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A MODEL OF NYSE FIRM MANAGER POSITION AND PARTICIPATION CHOICE ON THE MARCH 1985 FASB EXPOSURE DRAFT: EMPLOYERS' ACCOUNTING FOR PENSIONS

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ABSTRACT

A MODEL OF NYSE FIRM MANAGER POSITION AND PARTICIPATION CHOICE ON THE MARCH 1985 FASB EXPOSURE DRAFT: EMPLOYERS' ACCOUNTING FOR PENSIONS

By

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The Financial Accounting Standards Board (FASB) must anticipate the concerns of corporate constituents over the economic consequences of mandated accounting changes if it is to build support for these changes. The present research examines the relationship hypothesized between the economic consequences associated with a proposed change in pension accounting (the ED) and the behavior (position and participation choice) of New York Stock Exchange (NYSE) firm managers in the accounting standard-setting process.

A replication of prior research is provided by examining the relationship between corporate attributes and manager position and participation choices. Additionally, the relationship between these choices and a manager's stated expectations of the corporate costs associated with the ED are examined. Finally, the relationship between manager perceptions of the FASB and participation choice are examined.

The study expands the sample frame used in prior studies to include a random subset of NYSE firm managers who did not lobby the FASB on the pension accounting issue. A questionnaire is used to obtain measures of manager position choice, cost expectations and perceptions of the FASB. Separate analyses of position and participation choice are run for participating and nonparticipating

managers, and for opposing and supporting managers, respectively. Probit analyses and Mann-Whitney U tests are used to analyze these relationships.

The principal findings suggest that, on the pension accounting issue (1) manager position and participation choices are not independent. Comment letter filers tend to oppose the accounting change. (2) Corporate attributes are related to the participation and position choices of NYSE firm managers. Firm size was significant in both the position and participation choice models and firm leverage was significant in the position choice model of nonparticipating managers. (3) Corporate attributes - firm size and pension plan status - are related to stated manager cost expectations of political, labor and administrative compliance costs, and debt costs, respectively. (4) Stated manager cost expectations (political, labor and administrative compliance costs) and perceptions of the FASB are related to manager participation choice. However, a significant relationship was not found between manager cost expectations and position choice.

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I dedicate this dissertation to my husband, Bob, and our son, Eric, for their patience and support during my doctoral work. I am especially grateful to my husband who spent many hours helping me with the computer applications and with the preparation of the manuscript as well as providing much appreciated moral support.

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INTRODUCTION

1.1 The Research Objective

The Financial Accounting Standards Board (FASB) has been in existence for over ten years and since its inception over eighty standards have been issued. A due process procedure has been followed wherein the views of constituents have been actively solicited by the Board. Donald Kirk, chairman of the FASB, has stated that the objective of this due process is to build consensus for financial accounting standards.[1]

The need to build consensus arises because the Board functions in a political setting.[2] The Accounting Principles Board (APB) and its predecessor, The Committee on Accounting Procedure (CAP), were displaced, in part, because of a lack of support by their constituents.[3] The continuance of the FASB may depend on its ability to build and maintain this support.

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[1]The search for generally accepted accounting principles is important but as Kirk (1981) has noted, the objective of the due process procedures is not to search for and find consensus but rather to build it.

[2]Hinckley (1981, pp. 4,5) notes that there are three components to political activity: "(1) an application of power (in the sense of applying resources to determine outcomes), (2) a combination of conflict and coordination, and (3) a collective activity...."

[3]Lack of authority, inconsistency of standards, and inattention to normative criteria have all been cited as factors leading to the downfall of the CAP and the APB (Previts and Marino, 1979). These factors led to criticism and a lack of consensus by Board constituents.

In order to build consensus and support, the FASB must be aware of the economic impact of each issue it addresses before the issue is placed on the formal agenda.[4] By anticipating the claimed consequences which might arise from a proposed standard, the FASB might identify and include in the research task force, representatives from the interest groups who are most likely to be concerned with the proposal.[5] Wyatt (1977) argued that the FASB needs to be aware of the economic and social consequences of a proposed change in accounting so that it can avoid surprises in the process of resolving technical problems, and so that it can be prepared to counter opposition. Finally, by anticipating the level of concern over economic consequences, the Board might assess the political propriety of placing the issue on its agenda at a particular point in time.[6]

The objective of this study is to add evidence to the existing body of knowledge about the behavior of corporate managers in the accounting standard-setting process. This body of knowledge may help policymakers forecast preferences and actions of individuals on proposed accounting changes. These forecasts, in turn, may be used by

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[4]Rappaport (1977) uses the controversy over the FASB's publication of its Discussion Memorandum on "Accounting by Debtors and Creditors When Debt is Restructured" to illustrate the importance of the "preliminary assessment" of an accounting issue before it is placed on the formal agenda.

[5]For example, Kirk (1983, pp. 88-92) noted that, "the Board has to become expert on the impact of accounting changes on stock prices and behavior, [but] whether these two factors should affect the Board is a serious question."

[6]If the FASB is to survive, Gerboth (1973) argues that it must "supplement technical competence with political skill". A delayed action on an accounting issue may be necessary to promote a friendlier political atmosphere.

policymakers to build consensus among their constituents on accounting standards.

Watts and Zimmerman (1978) provided the first study on the relationship between certain corporate attributes of a company, and that manager's preference on a proposed accounting change. They used the microeconomic theory of self-interested individuals to predict the stated preferences of corporate managers on FASB Statement 33: General Price Level Accounting. Corporate attributes were used to proxy for the expected economic consequences associated with the proposed accounting change.

Since 1978, improvements in research methodology and variable measurement have been made. The Watts and Zimmerman model has been used to explain and predict both the stated preferences (position choice) and the decisions to lobby (participation choice) of corporate managers on other accounting issues.[7] The findings of these studies can be interpreted to provide support for the theory that there is a relationship between the expected economic consequences of an accounting proposal and the position and participation choices of a corporate manager.[8]

However, these studies are subject to some limitations. First, the findings may not be generalizable to all accounting issues. Only two proposed standards which affect the primary financial statements

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[7]For example, see Zmijewski and Hagerman (1981), Griffin (1982, 1983), Kelly (1982, 1985), Lasater (1982), McKee (1982), and McKee, et al (1984).

[8]Economic consequences are defined to include the changes in contracting, monitoring and other corporate costs (e.g., political, administrative compliance, debt covenant, labor negotiation and management compensation costs) associated with a change in financial statement accounting and reporting.

(FASB Statement 34: Interest Capitalization, and FASB Statement 8: Foreign Currency Translation) have been addressed in prior studies.

Second, the positions of corporate managers who did not file comment letters on the accounting proposals have not been obtained in prior studies. Therefore, the studies of position choice have been limited to the population of comment letter filers. Further, the studies of participation choice have not controlled for a manager's stated position on an accounting proposal.

Third, the construct (theoretical) validity of the proxies used in these studies for expected economic consequences has not been tested. The validity of a proxy may be assessed in terms of its predictive and its construct validity. Prior researchers have used only one method (corporate attributes) to measure expected economic consequences. The assessment of construct validity requires the use of two or more measurement methods for the same construct.[9] Therefore, the construct validity of the proxies used in these prior research efforts could not be assessed.

Finally, the models of participation choice used in prior studies have not included variables for manager perceptions of the financial accounting standard-setting process. In a political setting, these perceptions may be important determinants of a manager's decision to participate in the due process. Therefore, the inclusion of these variables may significantly improve the predictive ability of the participation choice model.

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[9]See Campbell and Fiske (1959).

1.2 Contributions of this Research

This study provides further tests of the relationship between economic consequences and corporate manager position and participation choice. The March 1985 FASB Exposure Draft: Employers' Accounting for Pensions is used to address two research questions:

1) What is the association between the expected economic consequences of the proposed change in pension accounting and the stated position of a corporate manager?
2) What is the association between the expected economic consequences of the proposed change in pension accounting, manager perceptions of the FASB, and a coporate manager's decision to participate?

The approach used in this study to answer these research questions reflects an attempt to address the limitations of prior research cited in the previous section. Two sets of proxies are used for the economic consequences associated with the proposed change - corporate attributes and managers' stated expectations of corporate costs. Three types of analyses are run using these proxies - correlation analyses between the proxies, and multivariate and univariate models of position and participation choice.

First, a replication of prior research on the relationship between hypothesized economic consequences and the position and participation choice of a corporate manager is provided on the pension accounting issue. Corporate attributes offered in prior research

efforts, are used to proxy for the economic consequences of the proposed change in pension accounting. Evidence is provided to support the theory that a manager's position and participation choices on the pension accounting issue are related to the expected economic consequences of that proposed change. These findings increase the generalizability of existing theories on corporate manager behavior in the accounting standard-setting process.

Second, the positions of corporate managers who did not file comment letters on pension accounting are obtained through the use of a questionnaire. The inclusion of this group of managers produces an expanded sample for this study which is more representative of the population of FASB corporate constituents than the samples used in prior research efforts on position choice. Prior researchers have found that most corporate managers who file comment letters take an opposing position. Those findings suggest that the position and participation choices of a corporate manager may not be independent. The sample used in this study, which includes nonfilers, provides further evidence that those choices are not independent. Additionally, specific evidence about the relationship between economic consequences and manager position choice is provided for nonfiling as well as filing corporate managers. Finally, evidence is provided about the relationship between economic consequences and the participation choice of a manager given his position choice.

Third, corporate managers' stated expectations of the costs associated with the proposed change in pension accounting are obtained through the use of a questionnaire. These cost expectations are used as alternative proxies for the economic consequences of a proposed

change in accounting. An analysis of the correlations between these proxies and corporate attribute proxies provide evidence to support the theoretical validity of certain corporate attributes as proxies for economic consequences[10]. However, the evidence provided by this study does not indicate that stated manager expectations of economic consequences provide better proxies than corporate attributes for explaining and predicting manager behavior.

Finally, additional variables not included in prior research efforts are described and tested in the model used to explain the corporate manager's participation choice on the pension accounting exposure draft. These variables, which reflect the manager's perceptions of the financial accounting standard-setting process, are found to increase the predictive ability of the participation choice model.[11]

1.3 Organization of the Dissertation

The remainder of the dissertation is organized as follows. Chapter 2 reviews the previous empirical tests of corporate manager lobby behavior in the financial accounting standard-setting process. Chapter 3 continues that line of research by hypothesizing that certain economic consequences are related to the position and

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[10]For example, there is a high correlation between manager expectations of political, labor and administrative compliance costs, and firm size, the corporate attribute proxy for these costs.

[11]These variables include the corporate manager's desire to support the FASB and the manager's perceptions of the costs of lobbying, the probability of influencing the policy outcome and the probability of affecting the FASB's continuance.

participation choices of a corporate manager on the pension accounting issue. The FASB's March 1985 Exposure Draft: Pension Accounting by Employers, its expected effect on corporate financial statements, and the economic consequences of these effects are described. Finally, models of manager position and participation choice are offered for testing.

The sample design, data collection, and statistical methodology are described in Chapter 4, including a discussion of methods used to assess the reliability and validity of variable measures. The findings on nonresponse bias, and the reliability and construct validity of the data are discussed in Chapter 5. Chapter 6 contains a discussion of the results of the empirical analyses using this data. Finally, Chapter 7 addresses the implications of the findings on prior and future research efforts and the limitations of the present study.

CHAPTER 2

SIGNIFICANT PRIOR RESEARCH

2.1 Introduction

The objective of this study is to add evidence to the existing body of knowledge about the behavior of corporate managers in the accounting standard-setting process. The particular context of this study is the pension accounting issue. Although the pension issue itself has not been specifically addressed in previous studies of manager behavior, a number of researchers have tested models of manager position and participation choice on other accounting issues. These models have been based on economic theories which assume that corporate managers are self-interested utility maximizers.[1]

A manager's position and participation choice on an accounting proposal are said to be driven by the proposal's effect on the manager's expected utility. The corporate manager is hypothesized to support an accounting proposal if the expected utility derived from its adoption is greater than the expected utility from any possible alternative.[2] Furthermore, the manager is hypothesized to lobby on the proposal, regardless of his or her position, only if the proposal's expected effect on his or her utility is large.

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[1]Utility may be derived from wealth and effort. Downs assumes that an individual prefers more wealth and less effort.

[2]Alternatively, if all the possible alternatives have an expected negative effect on a manager's utility, that manager may support a proposal if it has a lower negative effect than any other possible alternative.

According to agency and property rights theory, the manager's utility is affected by a change in the value of the firm due to the existence of monitoring contracts between the managers and the owners and lenders of a corporation.[3] According to this theory, shareholders and lenders of the corporation use accounting data to monitor the manager for value-reducing actions. Therefore, a manager's wealth and other utility variables are affected by a change in accounting standards when that change results in a change in the reported financial statements.[4]

Finally, the prior research on corporate manager lobby behavior has implicitly assumed an efficient capital market which supports a "no effects" hypothesis on the relationship between accounting changes and stock prices. Therefore, the only effects of an accounting change on firm value are assumed to be derived from contracting costs associated with debt covenants, management and other employee compensation contracts, and monitoring costs associated with consumer groups, competitors and government regulatory agencies. The magnitude of the effect of an accounting change on contracting and monitoring costs is expected to be determined in part by certain attributes of the corporation (i.e., firm size, leverage position...). The models of corporate manager lobby behavior used in prior studies are based on the theoretical link between corporate attributes and manager utility,

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[3]See Jensen and Meckling (1976) for discussion of property rights theory and Ross (1973) for discussion of agency theory.

[4]Fama (1980) suggests that the labor market will eventually become aware of managers who do not act to maximize firm value and the future compensation for such managers will be reduced.

described above and summarized in Figure 2A. A manager's position and participation choices are represented in the functional form,

$$D_i = fn(c_1, c_2, \ldots, c_k), \qquad (2.1.1)$$

where, D_i denotes an individual manager's binary position or participation choice on an accounting proposal and c_k denotes the corporate attribute used to proxy for the hypothesized contracting or monitoring costs.

A review of the prior studies of corporate manager behavior in the accounting standard-setting process is provided in the present chapter. The models of position and participation choice, which have not been formally developed in prior published studies, are more fully developed in Chapter 3 using a decision theory framework.[5]

2.2 SFAS 33: General Price Level Accounting (GPLA)

2.2.1 Position Choice

Watts and Zimmerman (1978) published the first empirical study using microeconomic theory to model the position choice of corporate managers in the accounting standard-setting process. They hypothesized that the position of a corporate manager (D_i) on a proposed accounting standard is related to the size of the firm (c_1) and the effect of the standard on the firm's reported earnings (c_2) such that,

$$D_i = fn(c_1, c_2). \qquad (2.2.1)$$

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[5]Lasater (1982) provides a formal development of a logit model of corporate manager position and participation choice.

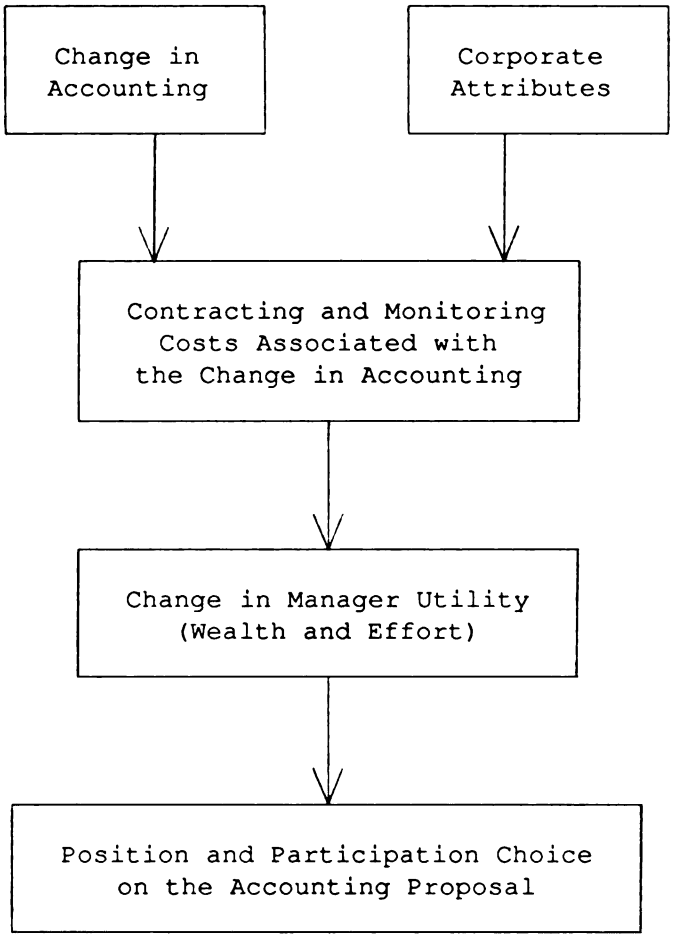

FIGURE 2A

THE RELATIONSHIP BETWEEN CORPORATE ATTRIBUTES AND CORPORATE MANAGER UTILITY

As firm size increases, the firm's political visibility increases and the potential effect of a mandated change in accounting standards on taxes and regulation (political sector costs) increases in relation to the effect on management compensation (private sector costs).[6] Therefore, Watts and Zimmerman argued that the manager of a large firm is more likely to support standards that decrease reported earnings, resulting in decreased political sector costs, and the manager of a small firm is more likely to support standards that increase reported earnings, resulting in lower private sector costs.

The February 15, 1974, Discussion Memorandum on General Price Level Changes (GPLA) was used as the basis for the Watts and Zimmerman study.[7] Fifty-three corporate firms, which were represented by comment letters filed with the FASB, were included in their sample. The positions of the firm managers were determined from position papers filed with the FASB. Thirty-four papers were classified as "in opposition to" the proposal, eighteen as "in support of". One of the 34 papers could not be classified. The effects of GPLA on each firm's reported earnings were not measured for the discriminant analysis. Instead, the sizes of the depreciable and net monetary asset balances were used as proxies for the direction of the expected effect on the firms' reported earnings. Separate analyses were run for regulated and unregulated firms.

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[6]Watts and Zimmerman (1978) do not address the effects of debt covenant or employee compensation costs.

[7]Their use of the GPLA Discussion Memorandum, which presents a neutral statement of the issue, as opposed to the Exposure Draft, should reduce the potential effects of strategic voting or game playing. See Brown (1981).

The Watts and Zimmerman model correctly classified 32 of the 34 positions taken by unregulated firms in comment letters filed with the FASB. Furthermore, the findings of the study, as shown in Table 2A, supported the hypothesis that the manager of a large firm would support the change and the manager of a small firm would oppose the change when GPLA income was expected to be lower than historical cost income. However, the findings did not support the hypothesis when GPLA income was expected to be higher than historical cost income. In this case, the managers of both large and small firms tended to oppose the change.[8]

The Watts and Zimmerman study had several statistical and theoretical limitations:

(1) Inferences from the statistical results were limited by the small sample which "precluded using a hold-out sample and, furthermore, did not allow for more sophisticated econometric techniques to control for the multicollinearity" of the underlying factors.

(2) The use of dummy variables as measures of the existence of management compensation plans, the effect on reported income, and the manager lobby position omitted potentially useful information, thereby reducing the power of the study.

(3) The use of the GPLA issue as a means of testing may have weakened the results of the study since GPLA does not affect the primary financial statements.

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[8]Watts and Zimmerman (1978) argued that the manager of a small firm who supported the GPLA Discussion Memorandum would not lobby because the marginal costs of lobbying are high for small firms. Therefore, they argued that all companies reporting higher GPLA income would tend to be opposers regardless of firm size.

TABLE 2A

FINDINGS OF THE WATTS AND ZIMMERMAN STUDY
ON GPLA (UNREGULATED FIRMS)

GPLA Income Lower than Historical Cost Income

	Support	Oppose
Large firms	7	2
Small firms	1	16

Fisher Exact Probability[a]
.0004

GPLA Income Higher than Historical Cost Income

	Support	Oppose
Large firms	0	3
Small firms	1	4

Fisher Exact Probability[a]
.6250

[a]The Fisher exact probability indicates the probability that two groups are from the same sample. See Siegel (1956, p. 96).

(4) Theoretically, using the size of the firm as a proxy for political visibility may not be valid.

McKee (1982) addressed two limitations of the Watts and Zimmerman study. First, he used a jackknife hold-out procedure to test the predictability of the model.[9] Second, he included an estimate of the magnitude of the GPLA's expected effect on restated earnings.[10] Third, he included a variable for the volatility of the GPLA's expected effect on mean earnings. Watts and Zimmerman's study of position choice on the GPLA issue was replicated, and the fit of the original Watts and Zimmerman model (OM) was compared with McKee's extended model (GM). The magnitude and volatility of the financial statement effect for the GPLA proposal was determined using the Parker procedure.[11]

The discriminant functions were formulated based on two sets of data relating to the GPLA issue - the Discussion Memorandum (N = 30) and the Exposure Draft (N = 80). Using a jackknife holdout procedure to test the predictability of the two models, McKee found that the GM and OM misclassified approximately 20% and 27% respectively, of the companies lobbying on the GPLA Discussion Memoranda. On the GPLA

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[9]Lachenbruck and Mickey (1968) recommend the following jackknife approach for small sample studies. One observation is held out in the estimate of the discriminant function which is then applied to predict the classification of the hold out. This process is repeated for each observation.

[10]Watts and Zimmerman (1978) included only the direction of income restatement effect in the form of a dummy variable.

[11]The Parker procedure was developed to estimate the effect of the GPLA Exposure Draft on restated earnings. Watts and Zimmerman used the Davidson and Weil estimation procedure, which did not comply strictly with the Exposure Draft. In four of the 30 cases included in McKee's study, the direction of change in restated earnings differed between the two procedures.

Exposure Draft, however, the GM misclassified approximately 59% of the lobbying companies versus a 39% misclassification rate for the OM.

McKee's findings contradict Watts and Zimmerman's findings. They indicate that neither the OM nor the GM provides a good description of corporate manager position choice on the GPLA. Furthermore, the findings indicate that the manager position choice models may not be consistent between the Discussion Memorandum and the Exposure Draft on the same issue.

McKee, Bell and Boatsman (1984) provided further improvements on the Watts and Zimmerman methodology arguing that the significance and stability of the model may be affected by problems with variable measurement and the use of discriminant analysis which assumes the explanatory variables are multivariate normal distributed.[12] McKee et al used a nonlinear logistic regression technique to analyze the data.[13] They also used a different measure for the reported income effect of GPLA. Instead of a dummy variable for the direction of change in reported income, McKee et al used the estimated percentage change in 1961 to 1978 linear earnings trend. This was an improvement to the Watts and Zimmerman study because it incorporated the magnitude of change in reported income and a longer term effect for the variable measurement. Although the performance of the model was improved by these revisions, it remained unstable across the Discussion Memorandum and Exposure Draft samples.

