5

Management Compensation, Insider Trading and Lobbying Choice: The Case of R & D

by
Ehsan Habib Feroz †
Robert L. Hagerman ‡

Abstract:

In this study we examine the consistency between lobbying choices and insider trading behaviour by managers before and after the issuance of the 1974 FASB Exposure Draft on R&D. The results, though not very strong, indicate that managers compensated by accounting-based schemes lobbied against the FASB 1974 Exposure Draft on R&D and sold the shares of their firms, while managers compensated by market-based schemes lobbied for and bought shares of their firms. These results provide additional evidence that managers' lobbying choice can act as a surrogate for their beliefs as reflected in their insider trading behaviour.

Keywords:

MANAGEMENT COMPENSATION; INSIDER TRADING; LOBBYING; FASB; R&D.

† Visiting Assistant Professor of Accounting, University of Minnesota–Twin Cities.
‡ Professor of Accounting and Finance, State University of New York at Buffalo.

The authors acknowledge the comments and suggestions of A. Rashad Abdel-Khalik, Lawrence Brown, Ron Huefner, Victor Pastena, Ross Watts and the participants of the American Accounting Association Annual Meeting, 1987, and Baruch College/CUNY Accounting Workshop. Research assistance of Indu Ravi is appreciated.

Australian Journal of Management, 15, 2, December 1990, © The University of New South Wales

1. Introduction

Several accounting studies (e.g., Watts and Zimmerman 1978; Zmijewski and Hagerman 1981 and Deakin 1989) have used lobbying of the FASB as a proxy for management's belief regarding how a proposed FASB statement will affect the firm's and the management's wealth. Amershi, Demski and Wolfson (1982) have argued that the managers' lobbying may not be a reliable guide of their beliefs regarding the effects of a proposed standard because the managers may be gaming. If this is the case, lobbying positions are not a useful surrogate for management beliefs as to how a standard will affect them. The purpose of this paper is to examine whether lobbying is related to managers' beliefs regarding the impact of a proposed FASB statement.

Earlier, King and O'Keefe (1986) examined whether lobbiers of the full cost versus successful efforts accounting method regarding SFAS No.19 had inside trades consistent with their positions and different from non-lobbiers. The evidence they presented indicates this was the case. Thus, lobbiers were more likely to trade in the direction of their lobbying position than normally would be the case. In this study, we focus on SFAS No.2, which deals with research and development (R&D), and we find that lobbying choices of managers regarding the FASB 1974 Exposure Draft on R&D are consistent with their insider trading behaviour.

The rest of the paper is organised as follows. Section 2 reviews the literature and Section 3 details the research design. The results are presented in Section 4, and Section 5 draws conclusions.

2. Management Compensation, Insider Trading and Lobbying Choice: A Review

Economic consequence studies analyse the stock market reaction around the date of a proposed mandatory accounting change in order to determine whether the proposed change is associated with economic consequences (e.g., Collins et al. 1981; Leftwich 1981; Larcker and Revsine 1983). The rationale is that if a proposed accounting regulation has economic consequences for firms that are required to conform to the mandatory change, an informationally efficient securities market should impound these economic consequences in stock prices. Presumably, the investors understand the effects the accounting change will have on the firms and therefore they will be impounded in the security prices.

Larcker, Reder and Simon (1983) took a different approach to determining the adverse economic effects of mandated accounting standards. Instead of looking at the security market reactions, they analysed trades by insiders at the time of a mandated accounting change. The rationale of this approach is that "insiders" have knowledge of economic effects of an accounting change as good as, if not superior to, those possessed by other market participants. If the corporate insiders believe the security market is not efficient in the strong form, Larcker et al. (1983) argue, corporate insiders may trade on the basis of their superior information. The Larcker et al. (1983) results indicate the existence of "unusual" and "differential"

trading by full cost and successful efforts insiders in the period after the issuance of the FASB Exposure Draft related to SFAS No.19. In particular, the full cost insiders were selling relative to the successful efforts insiders after the Exposure Draft was released.

