	0.902	-0.0830	0.0380	0.1980
<i>ABSDACC</i>	0.102	0.0210	0.0530	0.1150
<i>INVREC</i>	0.248	0.0850	0.2060	0.3680
<i>ROA</i>	-0.102	-0.1300	0.0090	0.0580
<i>LOSS</i>	0.463	0.0000	0.0000	1.0000
<i>LEVERAGE</i>	0.239	0.0110	0.1800	0.3790
<i>CASH</i>	0.224	0.0340	0.1270	0.3450
<i>MODOP</i>	0.330	0.0000	0.0000	1.0000
<i>MERGER</i>	0.038	0.0000	0.0000	0.0000
<i>SIZE</i>	19.220	17.6890	19.2150	20.6780

Where MORE_LOBBY=Indicator variable equal to 1 if the client switched to an auditor that lobbied more in the prior year (as measured by total reported Federal lobbying activity) than its predecessor auditor in the same time period, 0 otherwise; TOP2_LOBBY=Indicator variable equal to 1 if the client switched to an auditor that was either the top or second-most audit firm in terms of prior year lobbying activity, 0 otherwise; LOBBY_DUM=Indicator variable equal to 1 if the client firm is classified in an industry with high lobbying activity (FF49 #'s 4, 5, 13, 24, 25, 26, 27, 29, 32), 0 otherwise; LOBBY_DUM2=Indicator variable equal to 1 if the client firm is classified any of the industries included in LOBBY_DUM or in any of an additional 5 industries (FF49 #'s 28, 30, 11, 48); MKT_LEADER=1 if current year auditor had the largest market share of the client's industry (calculated as described below) in the prior year and its market share was at least ten percent higher than its closest competitor, 0 otherwise; GROWTH=Prior year percent growth in assets calculated as total assets (Compustat field AT) less beginning total assets, divided by beginning total assets; ABSDACC=Absolute value of prior year total discretionary accruals; INVREC=Inventory (Compustat field INVT) plus receivables (Compustat field RECT), divided by total assets for the prior year; ROA =The prior year's return on assets, defined as net income before extraordinary items (Compustat field IB) divided by average total assets; LOSS=Indicator variable equal to 1 if ROA_tm1 is less than zero, 0 otherwise; LEVERAGE =Ratio of debt (Compustat items DLTT+DLC) to total assets for the prior year; CASH=Prior year cash (Compustat item CHE) scaled by prior year total assets; MODOP=Indicator variable equal to 1 if the audit opinion in the prior year was modified for anything other than a going concern (value for Compustat item AUOP anything other than 1), 0 otherwise (AUOP=1); MERGER =Indicator variable equal to 1 if the client had a merger or acquisition in the 2 years prior to switching auditors (any value in Compustat items AQP or AQA), 0 otherwise; SIZE =Natural logarithm of the client's prior year market value of equity (Compustat CSHO*10⁶*PRCC_F);

In Table 7, I find that the mean values for my dependent variables of 6.3% for *SWITCH* and 5.992 years for *TENURE* are consistent with prior archival work in that relatively few clients switch auditors. When looking at the sample restricted to only those client firms that experienced an auditor switch in Table 8, I find in the mean value of *MORE_LOBBY* that over 40% of firms in my sample switch to an auditor that lobbies more than their previous auditor.

Comparing Tables 7 and 8, I find that lobbying intensive firms, as defined by *LOBBY_DUM*, make up a relatively small portion of both samples, 15% and 7.3% respectively. When I expand the definition of lobbying intensive firms in *LOBBY_DUM2*, I find that these firms make up 21.7% of the sample as reported in Table 7 and 24% in Table 8. Contrasting the two samples, I find that clients experiencing an auditor switch tend to be smaller (mean values of *SIZE* representing a mean market capitalization of \$222 million in Table 8 vs. \$404 million in Table 7).