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[12]Like McKee (1982), McKee et al (1984) replicated the Watts and Zimmerman model on the GPLA Discussion Memorandum and Exposure Draft using a jacknife holdout procedure.

[13]Press and Wilson (1978) found that the logistic regression outperformed discriminant analysis in studies with nonnormal dependent variable data.

The McKee, Bell and Boatsman study provided some evidence that a logistic regression technique may provide a better statistical model for predicting position choice than the discriminant analysis. However, even when the stronger statistical tool was utilized, the findings indicated that the Watts and Zimmerman model did not provide a good predictor of the position choice taken by a corporate manager on the GPLA issue. This may be due to the use of the GPLA issue which does not affect the primary financial statements, the use of firm size as a proxy for political visibility, or a misspecification of Watts and Zimmerman's self-interest model.[14]

To summarize, when corrected for weaknesses in the statistical analyses, the findings from the studies on the GPLA issue do not support the Watts and Zimmerman model. This lack of support may reflect limitations of the studies. For example, the economic consequences hypothesized by Watts and Zimmerman may not be associated with the GPLA issue, which did not effect the primary financial statements. Further, there may be weaknesses in the proxies used for the economic consequences associated with the proposed change. Finally, the small sample size may have reduced the power of the studies.

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[14]For example, a self-interest model may be descriptive of corporate firm manager behavior in the financial accounting standard setting process, but the Watts and Zimmerman model may not include the factors which drive that behavior.

2.2.2 Participation Choice

Zmijewski and Hagerman (1981) examined the effect of a firm's political visibility (c_1) and income strategy (c_2) on the corporate manager's decision to participate (D_i) in the financial accounting standard-setting process.[15] This may be represented notationally as,

$$D_i = fn(c_1, c_2). \qquad (2.2.2)$$

They used four proxies, including firm size, systematic risk, industry concentration and capital intensity, to measure a firm's political visibility. Income strategy was determined based on the methods used by the company to account for depreciation, inventory, pension costs and investment tax credit. Extreme income strategies were defined for those companies using all income increasing or decreasing accounting methods and mixed income strategies were defined for those companies using some income increasing and some income decreasing accounting methods.[16]

Zmijewski and Hagerman tested the hypothesis that the manager of a highly visible firm or a firm which was following an extreme income strategy would be more likely to file a comment letter than the manager of a less visible firm who was following a mixed income

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[15]Zmijewski and Hagerman(1981) argued that a firm manager follows an income strategy approach in selecting accounting techniques. A firm that utilizes all income increasing or decreasing accounting techniques is said to follow an "extreme income strategy". A firm that utilizes a combination of income increasing and decreasing accounting techniques is said to follow a "mixed income strategy".

[16]Levels of extremity were measured by weighting each accounting method. Three different scores were obtained using the different weightings and separate analyses on participation choice were run using each score. The findings from these separate analyses were consistent.

strategy. They tested this hypothesis by comparing the Watts and Zimmerman (1978) sample of lobbying, non-regulated firms with a random sample of non-regulated industrial firms listed on the CRSP tape.

A comparison of the four political visibility factors and income strategies for the two populations yielded the following results:

1) A binomial test was performed using the Clopper-Pearson methodology. This test provided evidence to support the hypothesis that a firm manager following an extreme income strategy was likely to file a comment letter on the GPLA issue. Alternatively, a firm manager following a mixed income strategy was not likely to file.

2) A Mann-Whitney U test provided evidence to support the hypothesis that a corporation represented by a comment letter on the GPLA issue tended to be larger than a corporation not represented by a comment letter.

3) Finally, the Mann-Whitney U test did not provide evidence to support the hypothesis that there was a relationship between firm risk, industry concentration or capital intensity, and a manager's decision to file a comment letter on the GPLA issue.

To summarize, the findings from the study by Zmijewski and Hagerman support the hypothesis that there is a relationship between a manager's participation choice and economic consequences of a proposed accounting change. Further, the findings suggest that corporate attributes may proxy for these consequences.

2.3 SFAS 34: Interest Capitalization

Lasater (1982) used a logit probabilistic discrete choice model to examine the relationship between the position and participation choices (D_i) made by a corporate manager and five wealth factors on the interest capitalization issue (SFAS 34). Financial statement proxies were used for debt covenant costs (c_1), income tax effects (c_2), administrative compliance (c_3) and political costs (c_4), and management compensation effects (c_5) such that,

$$D_i = fn(c_1, c_2, c_3, c_4, c_5) \qquad (2.3.1)$$

A multinomial logit probabilistic choice model was used for a three-alternative case (favored, did not lobby, opposed). Binary logit models were used to separately predict position and participation choices.

The models were found to be good predictors of the binary participation and position choices, correctly predicting the choices of a manager in more than 74 percent of the cases. However, Lasater argued that the three-alternative model is probably an incorrect characterization of the decision process since the participation and position choices are likely to be dependent, sequential events.[17]

The debt/equity ratio, a proxy for debt covenant costs, was the only individually significant factor (.005) in the position choice model. Earnings before taxes (EBT), a proxy for political costs, was the only individually significant factor (.005) in the participation

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[17]For example, a Downsian voter would choose a position and then decide whether or not to participate.

choice model. Based on these findings, Lasater concluded that the determinants of manager participation and position choices differ.[18]

Lasater's study, which included corporate attributes to proxy for the economic consequences of the interest capitalization issue, provided support for Watts and Zimmerman's model. These findings suggest that the insignificant relationships between manager position choice and corporate attributes on the GPLA issue may be issue specific. Stated otherwise, Watts and Zimmerman's model may not be generalizable to all accounting proposals. However, the model may be used to explain and predict manager position choices on accounting proposals which affect the primary financial statements. Finally, the findings suggest that corporate attributes may be used to proxy for expected economic consequences.

2.4 SFAS 8: Foreign Currency Translation

Kelly (1982) and Griffin (1982) examined the participation choice of corporate managers on SFAS 8, "Accounting for the Translation of Foreign Currency Financial Statements".[19] Kelly used t-tests and a probit analysis to test the relationship between a manager's decision

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[18]Lasater noted that the ex post explanation of the finding for EBT was not consistent with the effect he originally hypothesized for that variable. The relationship between EBT and a manager's participation choice was derived from the hypothesized relationship between EBT and position choice. Therefore, because EBT was not significant in the position choice model, it was not hypothesized to be significant in the participation choice model.

[19]Kelly read the comment letters submitted to the FASB and concluded that none of the filers supported the proposed standard. Therefore, she argued that she was actually testing position and participation choice.

to lobby (D_i) against the foreign currency translation proposal, and five corporate attributes including foreign assets (c_1), leverage (c_2), asset size (c_3), percentage of management stock ownership (c_4), and incentive compensation remuneration (c_5). These relationships may be represented in the following functional form,

$$D_i = fn(c_1, c_2, c_3, c_4, c_5). \quad (2.4.1)$$

In addition, Kelly examined the correlation between a manager's participation choice, the five corporate attributes, and subsequent changes in financing or operating activities (F_i) when SFAS 8 was adopted. Kelly hypothesized that a manager who had filed a comment letter on SFAS 8 was likely to make subsequent changes in financing or operating activities in order to avoid the impact of that statement on reported financial statements. Further, she hypothesized that there would be a similar relationship between the five corporate attributes and these subsequent changes. This relationship may be represented in the following functional form.

$$F_i = fn(D_i, c_1, c_2, c_3, c_4, c_5). \quad (2.4.2)$$

Kelly's sample included 52 companies responding to a Peat, Marwick, Mitchell and Company (1977) survey regarding the changes made by managers in financing or operating activities subsequent to the adoption of SFAS 8.[20] The results suggested that the hypothesized corporate attributes, except foreign assets (the proxy for the effect of SFAS 8 on financial statements), were associated with the manager's decision to lobby on the foreign currency translation Exposure Draft. However, the manager's decision to lobby was not indicative of

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[20]The nonresponse bias and measurement reliability limitations inherent in survey research were present in Kelly's study but were not addressed.

subsequent changes in financing or operating activities by the company. Furthermore, the corporate attributes were not associated with subsequent financing or operating changes.

Based on these findings, Kelly concluded that reliance should not be placed on comment letters to assess the potential economic impact of an accounting change. However, this conclusion is not supported by the findings. Kelly did not examine the positions taken by managers on individual aspects of the proposed accounting change. She addressed only the participation choice of corporate managers. Therefore, it can only be concluded, from this study, that a manager's decision to lobby on an FASB pronouncement may not be indicative of the proposal's impact on the financing or operating activities of the company he represents.

Griffin (1982) used t-tests and logit analyses to assess the relationship between corporate attributes and a manager's decision to lobby on the foreign currency translation issue. The corporate attributes he used included the firm's foreign exchange ratio (c_1), leverage position (c_2), size (c_3), profitability (c_4), and risk (c_5).[21] He hypothesized that,

$$D_i = fn(c_1, c_2, c_3, c_4, c_5). \qquad (2.4.3)$$

Griffin's sample included 119 of the 147 firms represented by comment letters on SFAS 8 and 479 firms which had been included in a study by Dukes (1978) on the security price effects of that Statement.

Like Kelly, Griffin found that leverage position and firm size (as measured by market share value), were significantly related to the

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[21]The ratio of reported foreign exchange gain or loss to pretax net income was used to proxy for the effect of SFAS 8 on reported net income.

manager's decision to file a comment letter on SFAS 8. Further, like Kelly, a significant relationship was not found between the foreign exchange ratio (a proxy for the effect of SFAS 8 on financial statements) and participation choice.[22] Finally, Griffin found that SFAS 8 did not have a major impact (as measured by the foreign exchange ratio) on corporate annual or interim financial statements.

Although Kelly and Griffin used different samples and different proxies for firm size and the proposal's financial statement effects, their results were consistent. Their findings suggest that a manager's decision to file a comment letter on a specific accounting proposal is associated with corporate attribute proxies for leverage position and firm size. However, an association was not found between the manager's decision to lobby and corporate attribute proxies for a proposal's expected effect on reported financial statements.

Kelly (1985) extended her study on SFAS 8 by using an expanded sample which included all firms that were forced to comply with the new standard. The proportion of foreign operations was used instead of foreign assets to proxy for the effect of SFAS 8 on reported financial statements. Finally, a matched pairs design was used to control for firm size.

Kelly hypothesized that a manager's decision to lobby on the foreign currency translation accounting issue would be related to the firm's proportion of foreign operations (c_1), leverage (c_2), asset size (c_3), and management's ownership percentage (c_4). She omitted

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[22]Firm profitability and risk were also insignificant in the model of participation choice.

the incentive compensation remuneration variable included in her earlier study.

The group of comment letter filers was divided into two groups: (1) those concerned about the practical and implementation difficulties of the standard and (2) those concerned about income statement effects. Therefore, the hypothesis could be tested based on two binomial choice functions represented as,

$$D_i = fn(c_1, c_2, c_3, c_4) \qquad (2.4.4)$$

In this function, D_i denoted three sets of binary choices - lobby due to implementation difficulties/do not lobby, lobby due to income statement effects/do not lobby, or lobby due to implementation difficulties/lobby due to income statement effects.

The results from Kelly's univariate analyses indicated that managers who lobbied due to implementation issues represented large firms with a high percentage of foreign operations. Managers who lobbied due to income statement effects had a high management ownership percentage and represented large, highly leveraged firms.[23] Finally, managers who lobbied due to implementation issues represented firms with a higher percentage of foreign operations than managers who lobbied due to income statement effects. The results from these analyses were not as significant after controlling for firm size.

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[23]Kelly had hypothesized the opposite relationship between the percentage of manager ownership and the manager's decision to file a comment letter. However, she noted that this finding supports Fama's (1980) argument that managers owning less of the firm are concerned with the influence of accounting reporting on their human capital values.

Only the management ownership variable remained significant in the income statement effects/lobby choice analysis.[24]

The findings from Kelly and Griffin's studies on SFAS 8 may be added to the findings from the study by Zmijewski and Hagerman on the GPLA issue. These findings increase the generalizability for the theory that there is a relationship between economic consequences and manager participation choice. However, the findings suggest that the immediate effect of a proposed accounting change on financial statements may not be a factor in the participation choice model.

2.5 SFAS 52 Foreign Currency Translation

Griffin (1983) extended his study on the foreign currency translation issue by examining a model of corporate manager participation choice on SFAS 52, Foreign Currency Translation. He tested a participation choice model which included the five corporate attribute variables used in his study of SFAS 8. These variables included the firm's foreign exchange ratio (c_1), leverage (c_2), size (c_3), risk (c_4), and profitability (c_5). In addition, a variable for the impact of the accounting change on reported income (c_6) was included in the analyses where,

$$D_i = fn(c_1, c_2, c_3, c_4, c_5). \qquad (2.5.1)$$

Univariate discriminant analyses were used to test the relationships between participation choice and each separate

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[24]The results of the logit analyses were not interpretable due to the multicollinearity between the explanatory variables.

independent variable. A multivariate discriminant analysis was used to test the predictive power of the model.

Griffin's sample included 156 of the 174 firms represented by comment letters on SFAS 52 and 296 firms which had been included in a study by Dukes (1978) on the security price effects of SFAS 8. The results from Griffin's study suggest that managers who lobbied on SFAS 52 represented large firms which were not highly profitable. Further, managers who lobbied on SFAS 8 were more likely to lobby on SFAS 52. Statistically significant relationships were not found between participation choice and firm leverage or the impact of foreign exchange gains and losses on reported income. Finally, the models of participation choice provided an average improvement of 8.71 percent over a naive method of prediction.[25]

The findings from this study differ from Griffin's previous study on SFAS 8. The manager who lobbied on SFAS 8 tended to represent a firm which was more highly leveraged than the manager who did not lobby. However, on SFAS 52, Griffin did not find a significant relationship between leverage position and a manager's participation choice. In fact, the leverage position of a company represented by a comment letter on SFAS 52 tended to be lower (insignificantly) than that of a company that was not represented by a comment letter. Further, firm profitability, which was significant in the manager's decision to lobby on SFAS 52, was not significant in his decision to lobby on SFAS 8. These differences suggest that a manager's

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[25]Griffin did not report the statistical significance of the overall model.

perceptions of the costs associated with the two accounting issues were not the same.[26]

The findings from Griffin's study on SFAS 52 provide additional support for the theory that there is a relationship between manager participation choice and economic consequences associated with a proposed accounting change. However, they suggest that the relationships may not be consistent between accounting issues or over time (if SFAS 8 and 52 are considered to be the same issue).

2.6 Summary

Prior research on corporate manager behavior in the financial accounting standard-setting process has addressed the position and/or participation choices of managers on the GPLA, interest capitalization and foreign currency translation issues. Proxies for political, debt, management compensation and administrative compliance costs have been tested. Improvements in research methodology and variable measurements have been made but the findings of these studies have not been consistent.

The research on position choice has been limited to the GPLA and the interest capitalization issues. The results on the GPLA issue, in terms of predictability were not significant after adjustments were made for weaknesses in the research methodology. However, weak support was provided for the firm size hypothesis using a Mann-Whitney U test.

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[26]This finding is similar to the results reported by McKee (1982) and McKee et al (1984) on the GPLA issue. They found that manager position choices on the GPLA were not the same on the Discussion Memorandum and Exposure Draft.

On the interest capitalization issue, a model which included a debt cost proxy (the only significant factor in the model) was found to be a good predictor of a manager's position choice.

The research on participation choice has addressed the GPLA, interest capitalization and foreign currency translation issues. Zmijewski and Hagerman, Lasater, Kelly and Griffin found that firm size was a significant factor in the model of participation choice on each of these issues. Income strategy was also found to be a significant factor in the manager's participation choice on the GPLA issue.[27] Firm leverage, profitability and percentage of manager ownership were significant factors in the participation choices on the foreign currency translation issues.[28]

Only Kelly (1985) could find a significant relationship between an accounting proposal's effect on corporate financial statements, and a manager's behavior in the accounting standard-setting process. She found that a proxy for the effect of SFAS 8 on corporate financial statements was significantly related to the manager's primary concern about that standard, as stated in a comment letter.

The findings of these studies can be interpreted to provide support for the theory that there is a relationship between the economic consequences (contracting and monitoring costs) of an accounting proposal and the position and participation choices of a

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[27]Income strategy was not included in the participation choice models on the interest capitalization or foreign currency translation issues.

[28]A significant relationship was not found between participation choice and leverage position on the interest capitalization issue. Firm profitability and percentage of manager ownership were not included in the participation choice models on the GPLA or interest capitalization issues.

corporate manager. The present study continues that line of research in the context of the March 1985 Exposure Draft, Employers' Accounting for Pensions. The position and participation choice models and the specific hypotheses tested in this study are developed in Chapter 3.

CHAPTER 3

THE RESEARCH CONTEXT AND QUESTIONS

3.1 Introduction

A review of prior studies on the position and participation choices of corporate managers in the financial accounting standard-setting process, including a brief overview of the theory underlying those studies, was provided in Chapter 2. The present chapter includes a more complete discussion of the theoretical underpinnings of that line of research and provides a formal development of the models of manager position and participation choices using a decision theory framework. An extension of the participation choice model used in prior studies is offered based on the Downsian theory of political choice. A brief history of pension accounting standards is provided, and the contracting and monitoring costs specifically associated with the FASB Exposure Draft on Employers' Accounting for Pensions are discussed. Finally, hypotheses are set forth for the relationship between contracting and monitoring costs, and corporate manager position and participation choice.

3.2 The Model of Position Choice

It has been asserted that the utility of a corporate manager is affected by the cash flows of the company he or she represents.[1]

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[1]For example, see Jensen and Meckling (1976) and Fama (1980).

Further, a reduction in manager utility is generally associated with an increase in corporate cash outflows.[2] Given this assertion, a manager attempting to maximize utility is expected to apply accounting methods which minimize the cash outflows associated with explicit and implicit contracts (contracting and monitoring costs).[3]

Therefore, when a mandated change in accounting standards restricts or changes the set of generally accepted accounting methods, a manager will support the proposed change if the accounting method he is currently applying is among the set of acceptable alternatives. Alternatively, a manager who would be required to change to a less favorable accounting method (in terms of corporate cash flow) will oppose the change, unless he believes the current proposal represents the best attainable alternative. In this case, the manager believes the FASB is commited to a restrictive accounting change and his preferred method is not among the FASB's set of acceptable methods.

Given these assertions, a manager's position choice on a proposed accounting standard is a function of the set of acceptable accounting methods. His preferred method (a^*) is the one which will maximize his

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[2]An exception may be an increase in management compensation costs which represents a direct cash transfer to the manager.

[3]Explicit contracts exist in the form of written debt covenants, management compensation contracts and union agreements. Implicit contracts exist in the form of unwritten agreements. For example, shareholders of a corporation expect managers to maximize firm value. Alternatively, governmental regulatory agencies, corporate competitors, and consumers are alert to companies (and managers) who attempt to monopolize an industry or earn excess profits. Published financial statements may be used by creditors, employers, shareholders and others to monitor manager activities for compliance with explicit and implicit agreements.

utility. Notationally, this may be represented as,

$$E(U|a^*) = \max_{a \in A} E(U|a), \tag{3.2.1}$$

where A denotes the set of acceptable accounting methods and $E(U|a)$ is the expected utility from selecting method $\alpha \in A$.[4] The manager's position on a proposed accounting standard (a') may be given by,

$$D_i = \begin{cases} 1 \text{ (support), if } E(U|a') = \max E(U|a) \\ 0 \text{ (oppose), otherwise.} \end{cases} \tag{3.2.2}$$

The manager's expected utility from selecting an accounting method ($E(U|a)$) is derived from that method's effect on the cash outflows of the corporation he represents. Notationally,

$$E(U|a) = E[\Sigma_{c \in C} U(c,a)], \tag{3.2.3}$$

where $U(c,a)$ represents the utility assessment of the corporate cash outflows (costs) that will result if standard $\alpha \in A$ is adopted.

The magnitude of these costs, which result from a change in the reported financial statements, may be affected by certain attributes of the firm. For example, the financial statements of a large corporation may be monitored more closely by governmental regulatory agencies, competitors and consumers than the financial statements of a small corporation. Therefore, the manager of the large corporation may face higher costs in avoiding government interference due to mandated changes in financial statement accounting. In this case, the manager's utility assessment will be a function of certain corporate attributes $f \in F$. Notationally, then

$$E(U|a) = E[\Sigma_{c \in C} U(c,a,f)]. \tag{3.2.4}$$

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[4]Notation taken from Demski (1980, p. 25).

Here, U(c,a,f) represents the utility assessment of the corporate cash outflows (c) that a corporation which has certain attributes (f) will incur if standard (a) is selected. A manager's position on a proposed accounting standard may be given by,

$$D_i = \begin{cases} 1 \text{ (support), if } E(U|a') = \max_{c \in C} E[\Sigma U(c,a,f) \\ 0 \text{ (oppose), otherwise.} \end{cases} \quad (3.2.5)$$

3.3 The Model of Participation Choice

A manager who has taken a position on a proposed accounting standard may or may not file a comment letter with the FASB. The comment letters filed by corporate managers and others serve as lobbying mechanisms in a political rulemaking process. Downs' model of political behavior may be used to describe the manager's decision to file a comment letter (the participation choice).

Downs (1957) developed a positive economic model to explain political decision making behavior. The model is based on the premise that every individual is a self-interested, utility maximizer.[5] Based on Downs' model, a manager, having taken a position on an accounting policy, will base his participation choice on three factors in a single period setting.

First, a manager may consider the expected marginal effect of the proposed accounting change on his expected utility $E[\Sigma U(c,a',f)]$. In this case, the contracting and monitoring costs (c), and the corporate

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[5]Utility may be derived from wealth and effort. Downs assumed that an individual prefers more wealth and less effort.

attributes (f), which affected the manager's position choice on the accounting proposal (a') may also affect his participation choice.[6]

Second, the expected benefits to be obtained by lobbying for or against a proposed accounting standard may be affected by the manager's perception of his ability to influence the policy outcome (pr_1). If a manager is not sure that the policy outcome can be influenced by lobbying, he may weight the expected effect on his utility by pr_1.