King and O'Keefe (1986) used the Larcker et al. (1983) sample to determine whether the insider trading behaviour of firms which lobbied the FASB is different from insider trading firms that did not lobby the FASB. If trading behaviour of lobbying insiders is different from the trading behaviour of non-lobbiers, then this would be an indirect evidence of economic consequences—i.e., lobbying with the FASB is undertaken as a part of the manager's wealth maximisation efforts. King and O'Keefe (1986) report that insiders of full cost firms that lobbied FASB regarding the Discussion Memorandum and Exposure Draft were net sellers compared with full cost insiders who did not lobby.

In this study we take the King and O'Keefe (1986) argument one step further and stipulate that if both lobbying choices and insider trading are being guided by anticipated effects upon management wealth, then there should be consistency between lobbying choice (position) and insider trading behaviour.[1] Management compensation (hence management wealth) is increased by either increasing the value of stock options or increasing the cash paid through management compensation plans (Watts and Zimmerman 1978). If a firm bases its compensation awards on reported accounting earnings, the management has incentives to lobby for and/or choose accounting alternatives that increase the reported accounting earnings (Zmijewski and Hagerman 1981). Similarly, if a proposed regulation is likely to affect management compensation adversely, the management will have incentives to lobby against the proposed regulation.

Smith and Watts (1982) identify the following types of compensation schemes:

1. Compensation conditional on accounting measures of firm performance (bonus, performance plans, and dividend units).
2. Compensation conditional on market measures of firm performance (stock options, stock appreciation rights, restricted stock, and phantom stock).
3. Compensation not conditional on measures of firm performance (salary, pensions, and insurance policies).

1. King and O'Keefe (1986) also stipulated that lobbying choice (positions) should be consistent with insider trading position. But in their empirical tests they focused on the more generic issue as to whether there is a relationship between insider trading behaviour and lobbying and divided their sample into lobbying and non-lobbying firms. In this study, we concentrate on the lobbying sample in order to determine whether there is a consistency between lobbying position (choice) and insider trading. A positive finding will be in the spirit of King and O'Keefe (1986) and provide further evidence to the effect that lobbying choice as well as insider trading are both driven by anticipated economic consequences upon managerial wealth.

Although one or more of these components in various combinations can predominate a compensation plan, accounting earnings-based compensation schemes seem to be rather popular. Accounting earnings-based plans compensate managers with the value of performance units if certain yearly or long-term earnings targets are attained (Healy 1985). The earnings targets are generally expressed in terms of earnings per share, return on assets or equity.

Accounting earnings (performance measure used by accounting-based compensation plans) measure the firm value with error because of the noise associated with accounting numbers. Since accounting earnings can be affected by the choice of accounting techniques, Smith and Watts (1982) argue that managers subject to compensation schemes based on accounting earnings measures have incentives to lobby for and choose those GAAP alternatives which tend to produce higher reported earnings.

3. Research Design

3.1 Selection of a Mandatory Accounting Change

Larcker et al. (1983), and King and O'Keefe (1986) investigated SFAS No.19 on oil and gas, since most studies reported economic consequences for affected firms. We chose SFAS No.2 on R&D issued in October, 1974, with effect from January 1, 1975, which required research and development costs be charged to expense when incurred. Before SFAS No.2, firms had the choice of either expensing or capitalising expenses incurred related to research and development. Daley and Vigeland (1983) suggest that prior to SFAS No.2, firms which capitalised R&D costs were more highly levered, used more public debt, were closer to dividend restrictions, and were smaller than firms which expense R&D costs. While mandatory expensing of R&D costs has implications for reported accounting earnings, and management wealth tied into accounting numbers, extant studies have failed to provide conclusive evidence regarding economic consequences. Horowitz and Kolodny (1980) and Elliott et al. (1984) documented an impact on spending behaviour of OTC and NYSE-ASE firms. On the other hand, Dukes et al. (1980) study of NYSE firms failed to find a significant effect in terms of R&D spending. Vigeland (1981) was also unable to document any abnormal market reaction in response to SFAS No.2.

This study focuses on the period surrounding the FASB Exposure Draft on Research and Development issued on June 5, 1974. Although it is arguable that a Discussion Memorandum represents the first FASB policy pronouncement on a given issue, it is not a set of *preferred* FASB policy choices on a given issue. It is rather a comprehensive set of available accounting alternatives on a given issue. An Exposure Draft, on the other hand, represents the FASB *preferred* alternatives on a given issue (Feroz 1987). Thus, even if the market might have anticipated the ultimate provisions of the SFAS No.2, it had no definitive statement of policy preferences from the FASB until the Exposure Draft was issued on June 5, 1974.