CHAPTER 6

RESULTS

Tables 9 through 11 present the results of my hypothesis testing. In Table 9 I present the results of my testing of H1a, the likelihood that a client in a lobbying intensive industry will switch away from an audit firm with greater lobbying activity. I find that the coefficient on the interaction of the audit firm's lobbying activity and the client's membership in a lobbying intensive industry is negative and significant no matter which specification I use of audit firm lobbying activity or client membership in a lobbying intensive industry. This finding is consistent with a lowered probability of a switch away from an audit firm with increasing lobbying activity on the part of the audit firm when the client is in an industry with high interest in lobbying activity. I also find that, moving from column (1) to column (4), the value for McFadden's pseudo R-squared increases when I utilize my alternate specifications with the model using both alternative specifications *LOBBY_DUM2* and *LAG_AU_TOP2* in column (4) having the highest value of 0.1046. When comparing the values to the McFadden's pseudo R-squared value for the model when run without including lobbying activity (0.093 in untabulated results), I find that lobbying activity contributes to the explanatory power of the *SWITCH* model.

Table 10 presents the results of my testing of H1b on the relationship between an audit firm's lobbying activity and the ability to retain clients in lobbying intensive industries. I find that the interaction term is positive and significant no matter which specification I use for audit firm lobbying activity or client membership in a lobbying intensive industry, consistent with increased lobbying activity being associated with longer auditor tenure when the client is in an industry with high interest in lobbying.

Table 9

Logistic Regression: Dependent Variable – *SWITCH*

(N=36,719)

Variable	(1)	(2)	(3)	(4)
<i>Intercept</i>	-1.1445 ***	-1.1873 ***	-1.3703 ***	-1.3995 ***
<i>LAG_AU_LRANK</i>	-0.1044 ***	-0.0996 ***		
<i>LAG_AU_TOP2</i>			0.1052 ***	-0.3092 ***
<i>LOBBY_DUM</i>	0.2032 **		-0.3156 ***	
<i>LOBBY_DUM2</i>		0.2814 ***		0.1411 ***
<i>LAG_AU_LRANK*LOBBY_DUM</i>	-0.0441 *			
<i>LAG_AU_LRANK*LOBBY_DUM2</i>		-0.0559 ***		
<i>LAG_AU_TOP2*LOBBY_DUM</i>			-0.1000 *	
<i>LAG_AU_TOP2*LOBBY_DUM2</i>				-0.0991 *
<i>LAG_AU_MKT_SH</i>	0.3520 ***	0.3707 ***	0.4852 ***	0.4968 ***
<i>GROWTH</i>	-0.0070	-0.0070	-0.0066	-0.0065
<i>ABSDACC</i>	0.1464	0.1405	0.1470	0.1397
<i>INVREC</i>	-0.1191 *	-0.0717	-0.1133 *	-0.067
<i>ROA</i>	0.1287 **	0.1280 **	0.1251 **	0.1241 **
<i>LOSS</i>	0.1221 ***	0.1210 ***	0.1212 ***	0.1203 ***
<i>LEVERAGE</i>	0.0063	0.0048	0.0075	0.0062
<i>CASH</i>	-0.1306 **	-0.1165 **	-0.1185 **	-0.1046 *
<i>MODOP</i>	0.0669 ***	0.0666 ***	0.0683 ***	0.0679 ***
<i>MERGER</i>	0.0206	0.0229	0.0238	0.0262
<i>SIZE</i>	-0.0174 ***	-0.0177 ***	-0.0171 ***	-0.0172 ***
+ year dummy variables				
McFadden's Pseudo R ²	0.1014	0.1022	0.1041	0.1046