Finally, a manager may consider the costs of lobbying ($E(U|1)$) in making his participation choice. These costs may include the time and effort required to research the accounting proposal and to determine its effect on corporate financial statements, as well as the actual costs of lobbying.[7]

In a single period setting, the expected utility associated with the lobbying on an accounting policy ($E(U|s)$) may be represented notationally as follows.

$$E(U|s) = pr_1(a')E(U|a') - E(U|1). \qquad (3.3.1)$$

The manager will lobby on the proposal if and only if $E(U|s)$ is greater than zero. Therefore, the manager's participation choice (V_i) may be represented as,

$$V_i = \begin{cases} 1 \text{ (lobby), if } E(U|s) > 0 \\ 0 \text{ (abstain), otherwise.} \end{cases} \qquad (3.3.2)$$

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[6]The participation choice model is an additive function of the position choice model. Therefore, contracting and monitoring costs included in the participation choice model are hypothesized to be significant only if they are significant in the position choice model.

[7]Downs identifies these research and evaluation costs as the costs of becoming well-enough informed to participate in the policymaking process.

In extending the model to a multi-period setting, Downs argued that an individual may lobby even if the short-term benefits from lobbying do not exceed the costs. This action is attributed to "long-run participation value" (LRPV). A manager may prefer the existing financial accounting standard-setting process (indexed as j) to an unknown alternative if the costs, in terms of his individual wealth and effort, are expected to be greater under a possible alternative system.[8] Further, the effect of LRPV (j) on the utility of a corporate manager ($E(U|j)$ may be weighted by the perceived probability of affecting the continuance of the FASB by lobbying (pr_2). In this case, the utility associated with lobbying may be represented as,

$$E(U|s) = pr_1E(U|a') + pr_2E(U|j) - E(U|1). \qquad (3.3.3)$$

Finally, the manager's participation choice may be given by,

$$V_i = \begin{cases} 1 \text{ (lobby), if } pr_1E(U|a') + pr_2E(U|j) - E(U|1) > 0 \\ 0 \text{ (abstain), otherwise.} \end{cases} \qquad (3.3.4)$$

3.4 Employers' Accounting for Pensions

The models developed in Sections 3.2 and 3.3 may be used to describe the position and participation choices of corporate managers on the FASB's proposed change in pension accounting. Changes in financial statements are asserted to affect corporate contracting and monitoring costs. Therefore, the expected effect of the pension accounting proposal on corporate financial statements is discussed in this section beginning with a brief history of pension accounting

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[8]For example, constituents may fear governmental regulation if the FASB does not continue.

standards. The hypothesized relationship between changes in financial statements and contracting and monitoring costs are discussed in Section 3.5.

3.4.1 A Brief History of Pension Accounting Standards

In 1974, the FASB added two projects to its agenda: Accounting and Reporting by Employee Benefit Plans, and Employers' Accounting for Pensions. These additions were precipitated primarily by the emergence of The Employee Retirement Income Security Act of 1974 (ERISA), which established standards for participation, vesting, and funding of pension plans leading to new, more expansive reporting requirements.[9]

From 1975 to 1980, the FASB focused primarily on the Employee Benefit Plans project. FASB Statement No. 35: Accounting and Reporting by Defined Benefit Pension Plans, was adopted in March 1980. SFAS 35 addressed financial reporting by the plans rather than the sponsoring employers. Based on the outcome of the benefit plans project, the FASB issued Statement No. 36: Disclosure of Pension Information, in May 1980 as an interim measure on employers' accounting, pending completion of that project.

The FASB adopted SFAS 36 to supercede paragraph 46 of APB Opinion 8. The new statement required that an employer disclose the actuarial present value of vested and nonvested accumulated plan benefits, and the plans' net assets available for benefits, in accordance with SFAS

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[9]See FASB Discussion Memorandum, Employer's Accounting for Pensions and Other Postemployment Benefits (February 19, 1981, p. 118).

35.[10] Additionally, disclosures were required for the assumed rates of return used in determining the present value of accumulated plan benefits, and the date as of which the benefit information was determined.

Since the adoption of SFAS 36, the FASB has issued two Discussion Memoranda (February 1981 and April 1983), a Statement of Preliminary Views (November 1982) and an Exposure Draft on Employers' Accounting for Pensions (March 1985). The position and participation choices of corporate managers on the March 1985 Exposure Draft, Employers' Accounting for Pensions is the focal point of this study.[11]

3.4.2 Income Statement Effects of the ED

APB Opinion 8 allowed a wide range of computational methods to be used in determining pension expense. The March 1985 Exposure Draft (ED) substantially reduced this range of acceptable alternatives in an effort to improve comparability across corporate financial statements. The effect of these required changes was expected to reduce reported pension expense for most companies as shown in Table 3A. This table identifies and summarizes the effect of five components of pension expense, which were individually addressed by the FASB in formulating

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[10]SFAS 35 specifies how the actuarial present value of accumulated benefits and the net assets available for benefits are to be determined, thereby providing a comparable basis for preparing the disclosures required by SFAS 36.

[11]SFAS 87 was adopted in late December 1985, superceding SFAS 36. The questionnaire, which is discussed in Chapter 4, was mailed in September 1985, before SFAS 87 was adopted.

TABLE 3A

SUMMARY OF THE ED'S EFFECT
ON REPORTED PENSION EXPENSE

Component of Pension Expense	Effect on Pension Expense	Explanation
Amortization of normal cost	Decrease[a]	Use of projected unit credit method
Amortization of prior service cost	Decrease[b]	Amortization of difference between assets available and benefits at time of ED's adoption
Interest cost	Increase	Use of higher interest rate to compute interest cost[c]
Return on plan assets	Decrease	Use of higher interest rate to compute return on plan assets[d]
Amortization of gains and losses on pension plan	Increase in Volatility	Determination of gains and losses on pension plan

[a]For most companies, since the majority of alternative actuarial methods result in earlier recognition of normal pension costs.

[b]For most companies since most are expected to report an excess of available plan assets over plan benefits at the time of adoption.

[c]Use of higher interest rate to determine the present value of plan benefits would result in a further reduction in the amortization of normal and prior service costs.

[d]Net effect of the interest cost and return on plan assets is a decrease in pension expense for most companies.

the ED.[12] Those five components are discussed in this section.

(1) The service (normal) cost component of a pension plan includes the actuarial present value of benefits earned by employees for the current year of service. The ED required that normal cost be measured using the projected unit credit method, whereas APB Opinion 8 allowed the use of "any acceptable actuarial cost method".[13] Most actuarial cost alternatives to the projected unit credit method attribute a greater portion of pension benefits to the earlier years of service, resulting in an earlier recognition of pension expense.[14] Therefore, in most cases, a change to the projected unit credit method would result in a reduction in the normal cost component of pension expense.

(2) Prior service costs, which arise from amendments to a pension plan, may be amortized using a "systematic and rational method" according to APB Opinion 8. The ED required that unrecognized prior service costs be amortized equally over the future period of service for those plan participants affected by the amendment. In current practice, the interest method, which allocates the smallest amount of

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[12]In fact, the March 1985 Exposure Draft would require separate disclosure of each component. These components may be combined under APB Opinion 8.

[13]The projected unit credit cost allocation method is based on an estimate of future retirement benefits that must be paid by the employer to each employee. The FASB's projected unit credit method requires that the estimate include each employee's expected future salary increases. See FASB Discussion Memorandum, Employers' Accounting for Pensions and Other Postemployment Benefits, dated February 19, 1981 (Chapter 4 and Appendix E) for further discussion of actuarial cost methods.

[14]Many companies currently use the entry age normal actuarial cost method, which results in early recognition of pension expense. (See Accounting for Pension Costs, 1977)

the prior service costs to the years immediately following an amendment, predominates.[15] Therefore, the proposed change would require an increase in the amortization of existing unrecognized prior service costs for most companies.

However, the more significant effect of the ED on prior service costs would result from the amortization of unrecognized net obligations or assets at the date of the ED's adoption.[16] Companies reporting an excess of available plan assets over projected pension benefits (overfunded plans) would experience a reduction in pension expense due to the required amortization of net assets while companies with underfunded plans would experience an increase in pension expense. Since most companies, in their 1985 year-end financial statements, reported overfunded plans, the overall effect of the ED on prior service costs would be to decrease reported pension expense.[17]

(3) The interest cost component represents the increase in the projected benefit obligation due to passage of time. Because the pension component of their compensation is deferred until after retirement, the employees have, in effect, provided a loan to their employer. The interest on that "loan" is treated as a separate expense to the company.

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[15]See March 1985 Exposure Draft, Employers' Accounting for Pensions (Summary of Major Changes).

[16]In a letter to clients regarding FASB Statement 87, Arthur Andersen & Co. noted that the funding status of pension plans at the time of adoption will significantly affect reported pension expense due to the required amortization of unfunded benefits or excess assets.

[17]Only 4% of the 300 randomly selected NYSE firms included in this study reported an underfunded pension plan status.

Interest cost is computed by multiplying the assumed discount (settlement) rate by the plan obligation at the beginning of the year.[18] According to the ED, the discount rate would be estimated by reference to rates implicit in current prices of annuity contracts, or rates of return on high-quality, fixed-income investments. This rate may be much different from the interest rates commonly used now. In early April 1985, for example, the long-term yield on U.S. Treasury Securities was approximately 11.75 percent, versus an average 8 to 9 percent rate used by companies for pension disclosure purposes. For most companies, the change in discount rates would result in a decrease in the normal and prior service cost components of pension expense and an increase in the interest cost component.

(4) The return on plan assets represents an offsetting revenue component in the determination of pension expense. The ED required that this component be based on assumed rates of return equal to the discount rates used to measure the interest cost component.[19] The net effect of the interest cost and return on plan assets components is to require that a company record interest on the excess of plan assets over accumulated benefits and vice versa. APB Opinion 8 requires only that a net interest component be included in the determination of pension expense to the extent that annual pension expense provisions and fundings are not equal. For companies that currently record pension expense equal to the amount funded, this change would result

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[18]The discount rate used to determine interest cost is the same rate used to determine the present value of normal and prior service costs.

[19]Under SFAS 87, the rates of return on plan assets may not equal the discount rate used to record interest cost and the present value of pension benefits.

in increased pension expense when the pension plan is underfunded and decreased pension expense when the plan is overfunded.[20] Again, since most companies report overfunded pension plans, the net effect of the interest cost and return on plan assets component should be to reduce reported pension expense.

(5) A gain or loss on the pension plan may be realized due to a change in value of either the projected benefit obligation or the plan assets. Either of these changes can result from experience different from that assumed, or from a change in an actuarial assumption. The ED required that unrecognized gain or loss be amortized over the average remaining service life of the plan participants to the extent that the gain or loss exceeds ten percent of the greater of the projected benefit obligation or the fair value of plan assets. APB Opinion 8 required only that unrecognized gains or losses be amortized using an "acceptable systematic method" over a suggested period of 10 to 20 years.

In practice, most companies use a spreading or averaging method which results in a straight-line amortization of the actuarial gain or loss.[21] The method required by the ED would approximate a straight-line amortization if the average remaining service life of plan participants remains relatively constant. The effect of the ED on pension expense would vary among the firms.

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[20]A company reporting an excess of available plan assets (at current fair market value) over accumulated plan benefits (computed using the unit credit method) is overfunded. A company reporting an excess of accumulate plan benefits over available plan assets is underfunded.

[21]See March 1985 Exposure Draft, Employers' Accounting for Pensions (Summary of Major Changes).

However, comment letter filers on the ED expressed greater concern over the determination of pension plan gains and losses than over the method of amortization. Comment letter filers argued that, by requiring the use of a current market rate to value pension plan assets and to discount pension obligations, the FASB was introducing unnecessary volatility in reported pension expense. Although a ten percent "corridor" approach was proposed to reduce this volatility, most companies may be expected to experience increased volatility in the pension plan gain/loss component of reported pension expense.

3.4.3 Balance Sheet Effects

As under APB Opinion 8, the ED required that accrued or prepaid pension cost be recognized on the balance sheet to the extent that actual funding does not equal reported pension expense. However, the ED further required that a liability be recorded when accumulated benefits (determined without the impact of future compensation levels) exceed the fair market value of plan assets as of the date of the financial statements.[22] Alternatively, an asset would not be recognized when the fair market value of plan assets exceeds the accumulated benefit obligations. Therefore, the ED would require a larger liability for corporations which have underfunded pension plans, but would have no effect on the liabilities of most corporations which have overfunded pension plans.

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[22]An offsetting intangible asset would be recorded equal to prior service costs.

3.4.4 Disclosure Requirements

The ED required an employer sponsoring a defined benefit pension plan to disclose in footnotes:

1) a description of the pension plan including type of benefit formula, funding policy, and other significant matters;

2) the components of pension expense and ratio of that expense to covered payroll;

3) a statement of changes in the fair value of plan assets showing contributions, benefits paid and actual return on assets;

4) a schedule showing plan assets, projected benefit obligations, unrecognized prior service costs, and unrecognized actuarial gains and losses; and

5) the assumed discount rate and salary assumptions, and the effect of a one-percentage-point change in each on the projected benefit obligations and reported pension expense.

These footnote disclosures required by the ED reflect a significant increase over the existing requirements of SFAS 36.[23] SFAS 36 requires disclosure only of accumulated pension benefits, the fair market value of assets, and the discount rate used to determine the present value of accumulated pension benefits.

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[23]Approximately 94% of the managers filing comments on the ED indicated that the footnote disclosures required by the ED were excessive.

3.4.5 Summary

APB Opinion 8 and SFAS No. 36 provided the guidelines on employer's accounting for pensions at the time that the March 1985 Exposure Draft (ED) was issued. The ED reduced the set of acceptable methods for measuring and reporting pension expenses and liabilities, and increased the pension disclosure requirements.

Under the ED, a company with an overfunded pension plan(s) may be expected to report an overall decrease in pension expense. Alternatively, a company with an underfunded pension plan(s) may be expected to report an overall increase in pension expense and would be required to report a pension liability to the extent that accumulated pension benefits exceed the fair market value of available plan assets. The expected changes in pension expense would reflect a decrease in the required amortization of normal and prior service costs, and in the net interest cost/return on assets components of pension expense.

Finally, all companies may be expected to experience greater volatility in reported pension expense and would be required to increase their disclosures. The volatility in pension expense would reflect the required method of amortizing gains and losses on pension plans. (See Appendix A for an illustration of the Income Statement, Balance Sheet and Disclosure Requirements under APB Opinion 8 and SFAS No. 36 and under the ED.)

3.5 Contracting and Monitoring Costs Associated with the ED

The potential effect of the ED on corporate financial statements was discussed in Section 3.4. These effects may, in turn, have economic consequences for companies that must change their accounting for pensions to comply with the new standard. Changes in reported pension expense, pension liability, and footnote disclosures may result in real cash outflows (costs) for an individual company. These costs (hereafter, contracting and monitoring costs) may be incurred as a result of explicit and implicit contractual obligations and public interference. Specifically, costs may be incurred due to the existence of debt covenant, management compensation and union agreements. In addition, political lobbying and legal costs may be incurred to avoid the interference of government regulatory agencies and corporate competitors and consumers who use published financial statements to monitor manager activities. Finally, internal recordkeeping, actuarial and auditing costs may be incurred in order to comply with the accounting change. These potential costs are described in Sections 3.5.1 through 3.5.6 for companies reporting changes in pension expense, liabilities and footnote disclosures.

3.5.1 Reporting Reduced Pension Expense

A company reporting reduced pension expense may expect to incur certain contracting and monitoring costs or benefits. The relative magnitude of these costs and benefits may depend on the labor

intensity, size, and leverage position (corporate attributes) of the company.

For example, a company that is in a labor intensive industry may experience increased labor costs as a consequence of reporting reduced pension expense. These increases in labor costs may come in two forms. First, the company may incur education and labor negotiation costs in explaining to employees that the reduction in pension expense reflects only a change in accounting, and not a real change in "pension cost". Secondly, a reduction in reported pension expense may encourage labor representatives to demand greater benefits. Ultimately, the company may have to comply with labor demands for increased pension benefits.

Second, Watts and Zimmerman (1978) argued that the manager of a large, profitable company will have incentives to avoid reporting increased net income due to concern over government interference, increased competition, and anti-trust suits. A company required to report decreased pension expense and increased net income may incur public relations and political lobbying costs to avoid government interference. Further, a company reporting increased net income may experience a real decrease in profits due to the entry of additional competitors into the industry. Finally, that company may incur legal costs to fight anti-trust suits.[24]

Third, a decrease in pension expense and the concurrent increase in net income may have a favorable impact on a company's accumulated earnings and, in turn, its debt/equity ratio.[25] Debt covenants

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[24]See Watts and Zimmerman (1978) for further discussion.

[25]Accumulated earnings will increase only if an amount equal to the increase in reported net income is not paid out to shareholders in the form of dividends.

generally include restrictions on a company's debt/equity ratio.[26] Typically, these covenants require a company to maintain a debt/equity ratio which is below some maximum value. A highly leveraged company is more likely to violate a debt/equity restriction than a company that is not. Therefore, a highly leveraged company may be more likely to benefit by reporting decreased pension expense. Such a company may be less likely than otherwise to incur debt renegotiation costs on existing debt agreements due to future, unrelated decreases in reported income. Further, a decreased debt/equity ratio associated with the decrease in reported pension expense may result in lower interest rates on future debt agreements.

Finally, if management compensation is based, in part, on reported net income, a company may experience increased management compensation costs when reported pension expense is reduced. The effect of the proposed change in pension accounting on management compensation is determined by (1) the significance of the income related bonus plan to the total management compensation package, (2) flexibility of the bonus plan formula to changes in accounting methods, and (3) upper and lower income bounds in the bonus plan formula.[27] Therefore, the effect of the ED on an individual company's management compensation costs will depend on the detail and flexibility of the bonus plan.[28]

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[26]See Fogelson (1978).

[27]See Healy (1985) for further discussion of management compensation plans.

[28]The details of most companies' management bonus plans are published in proxy materials filed with the SEC. However, the cost of obtaining this information is high. Therefore, a corporate attribute was not hypothesized to proxy for management compensation costs.

To summarize, as a consequence of the ED, a company reporting decreased pension expense may incur increased labor, political (lobby and legal), and management compensation costs. However, this same company may experience decreased debt costs. The magnitude of these changes may depend on the company's labor intensity, size and leverage position.

3.5.2 Reporting Increased Pension Expense

A company reporting increased pension expense may incur costs and benefits opposite to those incurred by a company reporting decreased pension expense. For example, a labor intensive company may incur reduced labor costs consequent to an increase in reported pension expense. In this case, the company may not have incentive to educate employees regarding the accounting change because the increase in reported pension expense could be used to negotiate a more favorable labor contract for the company at a future date.

A large, profitable company reporting increased pension expense and lower income may also benefit from reduced political costs in the long-run. By reporting reduced income, such a company may reduce the threat of anti-trust suits, government interference and increased competition.

All other things equal, an increase in reported pension expense may negatively affect both future and existing debt costs because of a reduction in accumulated earnings and total equity (and a concurrent increase in the debt/equity ratio). Future interest rates may be adversely affected due to an increase in debt/equity ratios.

Furthermore, existing debt covenants of already highly leveraged companies may be violated and lenders may take advantage of technical violations to raise interest rates on current debt agreements.[29]

Finally, a company may experience a decrease in management compensation costs due to an increase in reported pension expense. These costs may decrease if management compensation is based, in part, on reported net income.

To summarize, a company reporting increased pension expense due to the ED's adoption may experience a reduction in labor, political and management compensation costs. However, that same company may also incur additional debt costs.

3.5.3 Recording a Liability for Unfunded Pension Obligations

Under the ED, a company with an underfunded pension plan would be required to record a liability reflecting the excess of accumulated pension obligations over pension plan assets. The recording of this liability may or may not increase corporate debt costs depending on how creditors calculate debt/equity ratios.

The disclosure of accumulated pension benefits and plan assets is already required by SFAS 36. Therefore, the potential effect of the ED is only to move net unfunded pension obligations from a footnote to the balance sheet. If lenders consider footnote information when monitoring borrowers, the movement of excess pension obligations from a footnote to the balance sheet will not affect existing or future debt agreements.

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[29]See Aristar (1976).

However, Aristar (1976) provided examples of cases where companies were forced into technical default under long-term debt agreements because of mandated changes in accounting principles. In these cases, the lender used the situation to renegotiate the loan with a more favorable, higher interest rate.[30]

Given Aristar's findings, the manager of a firm which is near restrictive debt covenant margins, may be concerned with technical default on those agreements. Therefore, that manager may expect to incur increased debt costs if required to record a liability for the excess of accumulated pension benefits over pension assets.

3.5.4 Volatility in Reported Pension Expense and Liabilities

As discussed earlier, changes in reported income and liabilities may affect a company's debt/equity ratio. Therefore, a manager may be concerned with future fluctuations in reported pension expense and liabilities which are associated with the ED. Specifically, a manager may expect to incur increased debt costs due to volatility in reported net income and liabilities.

The initial effect of the ED on the level of reported pension expense may be positive for most companies in terms of debt costs.[31] However, future changes in capital market conditions may lead to

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[30]The inclusion of an offsetting intangible asset in the balance sheet may negate the technical default argument provided by Aristor. However Smith and Warner (1979) found that lenders, in computing debt/equity ratios, automatically reduce equity by the amount recorded as intangible assets.

[31]As discussed in Section 3.4.2, most companies may be expected to report reduced pension expense which is associated with reduced debt costs.

volatility in reported pension expense and liabilities, as discussed in Section 3.4.2. In this case, a manager may expect to incur an increase in debt costs due to future increases in reported pension expense and/or liabilities caused by fluctuations in discount rates or return on assets.

3.5.5 Increased Disclosure Requirements

A company that must change accounting and actuarial cost methods, or increase disclosures, may incur increased administrative compliance costs to comply with the ED. These costs may include information acquisition (actuarial and internal recordkeeping costs), and financial reporting costs (auditing and financial statement preparation costs). In the complex area of pension accounting, these costs (administrative compliance costs, hereafter) may be large. A large company which has many employees, is likely to have more than one pension plan. Under APB 8 and SFAS 36, the assets and obligations of these pension plans may be combined. By contrast, the ED would require that separate disclosures be made for each plan. Therefore, a large company which has more than one pension plan may be expected to incur higher administrative compliance costs than a smaller company due to the ED's adoption.

3.5.6 Summary

A company that would be required to change its accounting for pensions to comply with the ED may experience changes in contracting

and monitoring costs. In general, changes in reported pension expense are expected to be inversely related to political and labor costs and positively related to debt and management compensation costs. A change in reported pension liabilities or a change in the volatility of reported pension expense is expected to be positively related to debt costs. Finally, the increased disclosure requirements and the restrictive requirements of the ED are associated with increased administrative compliance costs.

The ED's impact on labor, political, debt, management compensation and administrative compliance costs may result from its effect on corporate financial statements. Furthermore, these costs may be higher for a labor intensive, large, or highly leveraged firm. The hypothesized relationships between these expected costs, corporate attributes, and manager position and participation choice on the ED are described in the following section.