We focus on a particular class of investors—corporate insiders. If corporate insiders believe that they have superior information regarding the effects of a proposed mandatory accounting change and that the market is not efficient in the strong form, they will trade on the basis of their perceived superior information.[2]

Information trading surrounding the issuance of the Exposure Draft may be based on expectations about the "content" of the Exposure Draft and/or expectations about its "effects" on individual firms. If the insiders believe they have private information about the contents of the Exposure Draft, they will trade on "content" prior to issuance of the Exposure Draft. But if the insiders believe they have superior information regarding the "effects" of the proposed change (but not "content"), they may trade both before and after the issuance of the Exposure Draft (King and O'Keefe 1986). Distinguishing "effect" trading from "content" trading is very difficult. Hence, we examine insider trading both thirty days before and after the issuance of the Exposure Draft on June 5, 1974.

3.2 The Hypotheses

As we have argued, managers' self-interest is an important motive for lobbying the FASB on a particular standard. The capitalisation of R&D costs raises net income. To the extent the managers' compensation is linked to earnings numbers, the more incentive managers have to lobby for the capitalisation method. Managers whose compensation is not based on accounting numbers, but on stock price or some other market measures will not have this incentive. Thus, the first hypothesis is that managers whose compensation is predominantly based on accounting numbers are more likely to lobby for R&D capitalisation.[3]

In order to determine if managers lobbied because they believe that the FASB would impose economic consequences on their firms, it is necessary to find a measure for their beliefs. Insider trading can serve as a measure of managers' beliefs (Larcker et al. 1983). If they believed that the mandatory expensing of R&D will reduce the value of their firms, they should have lobbied against it and sold stock. Alternatively, if they believed that the 1974 Exposure Draft on R&D would increase the value of the firm, they should have lobbied for it and bought shares. This hypothesis does not in itself explain why SFAS No.2 may have economic consequences. Instead, we are attempting to see if managers make

2. Insiders may also trade to adjust for change in their preferences or opportunity sets or to adjust for changes in risk or return components of their portfolios (see Finnerty 1976). In this study, we assume that insider trading to adjust for risk, return or opportunity sets, is random across a set of affected firms.
3. Note that we are not arguing that every firm affected by the 1974 FASB Exposure Draft on R&D will actually lobby the FASB. The decision to actually lobby will be preceded by perceived probability of lobbying success, costs and benefits of lobbying, and other strategic considerations. But since we are not addressing the issue of why managers lobby, rather how they lobby once they decide to do so, we ignore the costs involved in lobbying decisions.

personal economic decisions that are consistent with their lobbying positions.

Finally, managers do not wish to have their choices of accounting principles restricted. Since the FASB was trying to reduce the alternatives for accounting for R&D to expensing method only, we expect those managers who were capitalising R&D to lobby against this proposal. The position of the managers of firms that had voluntarily chosen to immediately expense R&D is less obvious. On the one hand, they should have been opposed to the reduction in alternatives. (Economics texts point out that having additional choices will never make anyone worse off, but may make them better off.) Alternatively, they may have believed the FASB was going to restrict the choice in any event, so they would have incentive to lobby for the alternative they had preferred. On balance, if anything they would have been likely to lobby for expensing. Therefore, the third hypothesis is that managers will lobby for the method their firm chose voluntarily.[4] This hypothesis is not independent of the first one, since firms whose managers receive bonuses based on reported income are more likely to have chosen the capitalisation method voluntarily.

3.3 Model and Operational Measures

We summarise the above hypothesis in the form of a binary choice model as follows:

$$\begin{matrix}\text{Insider} \\ \text{Lobby}\end{matrix} = F \begin{bmatrix}\text{Management} & \text{Insider} & \text{Accounting} \\ \text{Compensation,} & \text{Trading,} & \text{Method}\end{bmatrix}.$$

The operational measures for the variables are as follows:

Insider Lobby is a categorical variable where a firm which lobbied for the 1974 Exposure Draft on R&D, which requires expensing, was assigned the value of one, and a firm which argued a case against expensing (for capitalisation) was assigned a value of zero. A firm's position regarding the 1974 Exposure Draft or R&D was determined by reading the letters of comment submitted by the firm in response to the FASB 1974 Exposure Draft.