This table presents the results of the logistic regression of whether an client switches auditor on the variables described below and year fixed-effects where the dependent variable *SWITCH* is an indicator variable equal to 1 if the client firm switched auditors in the current fiscal year, 0 otherwise; and the regressors are defined as follows: *LAG_AU_LRANK*=the prior year auditor's rank order from low to high of prior year lobbying activity (measured in dollars), i.e. the audit firm with the least lobbying activity in a given year will be assigned 1, the next highest 2, etc; *LAG_AU_TOP2*=Indicator variable equal to 1 if the prior year auditor was either the top or second-most audit firm in terms of prior year lobbying activity, 0 otherwise; *LOBBY_DUM*=Indicator variable equal to 1 if the client firm is classified in an industry with high lobbying activity (FF49 #'s 4, 5, 13, 24, 25, 26, 27, 29, 32), 0 otherwise; *LOBBY_DUM2*=Indicator variable equal to 1 if the client firm is classified any of the industries included in *LOBBY_DUM* or in any of an additional 5 industries (FF49 #'s 28, 30, 11, 48); *LAG_AU_MKT_SH*=the prior year auditor's market share of the client's industry in the prior year, calculated as the sum of the square root of assets of all firms it audited that year in a given two-digit SIC code divided by the sum of the square root of all assets across all Compustat firms in the same two-digit SIC code, consistent with Hogan and Jeter (1999) and Mayhew and Wilkins (2003); *GROWTH*=Prior year percent growth in assets calculated as total assets (Compustat field AT) less beginning total assets, divided by beginning total assets; *ABSDACC* =Absolute value of prior year total discretionary accruals; *INVREC* =Inventory (Compustat field INVT) plus receivables (Compustat field RECT), divided by total assets for the prior year; *ROA*=The prior year's return on assets, defined as net income before extraordinary items (Compustat field IB) divided by average total assets; *LOSS* =Indicator variable equal to 1 if *ROA_tm1* is less than zero, 0 otherwise; *LEVERAGE*= Ratio of debt (Compustat items DLTT+DLC) to total assets for the prior year; *CASH* =Prior year cash (Compustat item CHE) scaled by prior year total assets; *MODOP*=Indicator variable equal to 1 if the audit opinion in the prior year was modified for anything other than a going concern (value for Compustat item AUOP anything other than 1), 0 otherwise (AUOP=1); *MERGER*=Indicator variable equal to 1 if the client had a merger or acquisition in the prior 2 years (any value in Compustat items AQP or AQA), 0 otherwise; and *SIZE*=Natural logarithm of the client's prior year market value of equity (Compustat CSHO*10⁶*PRCC_F).

*, **, ***, indicate significance at the 10%, 5%, and 1% levels respectively using two-tailed tests of significance.

Table 10

OLS Regression: Dependent Variable – *TENURE*

(N=36,719)

Variable	(1)	(2)	(3)	(4)
<i>Intercept</i>	2.2538 ***	2.3115 ***	2.10293 ***	2.16598 ***
<i>LAG_AU_LRANK</i>	-0.0917 ***	-0.0885 ***		
<i>LAG_AU_TOP2</i>			0.00673	0.01181
<i>LOBBY_DUM</i>	-0.7055 ***		-0.35011 ***	
<i>LOBBY_DUM2</i>		-0.6247 ***		-0.39095 ***
<i>LAG_AU_LRANK*LOBBY_DUM</i>	0.1510 ***			
<i>LAG_AU_LRANK*LOBBY_DUM2</i>		0.1000 ***		
<i>LAG_AU_LTOP2*LOBBY_DUM</i>			0.30996 ***	
<i>LAG_AU_LTOP2*LOBBY_DUM2</i>				0.20286 **
<i>LAG_AU_MKT_SH</i>	-0.9712 ***	-1.0331 ***	-1.5092 ***	-1.55417 ***
<i>GROWTH</i>	-0.0626 ***	-0.0630 ***	-0.0629 ***	-0.06331 ***
<i>ABSDACC</i>	-1.0482 ***	-1.0270 ***	-1.05418 ***	-1.03071 ***
<i>INVREC</i>	1.6470 ***	1.5253 ***	1.62476 ***	1.50064 ***
<i>ROA</i>	-0.0301	-0.0344	-0.02465	-0.02749
<i>LOSS</i>	-0.2362 ***	-0.2308 ***	-0.2407 ***	-0.23502 ***
<i>LEVERAGE</i>	-0.0499	-0.0454	-0.04195	-0.0387
<i>CASH</i>	-0.2200 **	-0.2534 ***	-0.26546 ***	-0.30241 ***
<i>MODOP</i>	0.0220	0.0196	0.02216	0.02054
<i>MERGER</i>	0.1660 **	0.1597 **	0.16169 **	0.15514 **
<i>SIZE</i>	0.1711 ***	0.1718 ***	0.17013 ***	0.17086 ***
+ year dummy variables				
Adjusted R ²	0.0891	0.0896	0.0885	0.0891

This table presents the results of an OLS regression of audit firm tenure on the variables described below and year fixed-effects where the dependent variable *TENURE* = number of years audited by the current year auditor, capped at 10 years, and the regressors are defined as follows:

LAG_AU_LRANK=the prior year auditor's rank order from low to high of prior year lobbying activity (measured in dollars), i.e. the audit firm with the least lobbying activity in a given year will be assigned 1, the next highest 2, etc; *LAG_AU_TOP2*= Indicator variable equal to 1 if the prior year auditor was either the top or second-most audit firm in terms of prior year lobbying activity, 0 otherwise; *LOBBY_DUM*=Indicator variable equal to 1 if the client firm is classified in an industry with high lobbying activity (FF49 #'s 4, 5, 13, 24, 25, 26, 27, 29, 32), 0 otherwise; *LOBBY_DUM2*=Indicator variable equal to 1 if the client firm is classified any of the industries included in *LOBBY_DUM* or in any of an additional 5 industries (FF49 #'s 28, 30, 11, 48); *LAG_AU_MKT_SH*=the prior year auditor's market share of the client's industry in the prior year, calculated as the sum of the square root of assets of all firms it audited that year in a given two-digit SIC code divided by the sum of the square root of all assets across all Compustat firms in the same two-digit SIC code, consistent with Hogan and Jeter (1999) and Mayhew and Wilkins (2003); *GROWTH*= Prior year percent growth in assets calculated as total assets (Compustat field AT) less beginning total assets, divided by beginning total assets; *ABSDACC* =Absolute value of prior year total discretionary accruals; *INVREC*= Inventory (Compustat field INVT) plus receivables (Compustat field RECT), divided by total assets for the prior year; *ROA*=The prior year's return on assets, defined as net income before extraordinary items (Compustat field IB) divided by average total assets; *LOSS* =Indicator variable equal to 1 if *ROA_tm1* is less than zero, 0 otherwise; *LEVERAGE*= Ratio of debt (Compustat items DLTT+DLC) to total assets for the prior year; *CASH* =Prior year cash (Compustat item CHE) scaled by prior year total assets; *MODOP*=Indicator variable equal to 1 if the audit opinion in the prior year was modified for anything other than a going concern (value for Compustat item AUOP anything other than 1), 0 otherwise (AUOP=1); *MERGER*=Indicator variable equal to 1 if the client had a merger or acquisition in the prior 2 years (any value in Compustat items AQP or AQA), 0 otherwise; 0 otherwise; and *SIZE*=Natural logarithm of the client's prior year market value of equity (Compustat CSHO*10⁶*PRCC_F)

*, **, ***, indicate significance at the 10%, 5%, and 1% levels respectively using two-tailed tests of significance.

While I do not find that the value of the adjusted R-squared increases when moving from column (1) to column (4) in the *TENURE* model results in Table 10, I do find that using *LOBBY_DUM2* does add incremental explanatory value over models using *LOBBY_DUM*. Additionally, the adjusted R-squared for column (1) when the *LAG_AU_LRANK* variable is excluded is 0.0882 (untabulated), indicating that the inclusion of lobbying activity does increase the explanatory power of the auditor tenure model.

To test H2, the likelihood that a client in a lobbying intensive industry will move to an audit firm that lobbies more than its previous audit firm, I restrict my sample to only those firms experiencing an auditor switch involving a Big N auditor. The results of testing H2 are presented in Table 11, where the dependent variable *MORE_LOBBY* represents whether the client firm's new auditor had higher lobbying activity than their previous auditor and *TOP2_LOBBY* represent whether the client firm's new auditor was one of the top two audit firms in terms of lobbying activity in the previous year.

I find that a client firm's interest in lobbying (as proxied by its membership in a lobbying intensive industry using *LOBBY_DUM* or *LOBBY_DUM2*) is positive and significant or marginally significant across the various model specifications. However, in contrast to my findings for H1a and H1b, I find that the alternative specifications for auditor lobbying activity (*MORE_LOBBY* vs. *TOP2_LOBBY*) and client membership in a lobbying intensive industry (*LOBBY_DUM* vs. *LOBBY_DUM2*) weaken the relationship and reduce the value of McFadden's pseudo R-squared. In spite of this fact, I still find that the *LOBBY_DUM* variable is positive and significant when using either *MORE_LOBBY* or *TOP2_LOBBY* as the dependent variable, indicating that

Table 11

H2 Tests: Logistic Regressions

(N=2,482)