3.6 The Hypotheses

3.6.1 Position Choice

A general model of manager position choice on a proposed accounting standard was offered in Section 3.2. This model was based on the assertion that a manager's utility may be affected by a mandated change in financial reporting. Specifically, a manager's utility may decrease when corporate cash ouflows increase due to mandated changes in financial reporting. The general model of manager

position choice presented in equation 3.2.4 is repeated here.

$$D_i = \begin{cases} 1 \text{ (support), if } E(U|a') = E[\underset{c \in C}{\Sigma} U(c,a,f)]. \\ 0 \text{ (oppose), otherwise.} \end{cases} \quad (3.2.4)$$

The expected corporate costs associated with the ED were described in Section 3.5. These included political (c_1), labor (c_2), debt (c_3), administrative compliance (c_4), and management compensation costs (c_5). The corporate attributes which were expected to affect the magnitude of these contracting and monitoring costs were also discussed in Section 3.5. Firm size (f_1), labor intensity (f_2), and leverage position (f_3) were expected to affect the magnitude of political and administrative compliance, labor, and debt costs, respectively.

The relationships between expected contracting and monitoring costs and a manager's position choice are hypothesized below. One overall hypothesis ($H_{1.0}$) on manager position choice, and eight subhypotheses are offered.

$H_{1.0}$: The model set forth in equation 3.2.4 may be used to describe a manager's position choice on the ED such that $D_i = fn(c_1, c_2, c_3, c_4, c_5, f_1, f_2, f_3)$.

Hypotheses 1.1 through 1.5, as illustrated in Figure 3A, address the individual relationships between expected changes in contracting and monitoring costs and a manager's position choice. A manager who expects to incur large increases in these costs as a result of the ED's adoption, is hypothesized to expect a reduction in his utility.

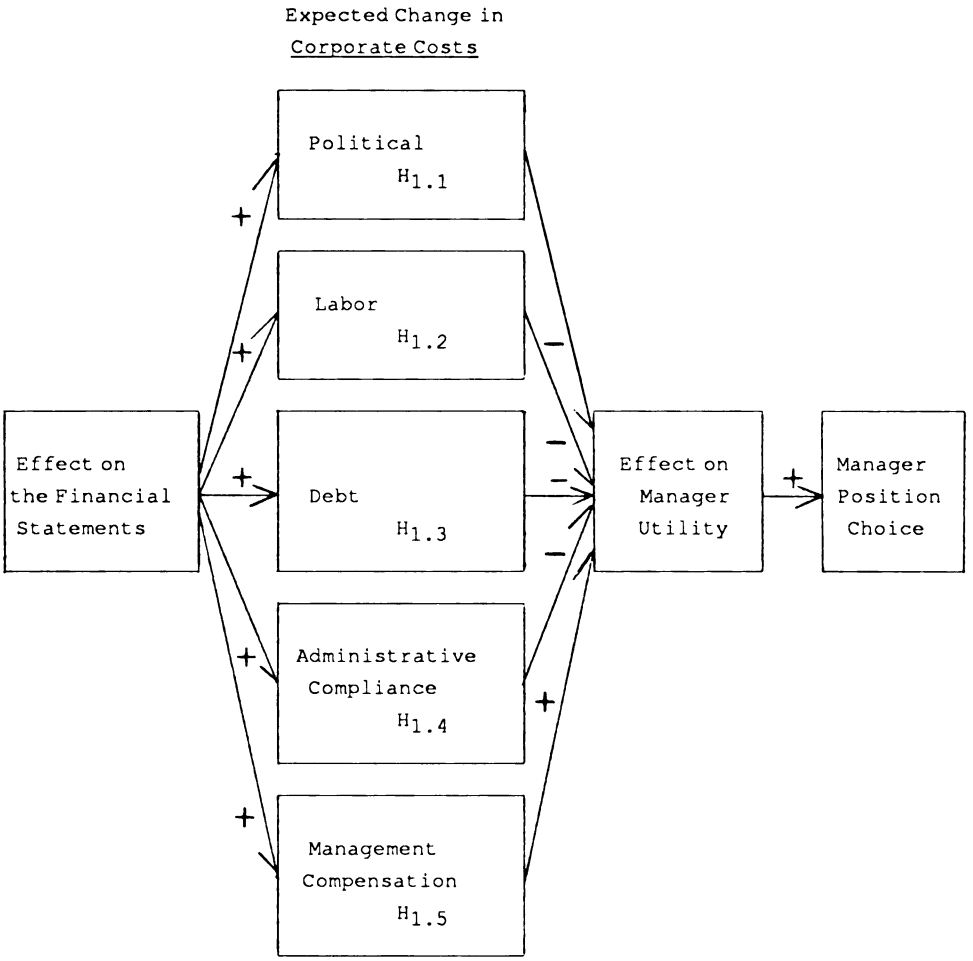

FIGURE 3A

THE RELATIONSHIP BETWEEN CHANGES IN CORPORATE COSTS
AND A MANAGER'S POSITION CHOICE

Further, a manager expecting a reduction in utility is expected to oppose the ED. Therefore it is hypothesized that:

$H_{1.1}$: A manager's position choice (D_i) is inversely related to the expected change in political costs (c_1).

$H_{1.2}$: A manager's position choice (D_i) is inversely related to the expected change in labor costs (c_2).

$H_{1.3}$: A manager's position choice (D_i) is inversely related to the expected change in debt costs (c_3).

$H_{1.4}$: A manager's position choice (D_i) is inversely related to the expected change in administrative compliance costs (c_4).

Alternatively, a manager who anticipates higher corporate management compensation costs may expect to experience an increase in personal wealth which more than offsets the negative effect of corporate cash outflows on his utility. Further, a manager who expects a net increase in his utility is hypothesized to support the ED.

$H_{1.5}$: A manager's position choice (D_i) is positively related to the expected change in management compensation costs (c_5).

Hypotheses 1.6 through 1.8, as illustrated in Figure 3B, address the individual relationships between the ED's effect on reported pension expense (f_4), corporate attributes, and a manager's position

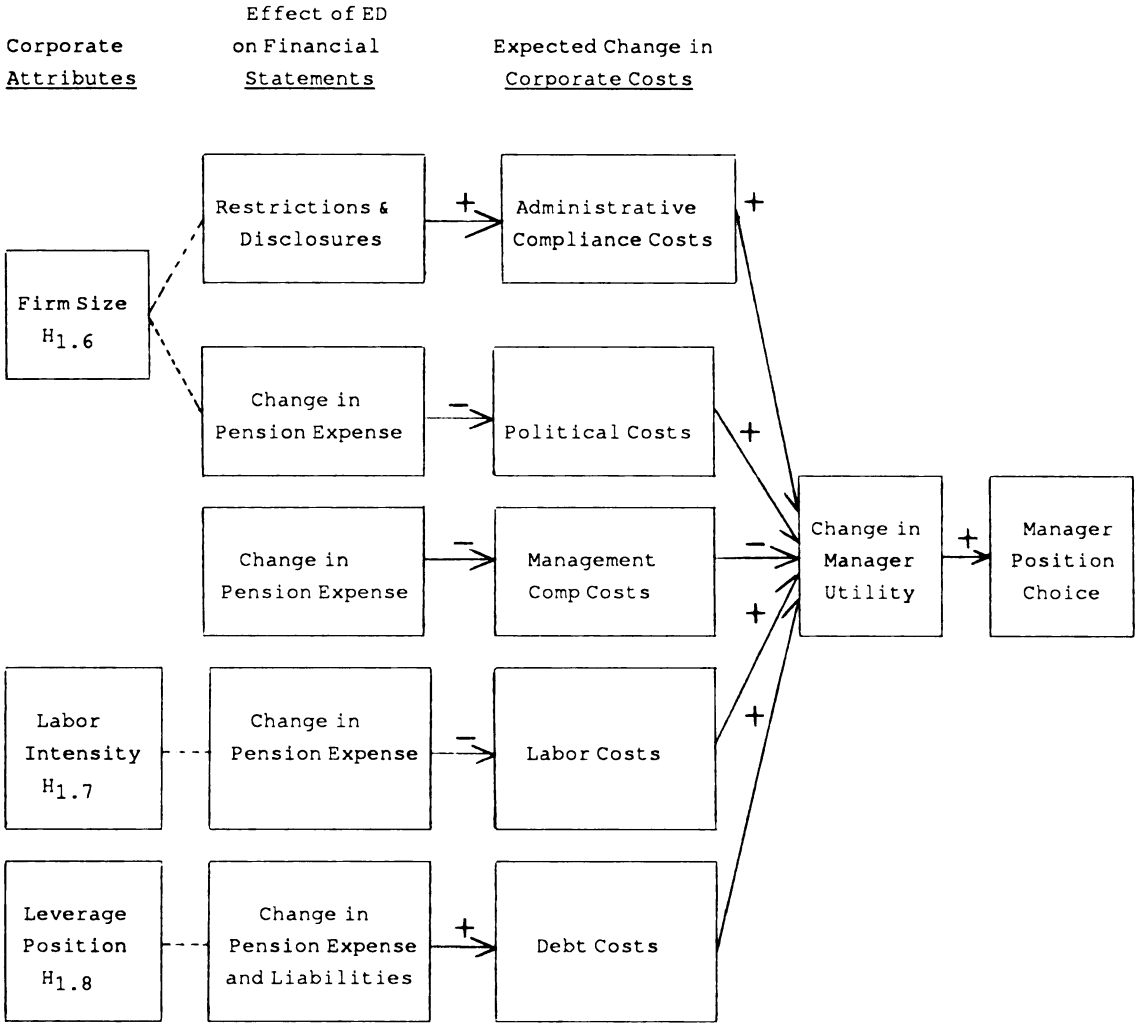

FIGURE 3B

THE RELATIONSHIP BETWEEN CORPORATE ATTRIBUTES, CORPORATE COSTS AND A MANAGER'S POSITION CHOICE

choice. A company reporting a decrease in pension expense is expected to experience an increase in political and labor costs. The same company is expected to experience a decrease in debt costs. Conversely, a company reporting an increase in pension expense is expected to experience a decrease in political and labor costs and an increase in debt costs.[32]

Further, a company's size, labor intensity, and leverage position may affect the magnitude of the corporate costs incurred due to the ED's adoption. The manager of a large company is expected to face high political and administrative compliance costs when a decrease in pension expense is reported. The manager of a labor intensive company is expected to face high labor costs when a decrease in pension expense is reported. Finally, the manager of a highly leveraged firm is expected to face high debt costs when an increase in pension expense is reported.[33]

Therefore, if the ED requires a decrease (-) in pension expense, the manager of a large or labor intensive firm may expect to incur increased (+) corporate costs. That manager is hypothesized to oppose (-) the ED. Alternatively, if the ED requires an increase (+) in pension expense, the manager of a highly leveraged firm may expect to incur increased (+) corporate costs. That manager is hypothesized to oppose (-) the ED.

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[32]Increased debt costs are also associated with an increase in reported liabilities. A company reporting increased liabilities due to the ED's adoption, is also expected to report increased pension expense.

[33]A firm's size, labor intensity, and leverage may also affect the probability of incurring these costs.

$H_{1.6}$: A manager's position choice (D_i) is positively related to the interactive effect of firm size (f_1) and the ED's effect on reported pension expense (f_4).

$H_{1.7}$: A manager's position choice (D_i) is positively related to the interactive effect of labor intensity (f_2) and the ED's effect on reported pension expense (f_4).

$H_{1.8}$: A manager's position choice (D_i) is inversely related to the interactive effect of leverage position (f_3) and the ED's effect on reported pension expense (f_4).

3.6.2 Participation Choice

A general model of manager participation choice in the accounting standard-setting process was set forth in Section 3.3. Like the position choice model, this model was based on the assertion that a manager's utility may be affected by a mandated change in financial reporting. Specifically, a manager's utility may decrease when corporate cash ouflows increase due to financial reporting changes. Therefore, a manager may expect to benefit by lobbying if he believes he can influence the outcome of a proposed standard (a') which affects corporate cash outflows. The manager's perception of the probability of influencing the policy outcome (pr_1) may affect his decision to participate in the standard-setting process.

A manager's utility from lobbying may also be affected by his perceptions of the costs of that action (l). Although the actual

costs of lobbying may be low, costs of research and evaluation may be high.

Finally, a manager may expect to obtain long-run utility benefits ($pr_2(j)$) from lobbying. In this case, the manager may believe that the current standard-setting process is preferable to some unknown alternative in terms of corporate costs and manager effort (j). Further, he may believe that by lobbying the FASB, he may affect its continuance (pr_2). The general model of manager position choice presented in equation 3.3.2 is repeated here.

$$V_i = \begin{cases} 1 \text{ (lobby), if } E(U|a')pr_1(a') + E(U|j)pr_2(j) - E(U|1) > 0 \\ 0 \text{ (abstain), otherwise.} \end{cases} \quad (3.3.2)$$

The relationships between contracting and monitoring costs, corporate attributes, manager perceptions of the FASB, and a manager's participation choice are illustrated in Figure 3C. The hypotheses used to test these relationships are described below. One overall hypothesis ($H_{2.0}$) and eight subhypotheses are offered.

$H_{2.0}$: The model described in equation (3.3.2) may be used to describe a manager's participation choice on the ED.

The manager of a company, whose expected utility is affected by the ED through changes in corporate contracting and monitoring costs, may have incentive to lobby on the ED. As these costs increase, the manager's incentive to lobby <u>against</u> the ED is hypothesized to increase. Alternatively, if the costs associated with the ED are low (relative to the costs associated with possible alternatives), a manager's incentive to lobby <u>for</u> the ED is hypothesized to increase.

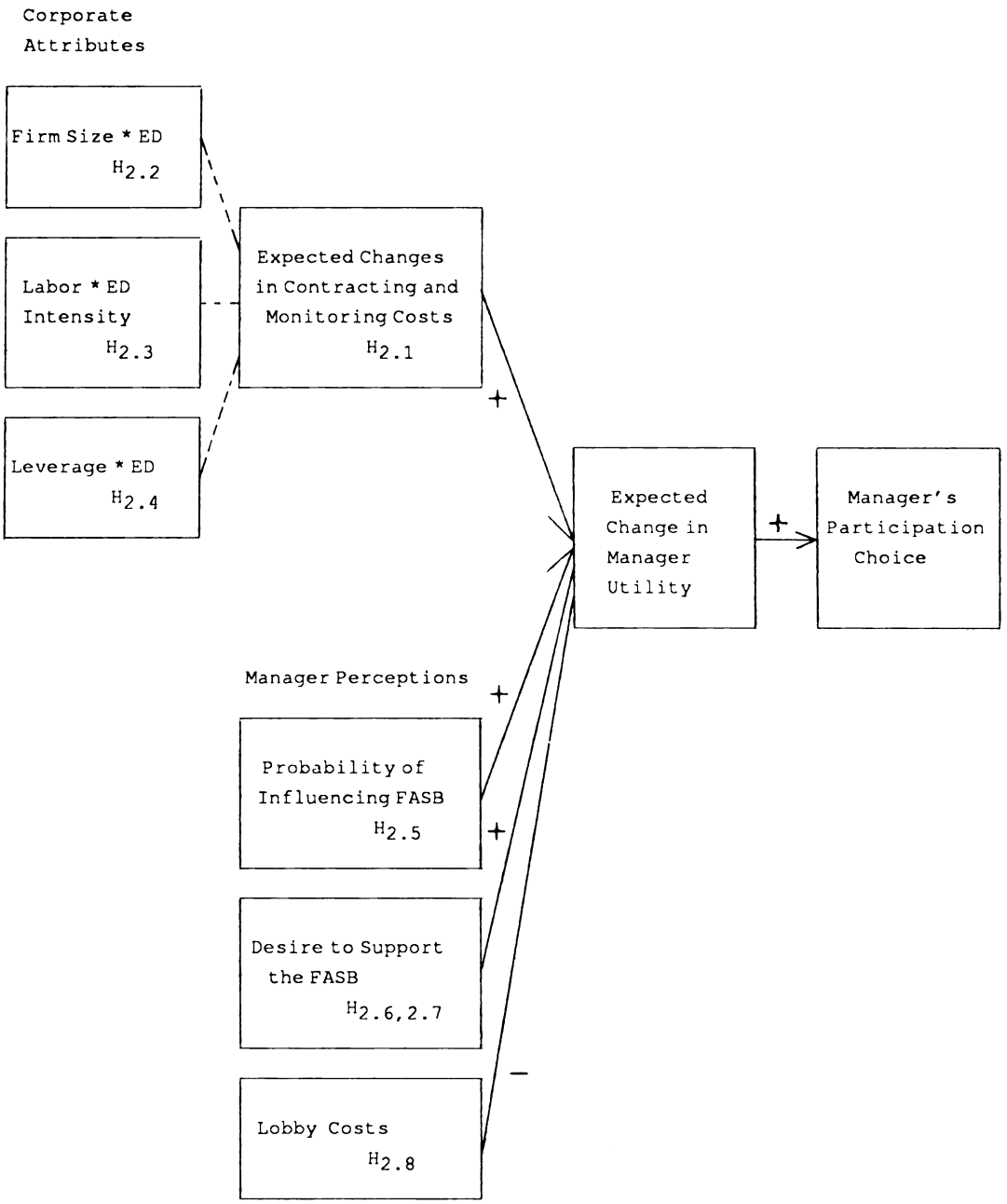

FIGURE 3C

THE RELATIONSHIPS BETWEEN CORPORATE ATTRIBUTES, MANAGER COST EXPECTATIONS, PERCEPTIONS OF THE FASB, AND A MANAGER'S PARTICIPATION CHOICE[a]

[a]The relationships between the magnitude of expected changes in contracting and monitoring costs and the expected change in manager utility are shown for an opposing manager. An opposite relationship is hypothesized for a supporting manager.

Hypotheses 2.1 through 2.4 pertain to a manager who opposes the ED. The opposite relationships are hypothesized for a manager who supports the ED.

$H_{2.1}$: An opposing manager's participation choice (V_i) is positively related to the expected change in corporate contracting, monitoring and other costs associated with the ED (c_1, c_2, c_3, c_4, c_5).

As in the position choice hypotheses, it is asserted that the ED's impact on the financial statements will affect the magnitude of expected corporate costs. Further, firm size, labor intensity, and leverage are expected to directly affect the magnitude of political and administrative compliance, labor, and debt costs, respectively. Therefore, if the ED requires an increase (+) in pension expense, the manager of a large or labor intensive firm may expect to incur increased (+) corporate costs. It is hypothesized that such a manager will be more likely to lobby (+) as these corporate costs increase. Alternatively, if the ED requires a decrease (-) in pension expense, the manager of a highly leveraged firm, facing higher debt costs, will be more likely to lobby (+) as his expected debt costs increase.

$H_{2.2}$: An opposing manager's participation choice (V_i) is positively related to the interactive effect of firm size (f_1) and the ED's effect on reported pension expense (f_4).

$H_{2.3}$: An opposing manager's participation choice (V_i) is positively related to the interactive effect labor intensity (f_2) and the ED's effect on reported pension expense (f_4).

$H_{2.4}$: An opposing manager's participation choice (V_i) is inversely related to the interactive effect of leverage position (f_3) and the ED's effect on reported pension expense (f_4).

A manager who does not believe that he can influence the outcome on the ED may not lobby even if he expects the ED to have a significant effect on his utility. Therefore, it is hypothesized that:

$H_{2.5}$: A manager's participation choice (V_i) is positively related to his perception of the probability of influencing the policy outcome (pr_1).

Alternatively, a manager who believes that the continuance of the FASB would be beneficial to him in the long run may lobby even if he does not expect the ED to have a short-run effect on his utility. A manager who supports the FASB and believes that its continuance is affected by filing a comment letter is more likely to file than a manager who either does not support the FASB or does not believe that filing a comment letter provides support for the FASB. Therefore, it is hypothesized that:

$H_{2.6}$: A manager's participation choice (V_i) is positively related to his expectations of the benefits obtained (costs avoided) from continuance of the existing standard-setting body (j).

$H_{2.7}$: A manager's participation choice (V_i) is positively related to his or her perception of the probability of affecting the FASB's continuance by filing a comment letter (pr_2)

Finally, it is hypothesized that a manager is less likely to lobby on the ED if he perceives the costs of filing a comment letter to be high.

$H_{2.8}$: A manager's participation choice (V_i) is inversely related to the costs of lobbying (l).

3.7 Summary

A corporate manager's position and participation choice models on the pension accounting issue are derived from general decision theory and Downs' model of political behavior. The manager's utility is hypothesized to be affected by changes in corporate contracting and monitoring costs. These costs are associated with changes in financial statement reporting required by the March 1985 Exposure Draft, Employer's Accounting for Pensions.

The manager's position choice is hypothesized to be related to expected changes in corporate political, labor, debt, administrative compliance and management compensation costs. These costs are

asserted to be affected by the ED's impact on corporate financial statements. Further, certain attributes of a corporation are expected to affect the magnitude of these costs. Therefore, corporate attributes are offered as proxies for the contracting and monitoring costs. Firm size is offered as a proxy for political and administrative compliance costs. Labor intensity is offered as a proxy for labor costs. Leverage position is offered as a proxy for debt costs.

The manager's participation choice is hypothesized to be related to:

1) the magnitude of the expected contracting and monitoring costs which affected his position choice;

2) his perception of the probability of influencing the ED's outcome by lobbying;

3) his desire to support the FASB;

4) his perception of the probability of affecting the FASB's continuance by lobbying; and

5) the costs of lobbying.

The research methodology used in this study to test the models of manager position and participation choice is discussed in the next chapter. The sample design, measurement methods, and choice of statistical methods are explained therein.

CHAPTER 4

METHODOLOGY

4.1 Introduction

The specifics of the March 1985 Exposure Draft, Employers' Accounting for Pensions (ED), and the potential effect of that proposal on corporate financial statements and corporate manager utility were discussed in the previous chapter. In addition, theoretical models of corporate manager position and participation choice on the pension accounting issue were offered. The research methodology used to test these models is discussed in the present chapter.

First, the population is defined and the sample design is explained. Second, the proxies chosen to measure the dependent and explanatory variables in the position and participation choice models are discussed. The sources used to obtain these measures, which include a questionnaire, are described. Further, the benefits of using a questionnaire and its limitations are addressed. Finally, the choice of statistical methods used to analyze the models of manager position and participation choice is discussed. The advantages of a probit analysis over discriminant analysis are discussed as they relate to the data used in this study.