Management Compensation related information was collected from the proxy statements. A compensation scheme which uses predominantly accounting-based valuation basis (equal or more than 60% of total compensation is based on accounting measures of firm performance) for compensating managers was assigned the value of one. A compensation scheme with predominantly market-based valuation basis (equal or more than 60% of total compensation is based on market measures of firm performance) was assigned the value of –1. A compensation scheme which could not be classified as being predominantly market

4. The accounting method chosen by the firm could be the optimal choice for the firm for contracting and monitoring reasons (see Watts and Zimmerman 1986, Ch. 9).

or accounting-based was assigned the value of zero.

Insider Trading information was collected from the SEC Official Summary of Security Transactions and Holdings. Earlier studies used the number of transactions and number of shares traded as measures of insider trading (Jaffe 1974; Finnerty 1976; Basel and Stein 1979; Larcker et al. 1983; King and O'Keefe 1986). In addition to these two measures of insider trading, we use the number of insider traders as a third measure. Our measures for insider trading are as follows:

1. Number of *transactions*:

$$\frac{\text{No. of insider buying transactions} - \text{No. of insider selling transactions}}{\text{No. of insider buying transactions} + \text{No. of insider selling transactions}}$$

2. Number of *shares*:

$$\frac{\text{No. of shares bought} - \text{No. of shares sold}}{\text{No. of shares bought} + \text{No. of shares sold}}$$

3. Number of *traders*:

$$\frac{\text{No. of buyers} - \text{No. of sellers}}{\text{No. of buyers} + \text{No. of sellers}}$$

One reason for using three continuous measures is to ensure that our results are not sensitive to a particular measure. Besides, we want to compare our findings to those of previous studies.

Accounting Method used by a firm for reporting R&D in 1974 was collected from the Annual Report and/or the Disclosure Journal Index. A firm using the expensing method was assigned a value of one, and a firm using the capitalisation method was assigned the value of zero.

3.3.1 Sample Selection

Firms included in our sample met the following criteria:

i. the firm wrote a letter of comment in response to the FASB Exposure Draft on Research and Development issued on June 5, 1974;

ii. the management of the firm had a written compensation scheme and the Proxy for the scheme was available; and,

iii. the firm reported accounting method for R&D in its 1974 annual report or in the Disclosure Journal Index.

A total of 69 firms met the above criteria.

4. Methodology and Findings

4.1 Methodology

Table 1 summarises the operational measures for the independent variables in the model and their hypothesised relationships with the dependent variable.

Table 1

Model Predictions of Coefficients

Independent Variables	Dependent Variable Lobby for (1)	Lobby against (0)
Management Compensation		
+1 = Accounting-based		
–1 = Market-based	(–)	
0 = Both		
Insider Trading[1]		
Number of transactions		
Number of shares	(+)	
Number of traders		
Accounting Method		
+1 = Expense		
0 = Capitalise	(+)	

Note: 1. These three continuous measures as defined on page 17, were used alternately in both univariate and multivariate analyses.

The model to be estimated has a discrete dependent variable. Attempts to estimate such a model using ordinary least squares (OLS) based on individual observations usually lead to biased and inconsistent estimates.[5] There are at least two ways to model the data more appropriately than by using OLS: LOGIT and PROBIT. The LOGIT technique assumes that the log of the odds ratio is a linear function of the exogenous variables; the PROBIT assumes that the underlying distribution function is cumulative normal.[6] Both LOGIT and PROBIT have been used in accounting

5. See Hanushek and Jackson (1977, pp. 179–215) for details.
6. The PROBIT and LOGIT procedures are similar in that the assumptions of normal distribution are nearly identical to those of the logistic distribution. Specifically, the differences between the two distribution functions show up in the tails; the normal curve approaches the axes more quickly than the logistic curve. The LOGIT and PROBIT models are both estimated by maximum likelihood techniques, and the derivation of the estimate can be obtained in an analogous fashion.

literature, and the results have sometimes been compared to OLS (see, e.g., Noreen 1988). In the same spirit, we use LOGIT and PROBIT and compare our results to those using OLS.