Variable	Dependent Variable			
	<i>MORE_LOBBY</i> (1)	<i>MORE_LOBBY</i> (2)	<i>TOP2_LOBBY</i> (3)	<i>TOP2_LOBBY</i> (4)
<i>Intercept</i>	-2.1187 ***	-2.1337 ***	-0.7809 ***	-0.8127 ***
<i>LOBBY_DUM</i>	0.1754 *		0.2918 ***	
<i>LOBBY_DUM2</i>		0.0174		0.0840
<i>MKT_LEADER</i>	0.4296 ***	0.4520 ***	1.0004 ***	1.0254 ***
<i>GROWTH</i>	-0.0302	-0.0311	-0.0035	-0.0041
<i>ABSDACC</i>	-0.2510	-0.2855	-0.1071	-0.1578
<i>INVREC</i>	0.0761	0.0805	0.0108	0.0560
<i>ROA</i>	0.1992	0.1757	0.0203	-0.0117
<i>LOSS</i>	0.2057 ***	0.2080 ***	0.1733 ***	0.1775 ***
<i>LEVERAGE</i>	0.0103	0.0095	-0.1131	-0.1233
<i>CASH</i>	-0.1211	-0.0652	0.0920	0.1762
<i>MODOP</i>	-0.0180	-0.0196	-0.0614	-0.0655
<i>MATCH</i>				
<i>MERGER</i>	-0.0633	-0.0687	-0.1450	-0.1483
<i>SIZE</i>	0.0751 ***	0.0754 ***	0.0231 *	0.0230 *
+ year dummy variables				
McFadden's Pseudo R ²	0.1060	0.1053	0.0424	0.0408

This table presents the results of testing hypothesis 2 using logistic regressions with the following variables: *MORE_LOBBY*=Indicator variable equal to 1 if the client switched to an auditor that lobbied more in the prior year (as measured by total reported Federal lobbying activity) than its predecessor auditor in the same time period, 0 otherwise; *TOP2_LOBBY*=Indicator variable equal to 1 if the client switched to an auditor that was either the top or second-most audit firm in terms of prior year lobbying activity, 0 otherwise; *LOBBY_DUM*= Indicator variable equal to 1 if the client firm is classified in an industry with high lobbying activity (FF49 #'s 4, 5, 13, 24, 25, 26, 27, 29, 32), 0 otherwise; *LOBBY_DUM2*=Indicator variable equal to 1 if the client firm is classified any of the industries included in *LOBBY_DUM* or in any of an additional 5 industries (FF49 #'s 28, 30, 11, 48); *MKT_LEADER*=1 if current year auditor had the largest market share of the client's industry (calculated as described below) in the prior year and its market share was at least ten percent higher than its closest competitor, 0 otherwise; *GROWTH*=Prior year percent growth in assets calculated as total assets (Compustat field AT) less beginning total assets, divided by beginning total assets; *ABSDACC*=Absolute value of prior year total discretionary accruals; *INVREC*=Inventory (Compustat field INVT) plus receivables (Compustat field RECT), divided by total assets for the prior year; *ROA* =The prior year's return on assets, defined as net income before extraordinary items (Compustat field IB) divided by average total assets; *LOSS*=Indicator variable equal to 1 if *ROA_tm1* is less than zero, 0 otherwise; *LEVERAGE* =Ratio of debt (Compustat items *DLTT+DLC*) to total assets for the prior year; *CASH*=Prior year cash (Compustat item CHE) scaled by prior year total assets; *MODOP*=Indicator variable equal to 1 if the audit opinion in the prior year was modified for anything other than a going concern (value for Compustat item AUOP anything other than 1), 0 otherwise (AUOP=1); *MERGER* =Indicator variable equal to 1 if the client had a merger or acquisition in the 2 years prior to switching auditors (any value in Compustat items AQP or AQA), 0 otherwise; *SIZE* =Natural logarithm of the client's prior year market value of equity (Compustat CSHO* 10⁶*PRCC_F);

*, **, ***, indicate significance at the 10%, 5%, and 1% levels respectively using two-tailed tests of significance.

firms in lobbying intensive industries are more likely to choose an auditor that lobbies more than their previous auditor.

Although the focus of this paper is on the economic benefits for audit firms engaging in lobbying activity, one of the limitations of my study is that it is not possible to calculate an objective return on investment on lobbying activity. Since I focus on the competitive advantage gained from federal lobbying, I examine lobbying activity on the part of audit firms on a relative basis. Thus, it is not possible to calculate the economic yield to a firm in terms of audit fees gained or retained of additional monetary units of lobbying activity.