4.2 Population Definition and Sample Selection

Mandated changes in financial statement accounting may affect all preparers of corporate financial statements who must comply with Generally Accepted Accounting Principles (GAAP). Therefore, an ideal study of manager behavior in the accounting standard-setting process would include a random sample of all corporations required to comply with GAAP. However, only a small number of corporate managers participate in the accounting standard-setting process by filing a comment letter.[1]

In order to study both position and participation choices, the requisite sample must include (1) a sufficient number of comment filers so that statistical inferences may be made on the position choice of filers, and (2) a sufficient number of both comment filers and nonfilers so that statistical inferences may be made on participation choice. Therefore, the sample used in this study should include a representative number of corporate managers who filed comment letters.

There are at least two ways in which a sample could be drawn which would include a representative number of filers. In prior studies of participation choice, researchers have selected two separate samples.[2] The first sample included all comment letter filers on the accounting issue which was being addressed. The second

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[1]For example, only approximately 1% of the companies listed on the NYSE, AMEX and OTC filed comment letters on the pension Exposure Draft.

[2]See Zmijewski and Hagerman (1981), Lasater (1982), Griffin (1982, 1983), Kelly (1982, 1985).

sample included a random selection of companies listed with some report service (i.e., COMPUSTAT). Because these studies used two samples, the statistical inferences from analyses of participation and position choices were not generalizable to any general population.

An alternative approach would be to select one random sample from a subpopulation which includes a greater proportion of comment letter filers than the total population includes. The single sample approach would provide generalizable evidence on the participation and position choices of the subpopulation taken as a whole.

This study used a single sample of 300 firms selected randomly from the population of firms listed on the NYSE. Fifteen percent of the managers of NYSE firms filed comment letters on the ED. By restricting the sample frame to NYSE firms, a random sample could be selected which included a representative number of comment letter filers and nonfilers.

A disadvantage of the restricted sample frame is that no conclusions can be drawn regarding the behavior of managers of American Stock Exchange, Over-the-Counter, or privately held companies. However, there is enough variability in the attributes of the NYSE firms and in the behavior of NYSE firm managers, to make statistical statements about the models of position and participation choice.

4.3 Variable Measurement

A manager's position and participation choice (the dependent variables) on the ED were hypothesized in Chapter 3 to be related to

three sets of explanatory variables. Manager expectations of contracting and monitoring costs incurred due to the ED's adoption were hypothesized to affect the manager's utility and, in turn, his position and participation choices. Further, corporate attributes were asserted to be related to the magnitude of these expected contracting and monitoring costs. Therefore, it was hypothesized that corporate attributes would affect a manager's position and participation choices on the ED. Finally, it was hypothesized that a manager's perceptions of the FASB would affect his participation choice.

4.3.1 Dependent Variables

The dependent variables in this study are the corporate manager's position and participation choices on the ED. The methods used to measure these variables are described in this section.

The participation choice of a manager is a strictly binary choice. A manager either files a comment letter or he does not. Further, a list of firms represented by comment letters on an accounting pronouncement is publicly available through the FASB. Therefore, a true measure of manager participation choice was obtained for this study by examining the FASB's list of comment filers on the ED.

Ideally, a manager's position choice on an accounting pronouncement would be measured on a continuous scale. The degree to which the manager opposes or supports a pronouncement would be determined. The best available measure of manager position choice on

an accounting pronouncement is provided by comment letters filed with the FASB. However, as discussed in Section 4.2, only a small percentage of corporate managers actually file comment letters. Further, the comment letters are subject to varied interpretations.

Prior researchers have relied on comment letters to measure manager position choices on accounting pronouncements. To reduce the difficulties of interpretation, manager position choice has been measured on a binary (oppose/support) scale.

The binary scale was used in this study to measure manager position choice. Comment letters were examined to determine the position choice of filing managers. Further, a questionnaire (see Appendix B) was used to obtain information about the position choices of corporate managers who did not file comment letters on the ED. Managers were asked about five subissues of the ED. These subissues included standardization of actuarial cost methods, balance sheet presentation of pension liabilities, determination of discount rates, valuation of plan assets, and footnote disclosures. The manager's overall position on the ED was coded as "support" if the manager supported at least three of these issues, and "oppose", otherwise.[3]

By determining the position choices of nonfilers, this study included a portion of the corporate manager population which was not included in prior research efforts. However, manager position choices obtained from a questionnaire may be subject to weaknesses in reliability. If questions are not clearly stated, the measures obtained may not represent the managers' true positions. Further,

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[3]This method of scoring resulted in an equal weighting of each subissue.

managers may not have incentives to state their true positions on the ED in the questionnaire.[4]

Validating measures of manager position choices stated on the questionnaire were obtained by examining comment letters filed with the FASB. A manager's overall position on the ED was determined from general statements made in the comment letters. Additionally, the comment letters were coded using the questionnaire's format. The McNemar test for the significance of changes in related samples was used to assess the validity of the position choices obtained from the questionnaire.[5] The test was used to compare overall position choices stated in comment letters, with the positions computed from equal weightings of the five subissues addressed in the questionnaire. In addition, positions stated in the questionnaire on those five subissues were compared with subissue positions stated in the comment letters. (See discussion p. 120 and Table 5D, p. 121.)

4.3.2 Independent Variables: Manager Cost Expectations

Manager position and participation choices were hypothesized to be related to manager expectations of changes in contracting and monitoring costs (manager cost expectations). Political, labor, debt, administrative compliance and management compensation costs were identified as costs which may be incurred due to the ED's adoption.

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[4]Managers may have stronger incentive to state their true position in a comment letter filed with the FASB.

[5]The McNemar test for the significance of changes may be used to compare related samples when the measurement is at the nominal level. See Siegel (1956, p. 63).

Measures of manager cost expectations have not been obtained in prior research efforts. Instead, corporate attributes have been used to proxy for expected contracting, monitoring and other costs. The use of corporate attribute proxies may reflect the difficulty associated with obtaining a true measure of manager cost expectations. Corporate managers have not addressed the costs associated with an accounting change in the comment letters they file with the FASB. In fact, it may be argued that managers are unable or unwilling to provide reliable estimates of these costs. In either of these cases, it would not be worthwhile to ask the manager to provide estimates of the corporate costs he would expect to incur if an accounting change were adopted.

Alternatively, managers may have estimated these costs, but they may not have been provided with a forum in which to state them.[6] In this case, a questionnaire may provide managers with that forum. Therefore, a questionnaire was used in this study to obtain measures for manager expectations of the corporate costs associated with the ED's adoption. Managers were asked to estimate both the out-of-pocket and opportunity costs which may be incurred to initiate compliance with the ED.[7] The development of the questionnaire is discussed below. The measures used for each of the five costs identified in Chapter 3 (political, labor, debt, administrative compliance, and

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[6]This assumes that the comment letter is not seen by managers as a forum by which to state the costs associated with a proposed accounting change.

[7]Long-run costs were not addressed due to measurement difficulties associated with estimation and discounting.

management compensation) are summarized in Table 4A, and discussed in this section.

Political and labor costs were combined as public relations costs on the questionnaire. Managers were asked to estimate the costs they would incur to explain the effects of the proposed change in pension accounting to outside investors, and others (i.e., government regulatory bodies), as well as to employees. In the pretest, these costs were categorized separately on the questionnaire in terms of investors, creditors, employees, and others.[8] However, one respondent to the pretest indicated that his company could not differentiate between the costs associated with the different groups. He noted that these costs may pertain to general publications and seminars which would not be directed at any specific group. Therefore, separate measures were not obtained, and the measure for public relations costs included a combination of hypothesized political (investors and others) and labor (employees) costs.

Debt costs relating to changes in interest rates on existing and future debt agreements were included in the questionnaire. Managers were asked to estimate changes in interest expense that may be incurred due to violations of existing indenture requirements. Additionally, managers were asked to estimate the marginal effect of the ED on interest expense incurred on future debt issuances. Administrative costs of possible debt restructuring were not specifically addressed. Respondents to the pretest indicated that

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[8]A discussion of the questionnaire development is provided in Section 4.4.

TABLE 4A

CORPORATE COSTS ASSOCIATED WITH THE PENSION EXPOSURE DRAFT

Public relations costs

Political and labor costs associated with monitoring activities of governmental agencies, investors, employees and others.

Debt costs

Costs associated with monitoring activities of creditors, including changes in interest rates on existing and future debt agreements.

Administrative compliance costs

Costs associated with changes in internal reporting, and with increases in actuarial and audit fees, as well as the costs associated with explaining the new reporting requirements to internal management.

Management compensation costs

Costs associated with contractual compensation agreements with managers.

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these costs would be negligible when compared to the interest expense effect.

Administrative compliance costs were separated into two categories. Administrative costs were described as actuarial and audit fees, the costs of computer installations, and other information processing costs. Internal management costs were added at the suggestion of the pretest respondents who were asked, "What are the most significant concerns that your company has regarding the current pension accounting proposal?" Both respondents to the pretest indicated that upper managements' understanding of the changes and the potential breakdowns in internal communications were their greatest concerns. They were not as concerned about the bookkeeping costs of compliance or the ED's effect on the financial statements. Their concern with internal management costs was based on the complexity of pension accounting and the general lack of understanding by most people, including top management, of the actuarial methods and assumptions underlying the determination of pension obligations and funding.

Finally, management compensation costs were measured in terms of percentage change. Managers were asked if the compensation of upper level management would decrease if reported income decreased "as a result of a change in pension accounting" and, if so, by how much.[9]

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[9]Managers were not asked if their compensation would increase if reported income increased. Therefore, thisrepresents a weakness in the measure. This limitation is discussed further in Chapter 7.

4.3.3 Independent Variables: Corporate Attributes

In Chapter 3, it was asserted that the ED's effect on corporate financial statements would affect the nature of the contracting and monitoring costs incurred by a firm due to the ED's adoption. For example, a firm reporting lower pension expense may expect an increase in political, labor and management compensation costs. At the same time, that firm may expect to incur lower debt costs. Further, it was asserted that corporate attributes may affect the magnitude of these costs.

Finally, it was argued that the ED's effect on corporate financial statements may depend on the funding status of the firm's pension plan. For example, a company with an overfunded pension plan was expected to report a decrease in pension expense. (A company with an underfunded pension plan was expected to report an increase in pension expense.) Therefore, pension plan status may be used to proxy for the ED's effect on financial statements. Further, the corporate attributes - firm size, labor intensity, and leverage position - may be used to proxy for the magnitude of the costs incurred, and the probability of incurring them.

Several measures for firm size, labor intensity, and leverage position are reported in audited financial statements and are published and summarized by data services. The Directory of Corporate Affiliations (1986) was used in the present study to obtain data on each company's size, labor intensity and leverage position. This Directory provided data for fiscal years ending 1985. Additionally, the NAARS library of 1985 annual reports and the Standard and Poor's

library of 10-K reports were used to obtain information from footnotes on pension plan status.

One corollary objective of this study was to provide a replication of work done by prior researchers on other accounting issues. Therefore, many of the measures used for corporate attributes were drawn from prior research efforts. The measures used in this study for firm size, labor intensity, leverage position, and pension plan status are summarized in Table 4B and are discussed here.

Firm size was measured using two different corporate attributes - total sales and the book value of assets. Watts and Zimmerman (1978), Zmijewski and Hagerman (1981) and Kelly (1982, 1985) used the book value of assets to proxy for firm size. McKee, Bell and Boatsman (1984) used sales.[10] Lasater (1982) used earnings before taxes (EBT) to proxy for firm size. EBT was not used as a proxy for firm size in this study due to the year-to-year volatility found in that measure.

Labor intensity was measured using the number of employees per sales dollar. A corporate attribute proxy for labor intensity has not been included in prior research efforts. At least two alternative measures for labor intensity are available: (1) employees per sales dollar or (2) employees per asset dollar. Employees per sales dollar was used in this study because every company is reporting sales in current, comparable dollars. The book value of assets, which are stated in historical dollars, reflect the age of a firm's assets. Stated otherwise, the book value of assets may not be comparable across firms.

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[10]An advantage of using sales to proxy for firm size is that the measure is in comparable current dollars rather than historical dollars.

TABLE 4B

CORPORATE ATTRIBUTES

Firm size - total sales; book value of assets

Firm size is expected to affect the magnitude of political and administrative compliance costs associated with the pension ED.

Labor intensity - number of employees per sales dollar

Labor intensity is expected to affect the magnitude of labor costs associated with the ED.

Leverage position - total debt to equity ratio

Leverage position is expected to affect the magnitude of debt costs associated with the ED.

Pension plan status - pension obligations to pension assets ratio

Pension plan status is offered as a proxy for the ED's effect on corporate financial statements. It is expected to affect the magnitude and direction of the changes in political, labor, debt, administrative compliance, and management compensation costs associated with the ED.

Leverage position was measured using a total debt/total equity ratio as used by Zmijewski and Hagerman (1981) and Kelly (1982, 1985). Zmijewski and Hagerman found that this measure was highly correlated with other measures such as total long-term debt to total equity.

Finally, pension plan status was measured using the ratio of accumulated pension obligations to pension plan assets as disclosed in the SFAS 36 footnote.[11] This ratio provided a measure for the effect of the ED on corporate financial statements. A company with a ratio greater than one (an underfunded plan) was expected to experience an increase in reported pension expense and pension liabilities. A company with a ratio less than one (an overfunded plan) was expected to experience a decrease in reported pension expense and no change in pension liabilities.

4.3.4 Independent Variables: Manager Perceptions of the FASB

It was hypothesized in Chapter 3 that a manager's perceptions of the FASB would affect his decision to lobby on the ED. Four specific factors were identified, including (1) the probability of influencing the FASB by filing a comment letter, (2) the costs associated with a change in the accounting standard-setting body (LRPV), (3) the probability of affecting the FASB's continuance by filing a comment

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[11]Accumulated pension benefits, as disclosed in the SFAS 36 footnote, do not include the effects of projected increases in compensation. The ED would require that pension expense be determined based on projected pension benefits, which include these effects. Therefore, the pension obligations/assets ratio used to proxy for the ED's effect on corporate financial statements is biased towards finding an overfunded pension plan. This bias may reduce the power of this study.

letter, and (4) the costs associated with filing a comment letter. A questionnaire was used to obtain measures for each of these factors as summarized in Table 4C and discussed below.

(1) The probability of influencing the FASB by filing a comment letter, and (4) the costs associated with that filing were measured in two ways. First, the managers were asked how they generally attempted to influence the FASB in the accounting standard-setting process. Additionally, they were asked what factors most affected their specific decision to file or not file a comment letter on the ED. Several alternative responses were offered for each question. These responses included the probability of influencing the FASB and the costs associated with filing. The managers were asked to allocate 100 points to the set of alternative responses (including an "other" category which could be added at their discretion).

(2) The costs associated with a change in the accounting standard-setting body (LRPV) were measured in three ways. Two of these measures addressed the managers' general perceptions, and one measure was specifically directed at the ED.

First, the managers were asked if their companies supported the FASB through financial contributions to the Financial Accounting Foundation. This binary yes/no (1/0) measure was used on the premise that a manager who associated increased costs with a change in the present accounting standard-setting body would support the FASB financially.

A second measure of LRPV was obtained by asking managers about the effect of a shift in financial accounting standard-setting to the governmental sector. Managers were asked if they would expect such a

TABLE 4C

MEASURES OF MANAGER PERCEPTIONS OF THE FASB
(See Appendix B for Complete Questionnaire)

Probability of influencing the policy outcome

"We do not attempt to influence the FASB because we do not believe the Board is responsive to corporate constituents."[a]

"We did not believe that our participation would have any effect on the standard issued by the FASB."[b]

Cost of filing comment letters

"We do not attempt to influence the FASB because it is too costly."[a]

"The cost and effort incurred to research the proposal and prepare a comment letter" affected our decision to file a comment letter on the ED.[b]

Long run participation value

"Does your company support the FASB through financial contributions to the Financial Accounting Foundation?

"If financial accounting standard setting shifted entirely to the governmental sector, what would be the effect on your company's total annual cost of financial accounting, research and external reporting activities?

"Our company's desire to support the FASB in its rulemaking efforts affected our decision to file a comment letter on the ED.[b]

Probability of affecting the FASB's continuance

"Do you believe that by filing a comment letter you increase the probability of the FASB's continuance?"

[a]Managers were asked to allocate up to 100 points to this response to the question, "How does your company attempt to influence the FASB?"

[b]Managers were asked to allocate up to 100 points to this desponse to the question, "...which factors most affected your decision to file or not file a comment letter on the March 22, 1985 Exposure Draft on pension accounting?"

shift to result in an increase or a decrease in the costs of financial accounting, research and external reporting activities. Further, they were asked to estimate how great that increase or decrease might be in terms of a percentage change. This percentage measure was used based on arguments that the downfall of the FASB may be followed by a shift to governmental accounting standard-setting.[12]

The third measure of LRPV was obtained by asking managers if their decision to file a comment letter on the ED was affected by a desire to support the FASB (based on a 100 point allocation). This measure was used on the assertion that a manager would not spend time and effort to support the FASB by filing a comment letter unless he believed that a change in the accounting standard-setting body would be costly.

Further, it may be argued that the third measure of LRPV may also be measuring the (3) probability of affecting the FASB's continuance. A manager will file a comment letter to support the FASB only if he believes that the FASB's continuance can be affected by filing. A second measure for the probability of affecting the FASB's continuance by filing a comment letter was measured by asking managers directly to estimate this probability.

4.4 Questionnaire Design

As discussed above a questionnaire was used in this study to obtain measures for the dependent variable - position choice. Additionally, the questionnaire was used to measure two sets of

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[12]See Previts and Merino (1979).

explanatory variables - manager expectations of corporate contracting and monitoring costs, and manager perceptions of the FASB.

The questionnaire provided information which could not be obtained from any other available source. By determining the position choices of nonfilers, this study could examine the behavior of a group of corporate managers which had not been examined in prior research efforts. Further, by measuring the managers' expectations of corporate costs associated with the ED, the validity of the corporate attributes used in prior research to proxy for these expectations could be assessed. Finally, by measuring manager perceptions of the FASB, this study could examine the relationships between these perceptions and other factors in the manager's participation choice.

However, the use of a questionnaire to obtain variable measures introduces potential limitations to this study. These limitations may result from weaknesses in measurement reliability or from questionnaire nonresponse bias.

Measures obtained from a questionnaire may not be reliable if the respondents do not clearly understand what is being asked. Furthermore, even if they understand the questions being asked, managers may be unwilling to respond truthfully or unable to provide reliable estimates. In either of these cases, the measures obtained from the questionnaire would also be unreliable.

Further, nonresponse bias may occur if every manager who receives a questionnaire does not respond. In this study, questionnaires were mailed to a <u>random</u> sample of NYSE firm managers. A random sampling method was used to obtain a sample which would provide an unbiased

representation of the population.[13] If less than 100 percent of these managers respond, the sample available for analysis would be self-selected rather than random. A self-selected sample is more likely to be biased than a randomly selected sample. Therefore, unless a 100 percent response rate is achieved, the results of this study may be subject to nonresponse bias.

Several techniques were used in designing the questionnaire to increase the reliability of the measures obtained from the questionnaire and to increase manager response rates. In addition, statistical techniques were performed to assess measurement reliability and nonresponse bias. The questionnaire design is discussed in this section, and the methods used to assess measurement reliability and nonresponse bias are discussed in Section 4.5.

4.4.1 Increasing Reliability of the Questionnaire

The reliability of measures obtained from a questionnaire is a function of the clarity of the quesionnaire and the respondents' ability and willingness to respond truthfully. To assess these factors, the questionnaire used in this study was pretested before it was mailed to the sample of 300 NYSE firms.

The questionnaire used in this study was intended to be completed by a chief financial officer (e.g., Vice-President of Finance or Controller). Therefore, the questionnaire was pretested by mailing it

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[13]See Kerlinger (1964, p. 52): "Random sampling is that method of drawing a portion (or sample) of a population or universe so that each member of the population or universe has an equal chance of being selected.... [Therefore], a random sample can be said to be representative of the population from which is was drawn."

to top level managers of four companies in the Detroit/Toledo area. Three NYSE firms that had filed comment letters on the pension ED and one firm that had not filed were selected for the pretest. A cover letter which indicated that the recipient was being asked to participate in a pretest accompanied the questionnaires.

Two of the four managers returned the questionnaire within one week and follow-up interviews were conducted. One of the managers responding was the director of financial accounting research at a large public utility that had filed several comment letters on the pension accounting issue. The assistant controller of a large manufacturer that had not filed a comment letter also responded. The managers of the other two companies expressed interest in the questionnaire when a follow-up phone call was made, but ultimately did not respond.

A revised questionnaire was sent to the randomly selected sample of 300 NYSE firm managers. This questionnaire was accompanied by a cover letter which explained the purpose and importance of the study. The cover letter also assured respondents that their names and that of the companies they represented would be kept strictly confidential. (See Appendix B for Questionnaire and Cover Letter.)

4.4.2 Reducing Nonresponse Bias

The response rate to a questionnaire may be a function of its appearance and length, the timing of its receipt, and the importance of the subject it addresses to those who receive it. Several

techniques were used to increase the response rate on the questionnaire used in this study.

The questionnaire and cover letter were prepared on high quality paper, and each cover letter was individually typed and addressed to the appropriate manager. Further, the length of the questionnaire was limited so that it would require approximately 30 minutes to complete.

The first questionnaires were mailed on September 9, 1985, shortly after Labor Day. For most companies, this represents a relatively slow period when management is more likely to be available to respond. Further, the September mailing was also close to the comment deadline (June 21, 1985) of the Pension Exposure Draft. Therefore, the topic of the questionnaire was likely to be of interest to corporate managers who were aware of the pronouncement. In addition, position choices on individual aspects of the ED, assessments of costs, and reasons for filing or not filing on the ED were likely to be 'fresh' in the minds of the managers.

Second requests were mailed on October 9, 1985 to managers who had not responded as of that date. This mailing included a second copy of the questionnaire in case the first copy had been misdirected or lost. The questionnaires included in the second mailing were identifiable as second requests. Therefore, comparisons could be made between first and second request respondents as discussed in Section 4.5.2.

4.5 Assessment of Reliability and Nonresponse Bias

4.5.1 Reliability

The reliability of a measurement method may be assessed in terms of its ability to measure a variable consistently across subjects. For example, a reliable measure of total sales was obtained for this study from the Directory of Corporate Affiliations which summarizes data reported in companies' audited financial statements. Sales for each company were reported in these statements based on the same set of generally accepted accounting principles. Therefore, the sales reported by each company were consistently defined and measured.[14]

Based on this line of reasoning, corporate attribute measures obtained from audited financial statements are assumed to be reliable. However, measures obtained from a questionnaire are subject to a high degree of individual interpretation. Therefore, measures obtained from a questionnaire may not be consistently defined between subjects. Efforts were made to increase the reliability of the quesionnaire used in this study by careful construction and pretesting. The effectiveness of these efforts to increase reliability was assessed using Cronbach's coefficient alpha.