4.2 Univariate Analysis

Table 2 Panel A reports the distribution properties of variables included in the model. Table 2 Panel B reports the correlation among the independent variables which range between –0.00 and 0.98. The last row of Table 2 Panel B which reports multiple R, ranges from 0.009 to 0.16, suggests that multicollinearity is not a problem for the model.

Table 3 reports the correlation between the dependent and independent variables. Panels A through C represent three different measures for insider trading, namely: number of transactions TRANS; number of sharesSHAR; and, number of traders NUM. All the correlation coefficients except Management Compensation (COM), are significant and have their expected signs. We discuss later a possible explanation for insignificance of COM.

4.3 Multivariate Analysis

Table 4 reports the results of estimating the model using PROBIT, LOGIT, and OLS. Panels A through C report the results of estimating the model using three different measures of insider trading—TRANS, SHAR and NUM. All coefficients have their expected signs in the three modes of analysis (PROBIT, LOGIT, and OLS).

Accounting Method (CM) and Insider Trading are significant in all three panels using three different measures—TRANS, SHAR and NUM. The consistency of results across three different panels indicates that the results are not sensitive to a particular measure of insider trading. These results also confirm our expectations that those managers who believed that mandatory expensing of R&D costs will reduce the value of their firm (hence their wealth) lobbied against it and sold stock, while managers who believed that the proposed expensing of R&D would increase firm value (hence their wealth) bought stock and lobbied for the 1974 FASB Exposure Draft on R&D.

The Management Compensation (COM) variable has expected signs and is significant at the 0.05 level for Panels A, B and C for OLS, Panel A for LOGIT and PROBIT. These results indicate that management wealth tied to a compensation scheme is an important determinant of insider lobbying. Specifically, managers compensated by an accounting-based (market-based) compensation scheme lobbied against (for) the 1974 Exposure Draft in anticipation of negative effects on reported earnings.

In the preceding analysis we looked at the whole period (i.e., thirty days before and thirty days after the Exposure Draft). In order to see if there is any difference in insider trading behaviour during the period before the issuance of the Exposure Draft from the period after, we re-ran two separate regressions relating to the two periods (thirty days before and after). The results reported in Tables 5

Table 2

Descriptive Statistics

Panel A: *Distribution Properties of the Variables*

Variable	Mean	Standard Deviation
Lobby (LOB)	0.53	0.50
Management Compensation (COM)[1]	0.11	0.91
Insider Trading:		
No. of Transactions (TRANS)[2]	–0.03	0.74
No. of Shares (SHAR)[3]	0.08	0.78
No. of Traders (NUM)[2]	–0.02	0.73
Accounting Method (CM)	0.72	0.44

Panel B: *Correlation Among Independent Variables*

	CM	COM	TRANS	SHAR	NUM
Accounting Method (CM)	1.00				
Management Compensation (COM)	0.18	1.00			
Insider Trading:					
No. of Transactions (TRANS)	0.42**	0.02	1.00		
No. of Shares (SHAR)	0.26	–0.09	0.87**	1.00	
No. of Traders (NUM)	0.40**	–0.00	0.98**	0.98**	1.00
Multiple of R^4	0.08	0.009	0.16	0.06	0.14

Notes: 1. The breakdowns in terms of –1,0 and 1 are 25, 11 and 33, respectively.
2. Predominantly selling.
3. Predominantly buying.
4. Obtained by regressing the variable on all other variables (see Johnston 1972).

Number of observations = 69.
* = significant at the 0.05 level or better.
** = significant at the 0.005 level or better.

and 6 do not indicate any difference in the overall pattern of trading behaviour, except that the management compensation variable is significant only for the period thirty days after (Table 6), not before (Table 5), the issuance of the Exposure Draft.

4.4 Sensitivity Analysis

In order to determine the sensitivity of our findings to alternative assumptions and measurement procedures, we performed the following additional tests: (i) omitted

Table 3

Univariate Analysis

Dependent Variable: LOBBY Independent Variables	Expected Sign	Coefficient
Panel A: *Insider Trading defined as No. of Transactions*		
Management Compensation (COM)	(–)	–0.07
Insider Trading:		
No. of Transactions (TRANS)	(+)	0.63**
Accounting Method (CM)	(+)	0.59**
Panel B: *Insider Trading defined as No. of Shares*		
Management Compensation (COM)	(–)	–0.07
Insider Trading:		
No. of Shares (SHAR)	(+)	0.52**
Accounting Method (CM)	(+)	0.59**
Panel C: *Insider Trading defined as No. of Traders*		
Management Compensation (COM)	(–)	–0.07
Insider Trading:		
No. of Traders (NUM)	(+)	0.60**
Accounting Method (CM)	(+)	0.59**

Notes: Number of observations = 69.
* = significant at the 0.05 level or better.
** = significant at the 0.005 level or better.