CHAPTER 7

CONCLUSION

By examining the relationship between relative lobbying activity and auditor switching behavior, I seek to understand whether audit firms achieve economic benefits that justify the perceived threats to independence brought about lobbying activities. In examining the decision to switch auditors as well the length of auditor tenure, I find that greater lobbying activity is associated with a lower probability of auditor switching and longer auditor tenure when the client is in an industry with high interest in lobbying. I also find that, for clients that are switching audit firms, clients tend to choose audit firms with greater lobbying activity. Even after controlling for other factors in the choice of audit firm, I find that companies in industries with high interest in lobbying are more likely to choose an audit firm with greater lobbying activity than their previous auditor. My results also suggest that greater lobbying activity by an audit firm is associated with better quality new clients in that they are lower risk.

In examining federal lobbying activity by audit firms and its benefits, I provide additional insight into both strategic competitive behaviors by Big N audit firms and client behavior in audit firm selection. However, the competitive advantage an audit firm can gain through federal lobbying is tempered by regulatory concerns.

Advocacy on behalf of a client is included as a threat to independence in the profession's own AICPA Conceptual Framework for Independence Standards, where advocacy is defined as "actions that promote an attest client's interest or position." The same Conceptual Framework also enumerates that professional independence includes independence "in appearance" as well as "in fact." No less a "reasonable and informed

third party” than the Securities Exchange Commission has brought up lobbying relationships in the context of other non-audit services that could be perceived to impair independence. While those other non-audit services were eventually expressly banned, lobbying remained in an ambiguous state. However, it seems reasonable to conclude that auditor lobbying is a threat to independence, if not in fact, at least in appearance, and empirically it can be seen that very few audit clients report engaging their audit firm to lobby on their behalf⁶. It is very likely that the scrutiny that the auditing profession received and continues to receive in the wake of the large accounting scandals that prompted the passage of the Sarbanes Oxley Act of 2002 (SOX) serves as a constraint in limiting their lobbying for outside clients and thus the amount to which federal lobbying activity can be used as a competitive strategy.

⁶ In their sample which covered the period 1998-2008, Burnett et al. (2013) only found 16 firms (41 firm-years) that used their own auditor as a lobbyist.

REFERENCES

- Auble, D. 2013. Lobbyists 2012: Out of the Game or Under the Radar? March 20.
Available at: <http://www.opensecrets.org/news/2013/03/lobbyists-2012-out-of-the-game-or-u/>
- Bertrand, M., M. Bombardini, and F. Trebbi. 2013. Is it Whom You Know or What You Know? An Empirical Assessment of the Lobbying Process. *American Economic Review* (forthcoming).
- Burnett, B., H. Chen, and K. Gunny. 2013. Auditor Lobbying and Audit Quality.
Available at SSRN 1956831.
- DeFond, M. L., and K. R. Subramanyam. 1998. Auditor changes and discretionary accruals. *Journal of Accounting and Economics* 25 (1):35-67.
- Hogan, C. E., and D. C. Jeter. 1999. Industry specialization by auditors. *Auditing: A Journal of Practice & Theory* 18 (1):1-17.
- Johnson, W. B., and T. Lys. 1990. The market for audit services: Evidence from voluntary auditor changes. *Journal of Accounting and Economics* 12 (1-3):281-308.
- Krishnan, J. 1994. Auditor switching and conservatism. *The Accounting Review* 69:200-215.
- Landsman, W. R., K. K. Nelson, and B. R. Rountree. 2009. Auditor switches in the pre- and post-Enron eras: Risk or realignment? *The Accounting Review* 84 (2):531-558.
- Mayhew, B. W., and M. S. Wilkins. 2003. Audit Firm Industry Specialization as a Differentiation Strategy: Evidence from Fees Charged to Firms Going Public. *Auditing: A Journal of Practice & Theory* 22 (2):33-52.
- McGrath, C. 2006. The ideal lobbyist. *Journal of Communication Management* 10 (1):67-79.
- Milyo, J., D. Primo, and T. Groseclose. 2000. Corporate PAC Campaign Contributions in Perspective. *Business and Politics* 2 (1):75-88.
- Panel on Audit Effectiveness. 2000. *The Panel of Audit Effectiveness: Report and recommendations*. New York: Public Oversight Board of the American Institute of Certified Public Accountants.