Cronbach's coefficient alpha was developed to assess the overall reliability of a questionnaire. It would be preferable to assess the reliability of individual measures obtained from the questionnaire. However, this cannot be done without data on the true variable

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[14]Reliability does not require that every company use the same revenue recognition method. It only requires that the choice of methods be based on the same criteria (GAAP).

measures. For example, in the questionnaire, managers were asked to provide an estimate of the debt costs their companies would incur if the pension ED were adopted. Managers who were unwilling or unable to provide an estimate of these costs may have responded by guessing, or by reporting an amount they believed the researcher wanted to see.[15] In either of these cases, the reported cost expectations would be unreliable, but because the true cost is unknown, the unreliability of the reported amount could not be assessed.

Cronbach's coefficient alpha requires the use of a symmetric questionnaire (one which includes many questions on the same overall concept). Therefore, the questionnaire used in this study was partitioned and treated as three separate instruments. For example, the first part of the questionnaire used in this study addressed several aspects of one overall concept - manager perceptions of the FASB. That part of the questionnaire was divided in half (split-halves) and a total score was computed for each half. If that part of the questionnaire has overall reliability, the total scores obtained from each half should be highly correlated. Further, the degree of correlation between these half-scores may be used to assess the reliability of the questionnaire.[16]

A problem with using the split-halves approach is that different correlation coefficients may be obtained depending on how the questionnaire's items are allocated to the "halves". To overcome this problem, Cronbach (1951) developed a formula to determine the mean

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[15]See Payne (1951).

[16]Nunnally (1967, p. 9) suggests that, "In the early stages of research on predictor tests or hypothesized measures of a construct,... [a correlation] of .60 or .50 will suffice."

reliability coefficient for all possible ways of allocating the questions. Cronbach's coefficient alpha was computed for the questionnaire used in this study from a covariance matrix of scores using the following algorithm.

$$\alpha = \left(\frac{k}{k-1}\right)\left(1 - \left(\frac{\sum_{i=1}^{k} \sigma_i^2}{\sigma_t^2}\right)\right), \text{where} \qquad (4.5.1)$$

k = number of items,

σ_i^2 = variance of item i, and

σ_t^2 = total covariance.

Separate coefficient alphas were computed for the measures obtained on manager perceptions of the FASB, and for the measures obtained on manager expectations of the corporate costs associated with the ED. (See Section 5.2 for discussion of results.) The reliability of manager position choice was not tested using Cronbach's coefficient alpha. Rather, correlations were run between manager responses to the questionnaire and comment letters filed with the FASB. (The results of these analyses are discussed in Section 5.4.)

4.5.2 Nonresponse Bias

Ideally, nonresponse bias would be assessed by comparing measures from the group of questionnaire respondents with measures from the group of nonrespondents. These comparisons would be made on the dependent and explanatory variables included in the study. However, data is not available for nonrespondents in most questionnaire

studies. In these cases, researchers have argued that late respondents to a questionnaire may be representative of the sample of nonrespondents. Therefore, comparisons made between first and second (or third or fourth...) request respondents may provide evidence of nonresponse bias.

The present study is focused on the position and participation choices of corporate managers. Inferences about these choices are drawn from a self-selected sample. The potential existence of non-reponse bias in the test results causes the following four questions to be raised:

(1) In tests where questionnaire data is used, can inferences about the position choices of managers who responded to the questionnaire be generalized to the population of managers who did not respond?

(2) In tests where questionnaire data is used, can inferences about the participation choices of managers who responded to the questionnaire be generalized to the population of managers who did not respond?

(3) In tests where corporate attributes are used, can inferences about managers' position choices be generalized from a self-selected subsample (i.e., the sample of questionnaire respondents) to the population of managers from which the subsample emerged?

(4) In tests where corporate attributes are used, can inferences about managers' participation choices be generalized from a self-selected subsample (i.e., the sample of questionnaire respondents) to the population of managers from which the subsample emerged?

Data was available for both questionnaire respondents and nonrespondents on the participation choices of managers and on

corporate attributes (question 4 above). Therefore, comparisons were made between respondents and nonrespondents for those variables. A chi-square test was used to determine if the two samples differed on participation choice.[17] In addition, Mann-Whitney U tests were used to determine if the corporate attributes - size, labor intensity, leverage position, and pension plan status - of the two samples differed.[18]

Data was not available for questionnaire nonrespondents on manager position choices, cost expectations or perceptions of the FASB (questions 1-3 above). Therefore, comparisons were made between respondents to the first and second mailings for these variables. A chi-square test was used to determine if the two samples differed on position choice. In addition, Mann-Whitney U tests were used to determine if the cost expectations and perceptions of the FASB stated by first and second request respondents differed. (The results from the tests on nonresponse bias are discussed in Section 5.5.)

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[17]See Siegel (1956, p. 104): "When the data of research consist of frequencies in discrete categories, the chi-square test may be used to determine the significance of differences between two independent groups."

[18]The parametric t-test is more powerful in finding differences between samples than the Mann-Whitney U test when all conditions of its statistical model (i.e., normal distributions, homogeneous variance, etc.)are met. However, when these conditions do not hold, the non-parametric Mann Whitney U test of rank orderings is more reliable and may be more powerful. See Siegel (1956, p. 126). Also, see Table 4D for summary of tests on the normality of underlying data distributions in this study.

4.6 Construct Validity

The measures of corporate attributes obtained for this study are assumed to be reliable as discussed above. However, the relationship between these attributes and expected contracting and monitoring costs cannot be assumed. Prior researchers have repeatedly used corporate attributes to proxy for the contracting and monitoring costs associated with a mandated accounting change. Yet, no studies have addressed the empirical relationship between these corporate attributes (proxies) and contracting and monitoring costs (constructs).[19] The third corollary objective of this study is to assess that relationship.

The construct validity of a proxy may be assessed in terms of its ability to measure the construct it is intended to measure (convergent validity), and only that construct (discriminant validity). Ideally, construct validity would be assessed by examining the correlations between the proxies and true measures of the constructs. However, proxies would not be used in studies if true measures of the constructs were economically obtainable. Practically speaking, it is impossible to directly examine the relationship between the corporate attribute proxies and their contracting and monitoring cost constructs.

To overcome this problem, Campbell and Fiske (1959) developed a method to assess the validity of proxies (methods of measurement) when at least two different proxies for the same construct are obtained.

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[19]A construct is a concept which has been deliberately and consciously adopted for a scientific purpose. A proxy provides an operational measure for that construct. See Kerlinger (1964, p32).

Campbell and Fiske argue that two proxies for the same construct should be highly correlated if they both measure the construct they are intended to measure. Therefore, when at least two proxies for the same construct are highly correlated, evidence is provided to support their convergent validity.[20]

To assess the ability of the proxies to measure only the construct they are intended to measure, it is necessary to obtain proxies for other constructs. Two proxies for different constructs should not be highly correlated. Therefore, when proxies used to measure different constructs are highly correlated, evidence is provided to indicate that they do not have discriminant validity. As an extension of that logic, Campbell and Fiske argue that a proxy has discriminant validity if it is more highly correlated with proxies for the same construct than it is with proxies for different constructs.

Campbell and Fiske (1959) developed a method to assess the construct validity of proxies utilizing a multimethod-multitrait correlation matrix. Multimethod refers to the multiple proxies obtained for the same construct. Multitrait refers to the multiple constructs examined.

A multimethod-multitrait correlation matrix was constructed for this study. As discussed in Section 5.3, the matrix included two proxies for each explanatory variable included in the manager position and participation choice models. The correlations between proxies for the same construct were examined to assess convergent validity. In

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[20]Therefore, a high correlation between two proxies can only provide evidence of construct validity. The strength of the evidence on construct validity increases with the number of proxies offered. See Kerlinger (1964).

addition, to assess discriminant validity, these correlations were compared with the correlations between proxies for different constructs.

4.7 The Statistical Analyses of the Position and Participation Choice Models

4.7.1 Probit Analysis

Probit analyses were used in this study to test the models of manager position and participation choice and to determine the importance of each hypothesized explanatory variable. Probit analysis was specifically developed by Finney (1947, 1971) for qualitative choice models. Tobin (1958) and others have adapted the probit model to economic analyses. The probit model, which uses maximum likelihood estimation (MLE) has several advantages over ordinary least squares (OLS) regression models when relating a qualitative dependent variable to one or more explanatory variables.[21] These advantages may be described as follows:

(1) When the dependent variable is dichotomous, the statistical assumptions of the OLS model are violated. In this case, the error term possesses a discrete distribution, is not normally distributed, and will tend to depend on the values of the explanatory variables (heteroskedasticity).

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[21]A Logit analysis provides the same advantages over OLS discriminant analysis. Amemiya's (1981) survey of qualitative response models indicated that a probit and logit analysis produce equivalent predictions of the discrete choice they are modeling.

(2) Furthermore, the linear probability OLS function does not constrain the predicted values to lie between the zero and one interval. Because the predicted values lie outside the zero-one interval, the significance of the beta coefficients on the individual explanatory variables are not consistent.

To eliminate the problems associated with OLS, the discrete dependent variable must be converted to a continuous dependent variable. This may be done by substituting the probability of occurrence of a discrete event for the discrete event itself. Probit analysis uses a nonlinear probability function to make this conversion. The probit function accounts for the heteroskedasticity of the error terms and restricts the predicted values to the zero-one interval.

Press and Wilson (1978) found that logistic regression with MLE (as used in probit analyses) outperformed linear discriminant analysis in empirical studies of discrete choice problems, but not significantly. However, they found that when the explanatory variables are not normally distributed, the advantages of MLE are more pronounced. When the explanatory variables (in addition to the dependent variable) are not normally distributed, the probit analysis provides consistent estimators of the beta coefficients while discriminant analysis does not. Furthermore, discriminant analysis provides misleading results as to the significance of the regression coefficients. A coefficient which is really insignificant will tend

to be estimated as such by a probit analysis which is robust when the explanatory variables are not normally distributed.[22]

To summarize, probit MLE estimators from a discrete choice model are unbiased and consistent even when the explanatory variables are not normally distributed. As shown in Table 4D, a preliminary analysis of the data used in this study indicates that the underlying distributions of the explanatory variables are significantly skewed. Because the dependent variables examined in this study are qualitative, and the explanatory variables are not normally distributed, the MLE probit analysis was used rather than the OLS discriminant analysis to examine the multivariate position and participation choice models.

4.7.2 Mann-Whitney U Tests

Managers may differ significantly on the hypothesized explanatory variables even though the variables are not significant in the multivariate probit analysis. This may be due to multicollinearity of the explanatory variables which reduces the power of a multivariate analysis to find significance on the individual variables.[23] Therefore, in addition to the probit analysis on the models of manager lobby behavior, Mann-Whitney U tests of rank order were computed on

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[22]MLE was found by Press and Wilson (1978) to be robust even when many of the explanatory variables were binary.

[23]A large number of explanatory variables in a multivariate analysis also reduces the power of significance tests on the individual variables when compared to a univariate analysis.

TABLE 4D

SUMMARY OF TESTS ON THE NORMALITY OF UNDERLYING DATA DISTRIBUTIONS

Variables	Skewness[a]	Kurtosis[b]	Kolmogorov-Smirnov Test[c]
Manager Cost Expectations			
Political and Labor	7.154	53.043	10.083
Administrative	5.956	45.179	9.983
Debt	10.399	109.446	5.716
Mgmt Comp	4.045	19.291	6.675
Corporate Attributes			
Sales	7.724	70.065	8.616
Assets	6.558	50.681	8.720
Number of Employees	2.928	12.924	10.258
Employees per sales	.782	2.810	8.916
Debt/Equity	4.125	20.517	8.720
Plan status	1.002	6.588	8.914

[a]A skewness of zero represents a symmetrical distribution.

[b]A value of three for kurtosis indicates normal peakedness.

[c]The Kolmogorov-Smirnov test is used to assess the normality of the distribution underlying a set of data. A value over .014 indicates that the data is not normally distributed. (See Siegel, Table E)

TABLE 4D (cont'd)

Variables	Skewness[a]	Kurtosis[b]	Kolmogorov-Smirnov Test[c]
Manager Perceptions			
Pr(influence-I)	2.487	7.8299	10.881
Pr(influence-II)	5.956	45.179	9.983
LRPV (I- FAF)	9.130	89.912	7.853
LRPV (I- shift)	8.618	81.599	6.717
LRPV (II)	3.907	19.259	10.118
Pr(LRPV)	2.246	7.164	7.534
Lobby cost (I)	4.714	34.659	9.631
Lobby cost (II)	2.122	5.988	10.401

[a]A skewness of zero represents a symmetrical distribution.

[b]A value of three for kurtosis indicates normal peakedness.

[c]The Kolmogorov-Smirnov test is used to assess the normality of the distribution underlying a set of data. A value over .014 indicates that the data is not normally distributed. (See Siegel, Table E)

the individual explanatory variables. Univariate comparisons were made between ED supporters and opposers (position choice) and between filers and nonfilers (participation choice).

The Mann-Whitney U test was used in this study to assess sample differences because the Mann-Whitney U test does not require normal data distributions or homogeneous variance of the independent variables. To apply the Mann-Whitney U test, the measures obtained for each variable are used to rank subjects in order of increasing size. The value of the Mann-Whitney U is based on a comparison of the rankings of the subjects in each group. Although information is lost by comparing rankings of subjects (rather than means), the Mann-Whitney U test has been found to be 95% as powerful as the t-test.[24] Further, it is more powerful and more reliable than the t-test when normal distribution requirements are not met.

4.8 Summary

Position and participation choices for a sample of NYSE firm managers on the pension ED were examined in this study. Probit analyses and Mann-Whitney U tests were used to examine hypothesized relationships between these choices and three sets of explanatory variables: (1) corporate attributes, (2) manager expectations of the corporate costs associated with the ED, and (3) manager perceptions of the FASB.

Managers' position choices on the ED were obtained from a questionnaire which was mailed after the ED deadline but before the

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[24]See Siegel (1956, p. 126).

adoption of the new pension accounting standard (SFAS Statement 87). Additionally, the questionnaire was used to obtain measures for manager expectations of the corporate costs associated the ED, and for manager perceptions of the FASB.

Managers' participation choices were determined by examining the list of ED comment letter filers received from the FASB. Finally, measures were obtained from published financial reports for corporate attributes which were used to proxy for corporate contracting and monitoring costs.

The questionnaire was used in this study to provide data which was not obtained for prior studies. The position choices of nonfiling managers on the ED were obtained, increasing the generalizability of this study. By obtaining measures for manager expectations of the costs associated with the ED, it was possible to assess the construct validity of the corporate attribute proxies used in prior studies. Finally, the relationships between manager perceptions of the FASB, expected contracting and monitoring costs, and participation choice could be examined.

However, the use of a questionnaire in this study introduced potential limitations in terms of measurement reliability and nonresponse bias. Unreliability in the measures of manager position choice, cost expectations and FASB perceptions would reduce the power of the findings about these variables. Further, nonresponse bias would reduce the generalizability of the findings from the sample to the population of NYSE firm managers.

Efforts were made in constructing the questionnaire to increase measurement reliability and to reduce nonresponse bias. Additionally,

the reliability of the overall questionnaire and nonresponse bias were assessed to determine the extent of these limitations.

The statistical results of this study are presented in two chapters. The limitations associated with the questionnaire data are evaluated in Chapter 5. Nonresponse bias and data reliability are discussed. Additionally, construct validity of the independent variable measures is addressed.

The analyses of the position and participation choice models are presented in Chapter 6. The results of the probit analyses and the Mann-Whitney U tests are summarized and discussed therein.

CHAPTER 5

ANALYSIS OF DATA

RELIABILITY AND VALIDITY

5.1 Introduction

The sample design and measurement methods used to obtain data for this study were discussed in Chapter 4. Further, the statistical methods used to assess measurement reliability and validity, and nonresponse bias were described. Finally, the statistical methods used in this study to estimate the models of manager position and participation choice were discussed.

The present chapter presents the results of tests used to assess measurement reliability and validity, and nonresponse bias. The reliability and construct validity of the independent variables used in this study are evaluated in Sections 5.2 and 5.3, respectively. The reliability and validity of the dependent variables are evaluated in Section 5.4. Finally, nonresponse bias is evaluated in Section 5.5.

5.2 Measurement Reliability of the Independent Variables

A measure is said to be reliable if it is consistent between subjects and over time. The corporate attribute measures used in this study were derived from audited financial statements which require the use of consistently applied and well-defined generally accepted

accounting principles. Therefore, it may be assumed that these measures are reliable.

However, measures obtained from the questionnaire were not subject to audit. Therefore, unobserved inconsistencies between managers in their interpretations of the questionnaire may exist. In this case, the measures obtained from the questionnaire may be subject to significant weaknesses in reliability.

As discussed in Chapter 4, the reliability of an individual measure in a questionnaire cannot be determined unless the true measure is known. However, the reliability of a questionnaire, taken as a whole, may be assessed using Cronbach's coefficient alpha if the questionnaire addresses a single general concept.

The questionnaire used in this study addressed three general concepts - manager position choice on the pension Exposure Draft (ED), manager perceptions of the FASB, and manager expectations of the contracting and monitoring costs associated with pension accounting as proposed in the ED. Therefore, the questionnaire (see Appendix B) was divided into three parts and each part was treated as a single instrument.

The reliability of the first part of the questionnaire, on manager position choice (Part II, question 1, p. 215), was not tested using Cronbach's coefficient alpha. This test was not needed because a true measure of that choice was available for managers who had filed comment letters on the ED. Therefore, comparisons could be made between the positions stated by managers in the questionnaire and in comment letters (the true measures). The results of these comparisons are reported separately in Section 5.4.

A coefficient alpha of .82 was computed on the items in the second part of the questionnaire which pertained to manager perceptions of the FASB (Part I, pp. 211-214, and Part II, questions 2 and 3, p. 216). This alpha provides evidence that the measures obtained for these variables are reliable.[1]

Finally, an alpha of .14 was computed on the items in the third part of the questionnaire which pertained to manager expectations of the contracting and monitoring costs associated with the ED (Part II, question 4, p. 217). This low alpha suggests that the measures obtained for these variables are not reliable. However, it may also reflect the limited number of items (six) on manager cost expectations. Nunnally noted that the computed reliability of a questionnaire is a "direct function" of the number of items in that questionnaire.[2]

Further, the low alpha may reflect assymetry in the questionnaire on manager cost expectations. For example, managers who expect to incur high administrative compliance costs due to the adoption of a new accounting standard may not also expect to incur high debt costs. In this case, Cronbach's coefficient alpha, which relies on a symmetric instrument, may not be provide a good assessment of reliability.

Unreliability in measures of manager cost expectations would reduce the power of this study. Significant relationships between variables in an analysis (multivariate or univariate) are less likely

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[1]Nunnally (1967, p. 9) suggests that, "In the early stages of research on predictor tests or hypothesized measures of a construct,... reliability of .60 or .50 will suffice."

[2]See Nunnally (1967), p. 206.

to be found if the measures obtained for those variables are unreliable. Therefore, the power of analyses on manager lobby behavior and from tests of construct validity, which include manager cost expectations, may be weakened.

5.3 Construct Validity

In Chapter 3, a manager's position and participation choice were hypothesized to be related to several explanatory variables. These variables included contracting and monitoring costs associated with a proposed change in accounting, corporate attributes, and manager perceptions of the FASB. The inclusion of corporate attributes in the set of explanatory variables was predicated on the assertion that these attributes may be related to the magnitude of the costs associated with a change in accounting.

Five contracting and monitoring costs were hypothesized to be related to manager position and participation choice. These costs included (1) political, (2) labor, (3) debt, (4) administrative compliance, and (5) management compensation costs. In addition, four manager perceptions of the FASB were hypothesized to affect manager participation choice. These perceptions included (1) the probability of influencing the policy outcome, (2) the costs associated with a change in the accounting standard-setting body (LRPV), (3) the probability of affecting the FASB's continuance by filing a comment letter, and (4) the cost of filing a comment letter.

Stated manager cost expectations and corporate attributes were offered as proxies for contracting and monitoring cost constructs.

Additionally, a manager's general perceptions, and ED-specific perceptions were offered as proxies for constructs on manager perceptions of the FASB. The measures obtained for each of the constructs listed above are summarized in Table 5A.

As shown in Table 5A, separate manager expectation proxies were not offered for political and labor costs. Further, separate corporate attribute proxies were not offered for political and administrative compliance costs, and no corporate attribute measure was offered for management compensation costs.[3] Finally, separate ED-specific proxies were not offered for the cost of a change in the accounting standard-setting body and the probability of affecting the FASB's continuance. However, two general proxies were offered for the cost of a change in the accounting standard-setting body.

A construct must be measured using at least two proxies if it is to be included in a multimethod-multitrait correlation matrix. Further, if the proxies for two different constructs are highly correlated, they should not be included in the matrix.

A simple correlation matrix was constructed which included each of the proxies listed in Table 5A. This matrix was used to examine correlations between proxies and to select those proxies (and constructs) to be included in the multimethod-multitrait correlation matrix.

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[3]This represents a limitation in the study. The empirical model used for testing is underspecified. See Chapter 7 for further discussion.

TABLE 5A

CONSTRUCT MEASURES

Contracting and Monitoring Costs:

Construct	Proxies	
	Manager Expectations	Corporate Attributes[a]
Political costs	Public relations costs	Sales, assets
Labor costs	Public relations costs	No. of employees, employees per sales
Administrative compliance costs	Administrative compliance and internal management	Sales, assets
Debt costs	Debt costs	Debt/equity ratio
Management costs	Management compensation costs	----------

Manager Perceptions of the FASB:

Construct	Proxies	
	General Perception	Perception on ED
Probability of influence	"FASB nonresponsive to corporate constituents" (Question 4, p. 212)	"Could not influence outcome on ED" (Question 2, p. 216)
Cost of change in standard-setting body	Contributions to FAF (Question 1, p. 211) Cost of shift to government sector (Question 6, p. 213)	"Filed to support the FASB" (Question 2, p. 216)
Probability of affecting FASB's continuance	"Probability of affecting the FASB's continuance" (Question 2, p. 211)	"Filed on ED to support FASB" (Question 2, p. 216)
Costs of filing a comment letter	"Too costly to file" (Question 4, p. 212)	"Costs of filing too high to file on ED" (Question 2, p. 216)

[a]In addition, pension plan status was offered as a proxy for the ED's effect on corporate financial statements and on each of the contracting and monitoring costs.