Accounting Method (CM); and, (ii) examined the sensitivity of our findings to coding biases for COM.

In order to see if these results are being driven by accounting method used by managers prior to their lobbying and insider trading, we omitted the Accounting Method (CM) variable and re-ran the regressions. The results reported in Table 7 for the reduced model are generally consistent with the results for the full model reported in Table 4. All three measures of insider trading are significant and have expected signs. The Management Compensation (COM) variable has the expected signs in all three panels, but is not significant. These results do not indicate that the Accounting Method (CM) is the driving force for the results reported in Table 4.

Table 8 reports the multivariate results after deleting zeros (non-classifiable schemes) for COM. The insider trading variable is significant and has expected signs in all three panels. The Management Compensation (CM) variable has the

Table 4

Multivariate Analysis

Independent Variables	Expected Sign	Dependent Variable: LOBBY OLS	PROBIT Coefficient (Standard Error of Independent Variables)	LOGIT
Panel A: *Insider Trading defined as No. of Transactions*				
Management Compensation (COM)	(–)	–0.08*	–0.43*	–0.76*
		(0.04)	(0.25)	(0.45)
Insider Trading:				
No. of Transactions (TRANS)	(+)	0.30**	1.24**	2.21**
		(0.06)	(0.32)	(0.64)
Accounting Method (CM)	(+)	0.48**	2.23**	3.77**
		(0.10)	(0.64)	(1.22)
Panel B: *Insider Trading defined as No. of Shares*				
Management Compensation (COM)	(–)	–0.07*	–0.35	–0.58
		(0.04)	(0.24)	(0.44)
Insider Trading:				
No. of Shares (SHAR)	(+)	0.23**	1.02**	1.77**
		(0.05)	(0.28)	(0.54)
Accounting Method (CM)	(+)	0.58**	2.65**	4.58**
		(0.10)	(0.63)	(1.23)
Panel C: *Insider Trading defined as No. of Traders*				
Management Compensation (COM)	(–)	–0.08*	–0.40	–0.70
		(0.04)	(0.24)	(0.44)
Insider Trading:				
No. of Traders (NUM)	(+)	0.28**	1.17**	2.05**
		(0.06)	(0.32)	(0.62)
Accounting Method (CM)	(+)	0.50**	2.19**	3.77**
		(0.10)	(0.59)	(1.19)

Notes: Number of observations = 69.
* = significant at the 0.05 level or better.
** = significant at the 0.005 level or better.

expected sign in all three panels, and is significant in Panels A and C. The Accounting Methods (CM) variable has the expected sign in all three panels, but it is not significant. These results indicate that non-classifiable compensations

Table 5

Multivariate Analysis (30 days before the Exposure Draft)

Dependent Variable: LOBBY		
Independent Variables	Expected Sign	LOGIT Coefficient (Standard Error of Independent Variables)
Panel A: *Insider Trading defined as No. of Transactions*		
Management Compensation (COM)	(–)	–0.62 (0.49)
Insider Trading: No. of Transactions (TRANS)	(+)	3.35** (1.10)
Accounting Method (CM)	(+)	3.83** (1.23)
Panel B: *Insider Trading defined as No. of Shares*		
Management Compensation (COM)	(–)	–0.62 (0.47)
Insider Trading: No. of Shares (SHAR)	(+)	2.63** (0.81)
Accounting Method (CM)	(+)	3.55** (1.20)
Panel C: *Insider Trading defined as No. of Traders*		
Management Compensation (COM)	(–)	–0.63 (0.49)
Insider Trading: No. of Traders (NUM)	(+)	3.30** (1.09)
Accounting Method (CM)	(+)	3.89** (1.23)

Notes: Number of observations = 69.
* = significant at the 0.05 level or better.
** = significant at the 0.005 level or better.