- Porter, M. E. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. New York, NY: Free Press.
- Potters, J., and F. van Winden. 1992. Lobbying and asymmetric information. *Public Choice (1986-1998)* 74 (3):269.
- Securities and Exchange Commission (SEC). 2000. *Revision of the Commission's Auditor Independence Requirements*. Final Rule Release No. 33-7919 (November 21). Washington, D.C.: Government Printing Office.
- Shu, S. Z. 2000. Auditor resignations: clientele effects and legal liability. *Journal of Accounting and Economics* 29 (2):173-205.
- Sterling, R. R. 1973. Accounting Research, Education and Practice. *Journal of Accountancy* (September):44-52.
- Thornburg, S., and R. W. Roberts. 2008. Money, politics, and the regulation of public accounting services: Evidence from the Sarbanes-Oxley Act of 2002. *Accounting, Organizations and Society* 33 (2-3):229-248.
- Washington Council EY. Home page. Available at:
<http://www.ey.com/US/en/Services/Tax/Legislative-Services>
- Watts, R. L., and J. L. Zimmerman. 1982. *Auditors and the determination of accounting standards*: University of Rochester.

APPENDIX A
VARIABLE DEFINITIONS

Dependent Variables

<i>SWITCH</i>	Indicator variable equal to 1 if the client firm switched auditors in the current fiscal year, 0 otherwise
<i>TENURE</i>	Number of years audited by the current year auditor, capped at 10 years
<i>MORE_LOBBY</i>	Indicator variable equal to 1 if the client switched to an auditor that lobbied more in the prior year (as measured by total reported Federal lobbying activity) than its predecessor auditor in the same time period, 0 otherwise
<i>TOP2_LOBBY</i>	Indicator variable equal to 1 if the client switched to an auditor that was either the top or second-most audit firm in terms of prior year lobbying activity, 0 otherwise

Independent Variables

<i>LOBBY_DUM</i>	Indicator variable equal to 1 if the client firm is classified in an industry with high lobbying activity (FF49 #'s 4, 5, 13, 24, 25, 26, 27, 29, 32), 0 otherwise
<i>LOBBY_DUM2</i>	Indicator variable equal to 1 if the client firm is classified any of the industries included in LOBBY_DUM or in any of an additional 5 industries (FF49 #'s 28, 30, 11, 48), 0 otherwise
<i>LAG_AU_LRANK</i>	The prior year auditor's rank order from low to high of prior year lobbying activity (measured in dollars), i.e. the audit firm with the least lobbying activity in a given year will be assigned 1, the next highest 2, etc.
<i>LAG_AU_TOP2</i>	Indicator variable equal to 1 if the prior year auditor was either the top or second-most audit firm in terms of prior year lobbying activity, 0 otherwise

Control Variables

<i>LAG_AU_MKT_SH</i>	The prior year auditor's market share of the client's industry in the prior year, calculated as the sum of the square root of assets of all firms it audited that year in a given two-digit SIC code divided by the sum of the square root of all assets across all Compustat firms in the same two-digit SIC code, consistent with Hogan and Jeter (1999) and Mayhew and Wilkins (2003)
<i>MKT_LEADER</i>	1 if current year auditor had the largest market share of the client's industry (calculated as described below) in the prior year and its market share was at least ten percent higher than its closest competitor, 0 otherwise.
<i>GROWTH</i>	Prior year percent growth in assets calculated as total assets (Compustat field AT) less beginning total assets, divided by beginning total assets
<i>ABSDACC</i>	Absolute value of prior year total discretionary accruals
<i>INVREC</i>	Inventory (Compustat field INVT) plus receivables (Compustat field RECT), divided by total assets for the prior year

<i>ROA</i>	The prior year's return on assets, defined as net income before extraordinary items (Compustat field IB) divided by average total assets
<i>LOSS</i>	Indicator variable equal to 1 if ROA_tm1 is less than zero, 0 otherwise
<i>LEVERAGE</i>	Ratio of debt (Compustat items DLTT+DLC) to total assets for the prior year
<i>CASH</i>	Prior year cash (Compustat item CHE) scaled by prior year total assets
<i>MODOP</i>	Indicator variable equal to 1 if the audit opinion in the prior year was modified for anything other than a going concern (value for Compustat item AUOP anything other than 1), 0 otherwise (AUOP=1).
<i>MERGER</i>	Indicator variable equal to 1 if the client had a merger or acquisition in the prior 2 years (any value in Compustat items AQP or AQA), 0 otherwise
<i>SIZE</i>	Natural logarithm of the client's prior year market value of equity (Compustat CSHO*10 ⁶ *PRCC_F)