5.3.1 The Simple Correlation Matrix

The matrix in Table 5B includes the simple correlations computed between the proxies offered for the each construct examined in this study. These correlations were computed on a sample which included only those subjects for whom all data was available. Data would have been better utilized by computing individual correlations separately for each combination of proxies. Using this latter technique, only data for the two proxies being correlated would be used in each computation. Therefore, the sample sizes would have been larger. However, the number of cases included in each computation would vary making comparisons between the correlations uninterpretable. The analysis of construct validity relies on comparisons between correlation coefficients. Therefore, the correlations were computed for a single sample of 70 managers. These correlations are shown in Table 5B and are discussed here.

Contracting and Monitoring Costs - A preliminary examination of the simple correlation matrix indicated that manager expectations of public relations (PREL), administrative compliance (ADMN), and internal management (INT) costs are highly correlated. The corporate attributes including sales (SALE), assets (ASSE) and number of employees (EMP), are also highly correlated. Furthermore, when compared to their relationships to other variables in the matrix, relatively higher correlations were computed between those manager cost expectation proxies (PREL, ADMN, INT) and corporate attribute proxies (SALE, ASSE, EMP). These findings suggest that these six

TABLE 5B

SIMPLE CORRELATION MATRIX[a]
(70 cases)

	SALE	EMP	ASSE	EM/S	PREL	ADMN	INT	D/E	PLAN	DEBT	MGMT	FAF	GOV	LRPV	PRLR	LCI	LCII	PRI
SALE																		
EMP	.859																	
ASSE	.771	.629																
EM/S	-.142	-.042	-.098															
PREL	.326	.356	.195	.005														
ADMN	.465	.505	.349	-.005	.864													
INT	.314	.322	.167	-.010	.956	.869												
D/E	.084	.096	.596	.006	.167	.215	.135											
PLAN	.050	.045	.164	.659	.205	.240	.170	.278										
DEBT	-.024	.006	.108	.370	-.021	-.046	-.030	.099	.391									
MGMT	-.095	-.113	-.098	.096	-.040	-.005	.018	-.057	.121	-.038								
FAF	.191	.210	.163	-.138	.132	.159	.126	.121	-.086	.096	.046							
GOV	-.057	-.047	-.011	-.034	-.030	.112	.006	.028	.014	-.046	-.030	.029						
LRPV	.096	.282	.087	-.026	.002	.148	-.018	.152	.049	-.030	-.073	.148	.114					
PRLR	-.012	-.061	-.057	-.143	-.039	.036	-.004	.014	-.014	-.024	.059	-.061	-.055	-.020				
LCI	.132	-.075	-.180	.283	-.073	-.057	.008	-.146	.055	-.050	.463	-.187	.005	-.115	.087			
LCII	-.136	-.091	-.168	.215	-.070	-.077	-.020	-.125	.116	-.055	.673	.038	.040	-.056	-.056	.305		
PRI	-.150	-.118	-.187	-.048	-.043	-.135	-.074	-.107	-.215	-.055	-.109	-.051	-.051	-.126	-.066	-.119	-.083	
PRII	.125	-.162	-.181	.192	-.075	-.093	.010	-.042	.024	-.055	-.090	-.175	-.082	-.127	.017	.183	-.046	.210

FACTORS

SALE	Total sales	INT	Expected internal management costs	GOV	Effect of shift to government.
EMP	Number of employees	D/E	Debt/Equity ratio	LRPV	Filed to support the FASB
ASSE	Total assets	PLAN	Pension obligations/pension assets ratio	PRLR	Probability of affecting FASB's continuance
EM/S	Employees/sales ratio	DEBT	Expected debt costs	LCI	General costs of lobbying ED
PREL	Expected public relations costs	MGMT	Expected effect on management compensation	LCII	Specific costs of lobbying
ADM	Expected administrative compliance costs	FAF	FAF contributions (0/1)	PRI	General probability of influencing FASB
				PRII	Probability of influencing ED outcome

[a]Correlation coefficients between two proxies for the same construct which were included in the multimethod-multitrait correlation matrix are underlined.

proxies measure the same construct rather than three separate constructs.

Due to the high correlations between these proxies, only one manager expectation and one corporate attribute proxy was used for purposes of the construct validity assessment. Manager expectations of administrative compliance costs (ADMN) and the firm's number of employees (EMP) were included in the multimethod-multitrait correlation matrix.[4]

The firm's debt/equity ratio (D/E) was not significantly correlated with manager expectations of debt costs (DEBT). However, a significant correlation was found between pension plan status (PLAN) and manager expectations of debt costs (DEBT). These correlations suggest that expected debt costs may be more significantly related to pension plan status than to a company's leverage position. Therefore, pension plan status was included in the multimethod-multitrait matrix as the corporate attribute proxy for the debt cost construct.

Manager Perceptions of the FASB - In general, significant correlations were not found between proxies for manager perceptions of the FASB. Only the two proxies for costs of filing (LCI and LCII) were significantly correlated (r=.305). These two proxies were included in the multimethod-multitrait correlation matrix with the two proxies for probability of influencing the policy outcome (PRI and PRII). Two general proxies (FAF and GOV) were included in the multimethod-multitrait correlation matrix for costs of a change in the

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[4]These proxies were selected because they were more highly intercorrelated than the other manager expectation and corporate attribute proxies of this single construct.

accounting standard-setting body.[5] Finally, because two unique proxies were not obtained for the probability of affecting the FASB's continuance, this construct was omitted from the multimethod-multitrait correlation matrix.

Unhypothesized Correlations - High correlations were found between several proxies which were not expected to be correlated. Manager expectations of management compensation costs (MGMT) were highly correlated with the costs of filing (LCI and LCII), and corporate assets (ASSE) were highly correlated with debt/equity ratios (D/E). Finally, labor intensity (EM/S) and pension plan status (PLAN) were highly correlated.

The correlations between costs of filing and management compensation costs may reflect biases in measures obtained for the MGMT proxy. Zeros were reported by many managers on expected management compensation costs. These zeros may reflect bias in the questionnaire on this measure. Managers were asked if a decrease in reported income would result in a decrease in management compensation. However, the effect of an increase in reported income on management compensation was not addressed.[6] Therefore, many managers who expected an increase in reported income due to the ED's adoption, and an increase in management compensation, may have reported a zero effect. In this case, the correlations found between management

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[5]These proxies were selected because they represented the only unique proxies for costs associated with a change in the accounting standard- setting body.

[6]This represents a limitation in the measurement of expected management compensation costs.

compensation costs and other proxies in the correlation matrix may reflect bias in the data.

The correlation between corporate assets (a firm size proxy) and debt/equity (a firm leverage proxy) suggests that large firms are likely to be highly leveraged. However, a high correlation was not found between sales (another firm size proxy) and debt/equity. Given these contradictory findings, the correlation between the proxies - assets and debt/equity - may not be generalized to the constructs - firm size and leverage.

Finally, the correlation between labor intensity and pension plan status suggests that the pension plan of a company that is labor intensive is likely to be in a less favorable position than the pension plan of a company that is not. In this case, a company that is labor intensive may be more likely to incur increased debt costs than a non-labor intensive company. Therefore, with a change in pension accounting, the high correlation between labor intensity (E/S) and expected debt costs (DEBT) is consistent with this explanation.

5.3.2 The Multimethod-Multitrait Correlation Matrix

The multimethod-multitrait correlation matrix used in this study to assess construct validity is shown in Table 5C. That table includes two proxies for each of five constructs, including (1) expected political, labor, and administrative compliance costs; (2) expected debt costs; (3) the probability of influencing the policy

TABLE 5C

MULTIMETHOD-MULTITRAIT CORRELATION MATRIX[a]
(70 cases)

	Method I					Method II			
Traits	EMP	PLAN	FAF	LCI	PRI	ADMN	DEBT	GOV	LCII
EMP									
PLAN	.045								
FAF	.210	-.086							
LCI	-.075	.055	-.187						
PRI	-.118	-.215	-.051	-.119					
ADMN	.505	.240	.159	-.057	-.135				
DEBT	.006	.391	.096	-.050	-.055	-.046			
GOV	-.047	.014	.029	.005	-.051	.112	-.046		
LCII	-.091	.116	.038	.305	-.083	-.077	-.055	.040	
PRII	-.162	.024	-.175	.183	.210	-.093	-.055	-.082	-.046

Construct (Trait)	Measurement Method I	Measurement Method II
Political, labor and administrative compliance costs	Corporate attribute: Number of employees (EMP)	Manager cost expectation: Administrative compliance costs (ADMN)
Debt costs	Corporate attribute: Pension plan status (PLAN)	Manager cost expectation: Debt costs (DEBT)
Probability of influence	General perception: (PRI)	ED specific perception: (PRII)
Cost of change in standard-setting body	General perception: Contributions to (FAF)	General perception: Cost of shift to government sector (GOV)
Costs of filing a comment letter	General perception: (LCI)	ED specific perception: (LCII)

[a]Circled correlations used to assess convergent validity. Underlined correlations are significantly different than zero at .05.

outcome; (4) costs of a change in the accounting standard-setting body; and (5) costs of lobbying.[7]

The correlations between the two proxies for expected political, labor, and administrative compliance costs (ASSE and ADMN), expected debt costs (PLAN and DEBT), and costs of lobbying (LCI and LCII) were significantly different than zero. However, the correlations between the two proxies for the probability of influencing the policy outcome (PRI and PRII) and the costs associated with a change in the accounting standard-setting body (FAF and GOV) were not significant.

Significant correlations on the proxies for the first three constructs suggest that these proxies measure what they are intended to measure. Stated otherwise, these proxies demonstrate convergent validity. To determine if they measure only the constructs they are intended to measure, a further examination of the multimethod-multitrait correlation matrix was made to assess discriminant validity.

The insignificant correlations between the proxies for the last two constructs suggest that these proxies may not have convergent validity. A proxy that does not have convergent validity cannot have construct validity. Therefore, an assessment was not made for the discriminant validity of these proxies.[8]

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[7]The method I measures in the multimethod-multitrait matrix represent a mix of measurement methods (corporate attributes and questionnaire - part I data). There is no evidence available to suggest that this method mix should limit the inferences to be made from the analysis of construct validity. See Campbell and Fiske (1959).

[8]When two proxies for the same construct are not significantly correlated, the probability of finding discriminant validity is lessened. However, even if discriminant validity is demonstrated, the measure cannot be said to have construct validity.

Discriminant validity is demonstrated if the correlation between two proxies for the same construct (the validity coefficient) is higher than their correlations with proxies for other constructs. No correlations were reported in the multimethod-multitrait correlation matrix which were higher than the validity coefficients for these proxies. Therefore, the proxies for political, labor and administrative compliance costs, debt costs and costs of lobbying demonstrate discriminant as well as convergent validity.[9]

5.3.3 Discussion of Results

The correlations between corporate attributes and manager expectations of the political, labor and administrative compliance costs and debt costs associated with the ED provide support for the use of these corporate attributes to proxy for contracting and monitoring costs. However, proxies with discriminant validity were not identified specifically for political, labor or administrative compliance costs. Therefore, the findings do not provide evidence to specifically support the firm size/political cost, labor intensity/labor cost, or firm size/administrative compliance cost hypotheses. Further, the evidence indicates that political, labor, and administrative compliance costs associated with the ED may represent a single construct. This reduces inferences that can be made about each of these specific costs from the probit analyses used

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[9]There is a second test which may be made to assess discriminant validity using the multimethod-multitrait correlation matrix. However, that test is predicated on the convergent validity of each proxy included in the matrix. Since two sets of proxies did not demonstrate convergent validity, the second test for discriminant validity was not made.

in this study. However, univariate analyses on manager cost expectations may provide evidence about the individual relationships between public relations costs or administrative compliance costs, and manager position and participation choice on the ED.

The correlations between the two methods of measuring manager perceptions of the probability of influencing policy outcome, and the costs of a change in the accounting standard-setting body suggest that these proxies do not have convergent validity. Stated otherwise, the proxies offered for manager perceptions of the FASB are not consistent with the underlying theory. Therefore, inferences made from the findings on these proxies may not be generalizable to the constructs they are intended to measure.

To summarize, the correlations reported in the multimethod-multitrait matrix provide support for the construct validity of the proxies obtained for the two corporate cost constructs, and for manager perceptions of lobby costs. However, the proxies provided for manager perceptions of the probability of influencing the policy outcome, and for the costs of a change in the accounting standard-setting body do not demonstrate construct validity.

5.4 Reliability and Validity of Dependent Variables

A "true" measure of participation choice was obtained by examining the FASB's list of comment letter filers on the ED. Therefore, by definition, the measures of participation choice are both reliable and valid.

The measures obtained from the questionnaire for manager position choice are not "true" measures. Therefore, the reliability and validity of the measures obtained for position choice were tested by comparing those measures with the positions stated by managers in comment letters.

A manager may not have incentive to honestly report his position on the ED in a questionnaire. In this case, the measures obtained from the questionnaire for manager position choice may not be reliable or valid. Stated otherwise, they may not provide consistent (reliable) measures of the variable they are intended to measure (validity).

The McNemar test for significance of changes was used to assess the reliability and validity of the position choice measures obtained for this study. The overall positions of 29 companies, represented by comment letters filed on the pension ED, were compared with the managers' positions as stated in the questionnaire.[10] Additionally, the comment letters were examined to determine the positions of the 29 corporate managers on the five subissues discussed in Chapter 4 (standardization of actuarial cost methods, balance sheet presentations, determination of discount rates, valuation of plan assets, and footnote disclosures). All managers did not discuss each ED issue in their comment letters. Therefore, the sample provided from the examination of subissues included only 80 comparisons.[11]

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[10]Two of the 31 questionnaire respondents who had filed comments did not clearly state an overall position on the ED in their comment letters.

[11]If each manager had addressed every issue, 145 (29X5) comparisons could have been made.

As shown in Table 5D, there was not a significant difference between the positions stated in the questionnaires and comment letters on individual ED issues or on overall position. Four changes on the individual subissues and two changes in overall position (one in each direction) were reported. The changes in positions on the subissues included two changes (one in each direction) on the standardization of actuarial costs and one each on the discount rate used to determine the present value of pension obligations, and on the level of disclosures required by the ED. No systematic changes were noted overall or on any one subissue.

These findings indicate that the overall position taken by a manager in the questionnaire was consistent with the corporate position stated in a comment letter. The results reported in Table 5D provide support for the use of questionnaire measures of manager position choice for nonfilers if it is assumed that nonfilers did not have different incentives than filers to respond honestly to the questionnaire, However, it may be argued that managers who did not file comment letters on the ED have less incentive to respond honestly to the questionnaire. Unlike comment letter filers, they have not publicly stated their positions on the ED. Further, it may be argued that managers who did not file may not have researched and evaluated the ED. These managers may have stated a position on the questionnaire which does not reflect an understanding of the pension pronouncement.

In either of these cases, managers who did not file comment letters on the ED may have had different incentives than filers to respond honestly to the questionnaire. Further, the stated position

TABLE 5D

MCNEMAR TEST ON POSITION CODING

Individual Aspects of the ED

Questionnaire

Comment Letter	Support	Oppose	Total
Oppose	3	73	76
Support	3	1	4
Total	6	74	80

Chi-square = .25
(Significance = .70)

Overall Position on the ED

Questionnaire
(based on equal weighting of each aspect)

Comment Letter[a]	Support	Oppose	Total
Oppose	1	26	27
Support	1	1	2
Total	2	27	29

Chi-square = .50
(Significance = .50)

[a]Based on an overall stated position choice.

choices of nonfilers in the questionnaire may be biased and/or unreliable.[12]

5.5 Nonresponse Bias

Because a 100 percent questionnaire response rate was not achieved, the sample used for this study may be subject to nonresponse bias. Therefore, analyses were performed to determine the extent of that bias on the dependent and explanatory variables included in the manager position and participation choice models.

First, comparisons were made between questionnaire respondents and nonrespondents on those variables which could be measured for both groups. These factors included manager participation choice and corporate attributes. Second, comparisons were made between first and second request respondents on each variable in the position and participation choice models.[13] A chi-square statistic was used to test the differences between these groups in terms of the binary position and participation choice variables. Additionally, a Mann-Whitney U test was used to test the differences on the explanatory variables.

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[12]It may also be argued that the position choices stated by managers in a comment letter are biased or unreliable with respect to "true" position. However, the objective of this study is to examine manager position choices as set forth to the FASB.

[13]These comparisons were made on the assertion that second request respondents may be representative of nonrespondents.

5.5.1 Questionnaire Respondents and Nonrespondents

The Dependent Variables - Thirty-one (27%) of the 114 managers who responded to the questionnaire filed comment letters on the ED. Only 23 (11%) of the 186 nonresponding managers had filed comment letters. As shown in Table 5E, the difference between these two groups indicates that the sample of questionnaire respondents included a disproportionately large number of comment letter filers. Firm managers who responded to the questionnaire tended to be the same managers who filed comment letters on the ED.

Further, this study provides statistical evidence that nonfiling managers tended to be more supportive of the ED than filers. As shown in Table 5F, 85 percent of the filing managers opposed the ED while only 57 percent of the nonfilers stated an opposing position in the questionnaire. These results indicate that manager position and participation choices are not statistically independent. Therefore, the sample of questionnaire respondents was probably not representative of the NYSE population in terms of the proportion of ED opposers and supporters. The sample of questionnaire respondents may have included a disproportionately large number of ED opposers.

The findings of this study may not be generalized to the total NYSE population due to the nonresponse bias found on participation choice and inferred on position choice. However, the sample of 114 questionnaire respondents did include a large number of firms (83) that were not represented by comment letters on the ED. The position choices of nonfilers has not been examined in prior research on other accounting issues. Therefore, this study represents an extension, in

TABLE 5E

THE PARTICIPATION CHOICE OF QUESTIONNAIRE RESPONDENTS AND NONRESPONDENTS

	Comment Letter		
	Filer	Nonfiler	Total
Questionnaire Nonrespondent	23 (11%)	163 (89%)	186
Questionnaire Respondent	31 (27%)	83 (73%)	114
Total	54	246	300

Chi-square = 14.72
Level of significance = .01

TABLE 5F

THE STATED POSITIONS OF FILERS AND NONFILERS
(From the sample of questionnaire respondents
and ED filers)

	Opposers	Supporters	Total
Questionnaire Respondents	28	3	31
Nonrespondents	13	4	17[a]
Total Filers	41 (85%)	7 (15%)	48
Questionnaire Respondents	47	36	83
Nonrespondents	0	0	0
Total Nonfilers	47 (57%)	36 (43%)	83
Total	88	43	131

Chi-square = 10.16
Level of significance = .01

[a]The positions taken by six of 23 questionnaire nonrespondents could not be determined from the comment letter filed with the FASB.

terms of generalizability, of prior research on manager position choice.

The Corporate Attribute Explanatory Variables - A relationship between corporate attributes and manager position and participation choice was hypothesized in Chapter 3. Therefore, it may be further hypothesized that the differences found between questionnaire respondents and nonrespondents on participation choice, may also be evident in comparisons of the explanatory variables - corporate attributes.

The comparative statistics for questionnaire respondents and nonrespondents on the corporate attribute explanatory variables is summarized in Table 5G. Group means, standard errors and the two-tailed probability of the Mann-Whitney U tests are provided for each corporate attribute.

The significant differences between questionnaire respondents and nonrespondents on firm size (sales and assets) is consistent with the hypothesis presented in Chapter 3 ($H_{2.1}$). The sample of questionnaire respondents, which included a high proportion of comment letter filers also included a high proportion of large firms. However, the difference between questionnaire respondents and nonrespondents on labor intensity is not consistent with $H_{2.2}$. A high proportion of firms which were not labor intensive were included in the sample of respondents. No explanation is offered for this bias. It may be indicative of an unhypothesized inverse relationship between labor intensity and manager participation choice. If not, it represents a further limitation in the generalizability of the findings.

TABLE 5G

A COMPARISON OF DESCRIPTIVE STATISTICS
ON CORPORATE ATTRIBUTES FOR QUESTIONNAIRE
RESPONDENTS AND NONRESPONDENTS

	Attribute Means		
Variable	Respondents 114 cases[a]	Nonrespondents 186 cases[a]	Mann Whitney Probability
Firm Size			
Sales (000's)	$ 2,993,729 (866,399)	$ 1,978,870 (605,380)	.022
Assets (000's)	$ 3,902,029 (1,125,391)	$ 2,385,495 (820,272)	.011
Labor Intensity			
Number of Employees	15,623 (2,349)	18,312 (4,233)	.910
Employees/ Sales (mils)	10.58 (.95)	22.50 (6.10)	.003
Leverage position			
Debt/Equity	1.86 (.28)	1.37 (.15)	.059
Plan status			
Pension Benefit/Assets	.79 (.03)	.90 (.08)	.166

[a]The standard error is in parentheses.

5.5.2 First and Second Questionnaire Respondents

To provide further data on nonresponse bias, differences between the first and second request respondents were examined. Comparisons could not be made between questionnaire respondents and nonrespondents on those variables which were measured using the questionnaire. Therefore, the only method available to assess the effect of nonresponse bias on these variables was to compare first and second request respondents. This method of assessing nonresponse bias is based on the assertion that later respondents to a questionnaire are representative of nonrespondents. To test this assertion, comparisons were made between first and second request respondents on participation choice and corporate attributes.

The Dependent Variables - As shown in Table 5H, the results do not indicate that there is a difference between first and second request respondents on participation choice. Twenty-nine percent of the first request respondents and 25 percent of second request respondents filed comment letters on the ED. Further, 33 percent of the first request respondents and 37 percent of the second request respondents supported the ED. These findings indicate that the bias found in Section 5.2.1 between questionnaire respondents and nonrespondents on participation choice (and the inferred bias on position choice) are not reflected in a comparison of first and second request respondents.