Table 6

Multivariate Analysis (30 days after the Exposure Draft)

Dependent Variable: LOBBY		
Independent Variables	Expected Sign	LOGIT Coefficient (Standard Error of Independent Variables)
Panel A: *Insider Trading defined as No. of Transactions*		
Management Compensation (COM)	(–)	–0.85* (0.47)
Insider Trading: No. of Transactions (TRANS)	(+)	2.71** (0.96)
Accounting Method (CM)	(+)	3.98** (1.26)
Panel B: *Insider Trading defined as No. of Shares*		
Management Compensation (COM)	(–)	–0.73 (0.45)
Insider Trading: No. of Shares (SHAR)	(+)	2.49** (0.84)
Accounting Method (CM)	(+)	4.64** (1.43)
Panel C: *Insider Trading defined as No. of Traders*		
Management Compensation (COM)	(–)	–0.79* (0.45)
Insider Trading: No. of Traders (NUM)	(+)	2.47** (0.92)
Accounting Method (CM)	(+)	3.73** (1.20)

Notes: Number of observations = 69.
* = significant at the 0.05 level or better.
** = significant at the 0.005 level or better.

Table 7

Multivariate Analysis (Reduced Model)

Independent Variables	Expected Sign	Dependent Variable: LOBBY OLS	PROBIT Coefficient (Standard Error of Independent Variables)	LOGIT
Panel A: *Insider Trading defined as No. of Transactions*				
Management Compensation (COM)	(–)	–0.04	–0.18	–0.34
		(0.05)	(0.20)	(0.34)
Insider Trading:				
No. of Transactions (TRANS)	(+)	0.42**	1.43**	2.53**
		(0.06)	(0.30)	(0.59)
Panel B: *Insider Trading defined as No. of Shares*				
Management Compensation (COM)	(–)	–0.012	–0.03	–0.07
		(0.05)	(0.18)	(0.31)
Insider Trading:				
No. of Shares (SHAR)	(+)	0.33**	0.95**	1.57**
		(0.06)	(0.23)	(0.40)
Panel C: *Insider Trading defined as No. of Traders*				
Management Compensation (COM)	(–)	–0.03	–0.14	–0.25
		(0.05)	(0.19)	(0.33)
Insider Trading:				
No. of Traders (NUM)	(+)	0.41**	1.34**	2.32**
		(0.06)	(0.29)	(0.55)

Notes: Number of observations = 69.
* = significant at the 0.05 level or better.
** = significant at the 0.005 level or better.

schemes (zeros) were masking a significant relationship between the type of compensation scheme and wealth maximising lobbying choices.

5. Summary and Conclusions

This study examined the consistency between the firm's lobbying positions (choices) regarding the FASB's 1974 Exposure Draft on R&D and managers' beliefs as measured by their insider trading. The results, though not very strong, indicate that there is a consistency between lobbying choices and insider trade

Table 8

Multivariate Analysis (Omitting zeros for COM)

Dependent Variable: LOBBY		
Independent Variables	Expected Sign	LOGIT Coefficient (Standard Error of Independent Variables)
Panel A: *Insider Trading defined as No. of Transactions*		
Management Compensation (COM)	(–)	–0.79* (0.46)
Insider Trading: No. of Transactions (TRANS)	(+)	1.73** (0.62)
Accounting Method (CM)	(+)	19.9 (2,350.6)
Panel B: *Insider Trading defined as No. of Shares*		
Management Compensation (COM)	(–)	–0.68 (0.46)
Insider Trading: No. of Shares (SHAR)	(+)	1.49** (0.56)
Accounting Method (CM)	(+)	20.76 (2,249.47)
Panel C: *Insider Trading defined as No. of Traders*		
Management Compensation (COM)	(–)	–0.75* (0.40)
Insider Trading: No. of Traders (NUM)	(+)	1.71** (0.62)
Accounting Method (CM)	(+)	19.94 (2,352.34)

Notes: Number of observations = 58.
* = significant at the 0.05 level or better.
** = significant at the 0.005 level or better.

behaviour. In particular, managers compensated by accounting-based schemes lobbied against the FASB 1974 Exposure Draft on R&D and sold shares of their firm, while managers compensated by market-based schemes lobbied for and bought shares of their firm. These results are consistent with the earlier findings of Larcker et al. (1983) and King and O'Keefe (1986) and provide additional evidence that: (i) managers take lobbying as a serious economic activity; and, (ii) their lobbying positions can act as surrogates for their beliefs as reflected in their insider trading behaviour.

(Date of receipt of final typescript: June 1990.)

References

Amershi, A.H., J.S. Demski and M.A. Wolfson, 1982, Strategic behavior and regulation research in accounting, *Journal of Accounting and Public Policy*, 1, 1, 19–32.

Basel, J.B. and G.R. Stein, 1979, The value of information: inferences from the probability of insider trading, *Journal of Financial and Quantitative Analysis*, 14, 3, 553–571.

Collins, D.W., M.S. Rozeff, and D.S. Dhaliwal, 1981, The economic determinants of market reaction to proposed mandatory accounting changes in the oil and gas industry: a cross sectional analysis, *Journal of Accounting and Economics*, 3, 1, 37–71.

Daley, L.A. and R.L. Vigeland, 1983, The effects of debt covenants and political costs on the choice of accounting methods: the case of R&D, *Journal of Accounting and Economics*, 5, 3, 195–211.

Deakin, E.B., 1989, Rational economic behavior and lobbying on accounting issues: evidence from the oil and gas industry, *Accounting Review*, 64, 1, 137–151.

Dukes, R.E., T.R. Dyckman, and J.A. Elliot, 1980, Accounting for research and development costs: the impact on research and development expenditures, *Journal of Accounting Research*, 18, Supplement, 1–26.

Elliot, J.A., G. Richardson, T.R. Dyckman, and R.E. Dukes, 1984, The impact of SFAS No.2 on firm expenditures on research and development: replications and extensions, *Journal of Accounting Research*, 22, 1, 85–102.

Feroz, E.H., 1987, Corporate demands and changes in GPLA, *Journal of Business Finance and Accounting*, 14, 3, 409–424.

Finnerty, J.E., 1976, Insider's activity and insider information: a multivariate analysis, *Journal of Financial and Quantitative Analysis*, 11, 2, 205–215.

Hanushek, E.A. and J.E. Jackson, 1977, *Statistical Method for Social Scientists* (New York, N.Y., Academic Press).

Healy, P., 1985, The effects of bonus schemes on accounting decisions, *Journal of Accounting and Economics*, 7, 1–3, 85–107.

Horowitz, B.N. and R. Kolodny, 1980, The economic effects on industry uniformity in the financial reporting of R&D expenditures, *Journal of Accounting Research*, 18, Supplement, 38–74.

Jaffe, J.F., 1974, Special information and insider trading, *Journal of Business*, 47, 3, 410–428.

Johnston, J., 1972, *Econometric Methods* (New York, N.Y., McGraw-Hill), 2nd Edition.

King, R.D. and T.B. O'Keefe, 1986, Lobbying activities and insider trading, *The Accounting Review*, 61, 1, 76–79.

Larcker, D.F. and L. Revsine, 1983, The oil and gas accounting controversy: an analysis of economic consequences, *Accounting Review*, 58, 4, 706–732.

Larcker, D.F., R.E. Reder and D.T. Simon, 1983, Trades by insiders and mandated accounting standards, *Accounting Review*, 58, 3, 606–620

Leftwich, R., 1981, Evidence of the impact of mandatory changes in accounting principles on corporate loan agreements, *Journal of Accounting and Economics*, 3, 1, 3–36.

Noreen, E., 1988, An empirical comparison of PROBIT and OLS regression hypothesis tests, *Journal of Accounting Research*, 26, 1, 119–133.

Smith, C. and R. Watts, 1982, Incentive and tax effects of executive compensation plan, *Australian Journal of Management*, 7, 2, 139–152.

Vigeland, R.L., 1981, The market reaction to Statement of Financial Accounting Standards No.2, *Accounting Review*, 56, 2, 309–325.

Watts, R. and J. Zimmerman, 1986, *Positive Accounting Theory* (Englewood Cliffs, N.J., Prentice Hall).

Watts, R. and J. Zimmerman, 1978, Toward a positive theory of determination of accounting standards, *Accounting Review*, 53, 1, 112–134.

Zmijewski, M. and R. Hagerman, 1981, An income strategy approach to the positive theory of accounting standard setting/choice, *Journal of Accounting and Economics*, 3, 1, 129–149.