The Explanatory Variables - Further, as shown in Table 5I differences were not found on firm size. However, a significant difference was found on labor intensity (employees/sales). The

TABLE 5H

THE PARTICIPATION AND POSITION CHOICE OF FIRST AND SECOND QUESTIONNAIRE RESPONDENTS

PARTICIPATION CHOICE

	Comment Letter Filer	Nonfiler	Total
First request Questionnaire Respondents	24 (29%)	60 (71%)	84
Second request Questionnaire Respondents	7 (25%)	23 (75%)	30
Total	31	83	114

Chi-square = .10
Level of significance = .76

POSITION CHOICE

	Exposure Draft Supporter	Opposer	Total
First request Questionnaire Respondent	28 (33%)	56 (67%)	84
Second request Questionnaire Respondent	11 (37%)	19 (63%)	30
Total	39	75	114

Chi-square = .05
Level of significance = .82

TABLE 5I

A COMPARISON OF DESCRIPTIVE STATISTICS
FOR FIRST AND SECOND REQUEST QUESTIONNAIRE RESPONDENTS

	Group Means[a] 1st Request (84 cases)	2nd Request (30 cases)	Mann-Whitney Probability
Corporate Attributes:			
Sales (000's)	$ 3,209,011 (1,157,107)	$ 2,408,433 (715,595)	.990
Assets (000's)	$ 4,193,783 (1,510,546)	$ 3,130,296 (054,923)	.639
Number of Employees	15,345 (2,349)	16,405 (4,233)	.211
Debt/Equity	1.71 (.26)	2.25 (.74)	.723
Employees/ Sales (mils)	9.80 (1.16)	12.70 (1.55)	.034
Pension Benefit/Assets	.77 (.03)	.85 (.06)	.367
Manager Cost Expectations[b]:			
Administrative Compliance	$ 41,850 (11,550)	$ 38,060 (17,170)	.235
Public relations	$ 26,700 (15,360)	$ 6,800 (3,450)	.779
Internal management	$143,060 (117,840)	$ 9,500 (3,770)	.296
Debt covenant	$ 1,920 (880)	$333,470 (333,290)	.980
Mgmt compensation (% change)	.30% (.10)	.29% (.17)	.395

[a]The standard error is in parentheses.

[b]Many corporate managers reported zeros for expectations of contracting and monitoring costs. Therefore, the reported means may be misleading in terms of differences. The Mann-Whitney U test is robust with respect to these nonnormal distributions.

TABLE 5I (cont'd)

	Group Means[a] 1st Request (84 cases)	2nd Request (30 cases)	Mann-Whitney Probability
Long Run Participation Value:			
FAF contributions ($000's)	6.81 (3.68)	1.24 (.39)	.901
Shift to government	25.17 (12.61)	21.99 (5.20)	.052
Pr(affecting FASB continuance)	9.80 (2.22)	7.50 (2.93)	.980
Filed to support FASB	3.99 (1.40)	7.23 (3.65)	.599
Pr of influencing policy outcome[b]:			
FASB is not responsive (Pt I)	8.83 (2.46)	20.31 (6.76)	.378
Would not (Pt II) help to file	16.90 (3.63)	12.65 (5.46)	.941
Costs of filing a comment letter[b]:			
Too costly to file (Pt I)	20.58 (5.46)	19.53 (6.42)	.912
Did not file due to costs (Pt II)	11.17 (2.81)	18.45 (6.36)	.704

[a]The standard error is in parentheses.

[b]Total of a 100 point allocation.

difference between first and second request respondents on labor intensity is consistent with the difference found between questionnaire respondents and nonrespondents. The employees/sales of first request respondents (9.80) was less than that of second request respondents (12.70) which was also less than that of nonrespondents (22.50).

A further examination of Table 5I indicates that first request respondents differed (at the .052 confidence level) on their perceptions of the cost of a shift in accounting standard-setting to the government sector. This difference may reflect the wording of the cover letter accompanying the second request. The cover letter suggested that the enclosed questionnaire offered "... an important opportunity to express the views of your company on the FASB...". This wording may have biased the response on the second mailing to include those managers who have more negative views of the FASB. Alternatively, the difference may reflect nonresponse bias. Corporate managers who were more concerned about a shift in accounting standard-setting to the government sector may have been more likely to respond to the questionnaire. In either case, this bias further reduces the generalizability of the findings from this study.

5.5.3 Discussion of Results

The comparison of questionnaire respondents and nonrespondents provides evidence that the sample used in this study is biased to include a large proportion of ED filers. Further, the findings suggest that the sample may include a large proportion of ED opposers. These biases limit the generalizability of this study's findings.

However, the sample of respondents is more representative of the NYSE population than samples used in prior studies of manager position choice. Those studies included only observations about filing managers and their companies.

The biases found on the corporate attribute variables may reflect relationships between these variables and manager participation or position choice. Stated otherwise, they may simply be further indications of nonresponse bias on the dependent variables.

Finally, manager position and participation choices on the ED were not independent. Therefore, separate analyses of position choice were performed in this study for ED filers and nonfilers. Further, separate analyses of participation choice were performed for ED opposers and supporters.

5.6 Summary

Measures obtained from a questionnaire are not reliable if they are not interpreted consistently across respondents. Further, measures are not valid if they do not measure the construct they are intended to measure and only that. When measures are unreliable, the power of a study is reduced. When measures are invalid, inferences may not be made from the findings (which include those measures) about the constructs which were intended to be measured. The reliability and validity of the measures used in this study were assessed using Cronbach's coefficient alpha and Campbell and Fiske's multimethod-multitrait correlation matrix, respectively. The results of these tests on reliability and validity are summarized in Table 5J.

TABLE 5J

SUMMARY OF RESULTS ON RELIABILITY AND VALIDITY

Variable	Reliability	Validity
Participation Choice	Assumed[a]	Assumed[a]
Position Choice	Yes[b]	Yes[b]
Manager Cost Expectations	No	Yes[c]
Corporate Attributes	Assumed	Yes[c]
Manager Perceptions of the FASB	Yes	No[d]

[a]A true measure of participation choice was obtained. Therefore, by definition, it is reliable and valid.

[b]Significant differences were not found between the position choices stated by ED filers in the questionnaire and in comment letters.

[c]Public relations/administrative compliance costs, and debt costs demonstrated construct validity with firm size and pension plan status, respectively.

[d]Only costs of filing demonstrated construct validity.

As shown in Table 5J, a true measure of manager participation choice was obtained. Therefore, this measure is, by definition both reliable and valid. Further, the questionnaire measures of manager position choice, which were compared with positions stated in comment letters, demonstrated reliability and validity. However, only the reliability and validity of the measures obtained for filing managers could be examined.

The measures obtained for manager cost expectations did not demonstrate reliability. Further, an examination of the data on management compensation costs indicates bias for that measure. However, public relations and administrative compliance costs, and debt costs demonstrated construct validity. These manager expectations were found to be significantly correlated with corporate attributes - firm size, and pension plan status - intended to measure the same corporate contracting and monitoring costs.

The questionnaire measures for manager perceptions of the FASB demonstrated reliability. However, only the two proxies for 'costs of filing' demonstrated construct validity.

A lack of reliability on manager position choice or manager cost expectations would reduce the power of the study to find relationships that do, in fact, exist. A lack of construct validity on manager perceptions limits the generalizability of the results on these proxies. Further, the lack of construct validity may reduce the power of the study.

Finally, the sample used in this study was tested for nonresponse bias. Sixty-two percent of the managers included in the random sample of 300 NYSE firms did not respond to the questionnaire. Therefore,

the final sample was self-selected, and it may not be representative of the population. Evidence of nonresponse bias was found on manager participation choice and on corporate attributes for firm size and labor intensity. The sample of questionnaire respondents included a high proportion of ED filers representing large firms which were not labor intensive. Nonresponse bias on the questionnaire limits the generalizability of the inferences made from this study.

The results of the analyses on manager position and participation choice models are discussed in Chapter 6. Separate analyses of participation choice were performed for ED opposers and supporters, and of position choice for ED filers and nonfilers.

Chapter 6

ANALYSIS OF RESULTS

6.1 Introduction

The analyses of measurement reliability and construct validity were discussed in Chapter 5. Further, sample biases associated with questionnaire nonresponse were discussed. The models of manager position and participation choice, which included the measures and the sample discussed in Chapter 5, are addressed in the present chapter. Multivariate probit analyses, as discussed in Chapter 4, were used to test the overall models in this study. Additionally, univariate Mann-Whitney U tests were used to examine the difference in rankings between managers on the explanatory variables hypothesized to affect manager position and participation choices.

Evidence from this study suggests that the position and participation choices of an individual manager on the pension Exposure Draft (ED) were not independent (as shown in Table 5F). Therefore, the sample was partitioned so that the position choice of a manager could be analyzed given his participation choice. Further, the participation choice of a manager could be analyzed given his position choice.

The participation choices of each of the managers of the 300 firms included in the original sample were found by examining the list of comment letter filers provided by the FASB. However, the position choices of only 131 of those managers were determinable from comment

letters or responses to the questionnaire. This sample of 131 firms was divided into four groups based on the manager's position and participation choices. As shown in Table 6A, Group I included 7 ED supporter/filers, group II included 36 ED supporter/nonfilers; group III included 41 opposer/filers, and group IV included 47 opposer/nonfilers.

Additional sample reductions from 131 were required because of missing data on the explanatory variables. Two techniques were considered for handling this missing data. First, mean substitution was considered. In this case, any independent variable that is missing is replaced by the mean average of that variable. Alternatively, when there is missing data, the entire case may be excluded from the analysis. Mean substitution has the possible effect of distorting the results of a probit analysis. By excluding the entire case, this possibility is reduced. However, it also reduces the power of the analysis because the sample size is reduced.

To avoid distortion of the results, mean substitution was <u>not</u> used in this study to handle missing data. Instead, when missing data was encountered, the case was excluded from the probit analysis. To avoid further reductions in sample size, a case which was excluded from one analysis was not automatically excluded from every other analysis. Therefore, sample sizes were not consistent throughout the study. Further, each sample did not include all of the same cases. The effect of these case exclusions on the various sample sizes in this study are reported in Table 6B. These variations in sample size limit the inferences which may be made from <u>comparisons</u> between these

TABLE 6A

PARTITIONING OF CORPORATE MANAGER POSITION AND PARTICIPATION CHOICES[a]

Position Choice	Participation Choice: Filers	Participation Choice: Nonfilers
	Group I	Group II
Supporters	7 (3)	36 (36)
	Group III	Group IV
Opposers	41 (28)	47 (47)

[a]The number of questionnaire respondents is in parentheses.

TABLE 6B

SUMMARY OF SAMPLE REDUCTIONS

	Filer/Supporter			Nonfiler/Supporter		
	COR	EXP	PER	COR	EXP	PER
Positions stated[a]	7	7	7	36	36	36
Reductions:						
Common	(0)	(4)	(4)	(0)	(1)	(1)
Unique	(1)	(0)	(0)	(3)	(0)	(0)
COR, EXP, PER[b]	6	3	3	33	35	35
PER reduction[c]	(4)	(0)		(1)	(0)	
COR/PER, EXP/PER[d]	2	3		32	35	

	Filer/Opposer			Nonfiler/Opposer		
	COR	EXP	PER	COR	EXP	PER
Positions stated[a]	41	41	41	47	47	47
Reductions:						
Common	(0)	(9)	(9)	(0)	(1)	(1)
Unique	(4)	(4)	(8)	(6)	(4)	(5)
COR, EXP, PER[b]	37	28	24	41	42	41
PER reduction[c]	(17)	(8)		(6)	(5)	
COR/PER, EXP/PER[d]	20	20		35	37	

[a]See Table 6A. COR denotes corporate attributes. EXP denotes manager cost expectations. PER denotes manager perceptions of the FASB.

[b]Sample size for position and truncated participation choice model.

[c]Sample reduction for manager perceptions to be included in total corporate attribute/manager perceptions or total manager expectations/manager perceptions models (which include FAF).

[d]Sample size for total models as described in (c).

analyses. Three types of models were analyzed on manager position and participation choice. These models are described below.

First, models of position and participation choice which included only corporate attributes as explanatory variables were tested. Separate analyses of position choice were performed on the samples of comment letter filers and nonfilers. In addition, analyses of participation choice were performed separately on the samples of ED opposers and supporters, and on the sample taken as a whole.

Prior researchers have not obtained position choice data for nonfilers. Therefore, only the position choices of filers have been examined. Further, the position choices of managers have not been considered in prior studies which examined models of participation choice. The analysis of position choice on comment letter filers, and the analysis of participation choice on the sample taken as a whole provide replications of these prior research efforts. The analysis of position choice on nonfilers and the separate analyses of participation choice on ED opposers and supporters provide an extention of prior research.

Second, models of position and participation choice, which included only manager cost expectations as explanatory variables, were tested.[1] Analyses for the position choice of nonfilers and for the participation choice of ED opposers were performed separately.[2]

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[1]Manager cost expectations included public relations (political and labor), administrative compliance, debt, and management compensation costs.

[2]An analysis was not performed for the total sample using manager cost expectations. The total sample was analyzed for corporate attributes only to provide a replication of prior research efforts which did not provide controls for manager position choice.

Analyses for position choice of comment letter filers and for participation choice of ED supporters were not performed because a representative sample of ED supporter/filers was not available for these analyses. Four of the ED supporter/filers in Group I of Table 6A, and 13 of the ED opposer/filers in Group III did not respond to the questionnaire. Therefore, manager cost expectations were determinable only for three ED supporter/filers and 28 opposer/filers. The sample of three ED supporters would be compared with 28 opposers in an analysis of position choice for comment letter filers. Additionally, the sample of three ED filers would be compared with 36 nonfilers in the analysis of participation choice for ED supporters. However, the sample of three supporter/filers may not be representative of that group's population.[3] Therefore, generalizable evidence could not be drawn from analyses which included that sample.

Finally, models of participation choice which included manager perceptions of the FASB as explanatory variables were tested. Three models were examined for ED opposers. These models included the following explanatory variables: (1) manager perceptions of the FASB only; (2) corporate attributes and manager perceptions of the FASB; and (3) manager cost expectations and perceptions of the FASB.[4] Analyses for the participation choice of ED supporters was not performed due to the small sample of ED supporter/ filers discussed above.

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[3]When a representative sample is not obtained for an analysis, statistical inferences may not be drawn from that analysis.

[4]Several analyses were performed using corporate attributes, manager cost expectations, and manager perceptions of the FASB. The results of these analyses were ambiguous due to the very small samples and the large number of explanatory variables.

6.2 Corporate Attribute Models

In Chapter 3, a manager's position and participation choices on the ED were hypothesized to be a function of corporate contracting and monitoring costs associated with the ED. Further, it was asserted that these costs are related to corporate attributes. Therefore, corporate attributes may be used to proxy for contracting and monitoring costs. Specifically, firm size (f_1), labor intensity (f_2), leverage position (f_3), and pension plan status (f_4) were offered as proxies for contracting and monitoring costs.

To test the relationship between corporate attributes and manager position (D_i) and participation choice (V_i), the following empirical corporate attribute models were analyzed.

$$D_i = \alpha + ß_1 f_1 + ß_2 f_2 + ß_3 f_3 + ß_4 f_4 \qquad (6.2.1)$$

$$V_i = \alpha + ß_1 f_1 + ß_2 f_2 + ß_3 f_3 + ß_4 f_4 \qquad (6.2.2)$$

As discussed in Chapter 5, three corporate attribute measures - total sales, book value of assets, and number of employees - were found to be highly correlated. Therefore, due to the problems associated with multicollinearity in multivariate analyses, these measures were not all included in the same analysis.[5] Separate analyses, which included

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[5]Multicollinearity refers to the correlation between two explanatory variables which are included in the same analysis. When highly correlated variables are included in a multivariate analysis the power of that analysis is reduced.

each of these measures, were run in order to determine which measure was more predictive of manager position and/or participation choice.

The results from the analyses of manager position and participation choice are discussed in Sections 6.2.1 and 6.2.2, respectively. These results indicate that the model described in equation 6.2.1 provided a good predictor of a nonfiling manager's position choice. However, the model did not provide a good predictor of a filing manager's position choice. The model described in equation 6.2.2 provided a good predictor of manager participation choice for each group of managers.

6.2.1 Position Choice

In Chapter 3, it was asserted that the nature of the corporate costs associated with the ED may depend, in part, on the ED's effect on reported pension expense and liabilities. Pension plan status (obligations/assets) was offered as a proxy for this effect. A company with an overfunded pension plan (obligations/asset ratio less than one) was expected to report reduced pension expense. Increased political and labor costs, and decreased debt and management compensation costs were associated with a decrease in reported pension expense. Alternatively, a company with an underfunded pension plan (obligations/asset ratio greater than one) was expected to report increased pension expense. Decreased political and labor costs, and increased debt and management compensation costs were associated with an increase in reported pension expense. Firm size, labor intensity, and leverage were offered as proxies for political, labor, and debt

costs, respectively.[6] Therefore, it was hypothesized that a manager's position on the ED would be related to the interactive effects of pension plan status with firm size, labor intensity, and leverage.

An underfunded pension plan (per SFAS 36 disclosures) was not reported by any of the 300 companies included in this study. Therefore, the hypothesized relationships between manager position choice and each corporate attribute were based on the assumption that every company would report decreased pension expense due to the ED's adoption. Further, the effects of firm size, labor intensity, leverage and pension plan status were examined separately, rather than with interaction effects. The following statistical hypotheses on manager position choice were derived from equation 6.2.1. (See hypotheses 1.0, and 1.6 through 1.8 in Section 3.6.1 for further discussion.)

$H_{1.0}$: The model described in equation 6.2.1 may be used to describe a manager's position choice on the ED. This predictive ability will be evidenced by a significant chi-square on the probit analysis.[7]

$\chi^2 > 0$ $\quad$ H_0: $\chi^2 = 0$

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[6]However, as shown in Table 5C, pension plan status was highly correlated with manager expectations of debt costs. A high correlation was not found between leverage (debt/equity) and debt costs.

[7]The chi-square statistic used in the probit analyses is based on a market-share test wherein a constant is estimated for the null hypothesis that will replicate the observed proportion of ED opposers/supporters. This is more stringent than a naive 50/50 proportion assumption.

$H_{1.1}$: A manager's position choice on the ED (D_i) is inversely related to firm size (f_1).

$\beta_1 < 0$ H_0: $\beta_1 = 0$

$H_{1.3}$: A manager's position choice on the ED (D_i) is inversely related to labor intensity (f_2).

$\beta_2 < 0$ H_0: $\beta_2 = 0$

$H_{1.3}$: A manager's position choice on the ED (D_i) is positively related to leverage position (f_3).

$\beta_3 > 0$ H_0: $\beta_3 = 0$

$H_{1.4}$: A manager's position choice on the ED (D_i) is positively related to pension plan status (f_4).[8]

$\beta_4 > 0$ H_0: $\beta_4 = 0$

The sample used in this study to test these hypotheses on the position choice of a filing manager included 37 opposers and 6 supporters. Further, the sample used to analyze the position choice of a nonfiling manager included 41 opposers and 33 supporters. (See Table 6B.)

The results of the probit analyses which were performed for ED filers and nonfilers, are summarized in Table 6C and Appendix C. As discussed above, three analyses were run for each sample including

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[8]Every company in the sample had an overfunded pension plan (pension obligations/pension assets < 1). Therefore, as that ratio gets closer to one (larger), the ED's effect is smaller and the manager is more likely to support the ED.

TABLE 6C

PROBIT ANALYSES
CORPORATE ATTRIBUTES AND POSITION CHOICE

Corporate Attribute	Beta Coefficient[ab] Filers	Nonfilers
Constant	.5171	.7630
	(.33)	(.05)
Firm size (Assets)	.0002	-.0023
	(.17)	(.05)
Labor intensity	-.1029	-.0135
	(.11)	(.27)
Leverage	-.4397	-.2025
	(.09)	(.05)
Pension plan status	-.6657	-.3316
	(.30)	(.21)
No. of opposers	6	41
No. of supporters	37	33
Chi-square	6.47	10.10
(Significance)	(.1668)	(.039)
Correctly predicted	88%	57%

[a]A positive relationship was hypothesized between manager position choice and firm leverage and pension plan status. An inverse relationship was hypothesized for firm size, labor intensity.

[b]One-tailed probability of t-statistic in parentheses.

each of three highly correlated corporate attributes used to proxy for firm size. The results from the models which included the book value of assets are presented in Table 6C. This analysis provided the best data fit.

As shown in Table 6C, the position choice model presented in equation 6.2.1 provided a good fit of the data for the position choice of an ED nonfiler (chi-square significant at the .04 level). Fifty-seven percent of manager position choices on the ED were correctly predicted using this model.

As hypothesized ($H_{1.1}$), firm size was significantly and inversely related to manager position choice. However, the coefficient on leverage position, which was statistically significant, was not in the hypothesized direction ($H_{1.3}$). This finding suggests that the nonfiling manager of a highly leveraged firm tended to oppose the ED even though it would require a reduction in reported pension expense. One explanation for this finding is that the manager of a highly leveraged firm may be concerned with the ED's effect on volatility of corporate financial statements. As discussed in Chapter 3, an increase in income and balance sheet volatility is associated with the ED. Therefore, if the manager of a highly leveraged firm is concerned with financial statement volatility, he may oppose the ED.

The model presented in equation 6.2.1 did not provide a good fit for data on the position choice of an ED filer (chi-square significant at the .17 level). Further, none of the beta coefficients on the hypothesized explanatory variables were statistically significant. However, 88 percent of filing manager position choices on the ED were correctly predicted using that model.

This prediction rate does not appear to be consistent with the reported chi-square statistic. One explanation for this finding is that the model used to predict manager position choice was derived from an analysis which included the individual manager whose position was being predicted.[9] Therefore, because the sample used to derive that model was small (37 opposers and 6 supporters), an individual manager's behavior may have significantly affected the outcome of the analysis. In this case, the prediction rate may be overstated. However, the chi-square statistic will provide a better measure of the model's goodness of fit.[10]

The results of the Mann-Whitney U tests are shown in Tables 6D and 6E for filers and nonfilers, respectively. These results are consistent with the findings from the probit analyses.

As discussed in Chapter 2, only two accounting issues have been addressed in prior studies of manager position choice. On the interest capitalization issue, Lasater (1982) found that a logit model provided a good fit for the data. Further, Lasater found that firm leverage (debt/equity) was significant in that model. On the GPLA issue, as in this study, the model of position choice for comment letter filers did not provide a good fit for the data.

One explanation for the inconsistency of these findings is suggested based on a comparison of the sample sizes used in each

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[9]A holdout sample was not used to estimate the model.

[10]Another explanation for the inconsistency of these findings is that the manager position choice models are not consistent between comment letter filers and nonfilers.

TABLE 6D

MANN-WHITNEY U TESTS
CORPORATE ATTRIBUTES AND POSITION CHOICE

ED FILERS

Corporate Attributes	Means		U-test[a]
	Opposers	Supporters	
Firm Size			
Sales (000's)	$ 7,264,070	$18,639,152	.191
Assets (000's)	$11,945,160	$15,011,871	.300
No. of employees	47,824	18,455	.376
Labor Intensity			
Employees/sales (millions)	33.50	4.67	.071
Leverage Position			
Debt/Equity	2.48	1.28	.390
Effect of ED			
Plan status	.72	.67	.242

Number of ED opposers	37
Number of ED supporters	6

[a]One-tailed probability of Mann-Whitney U test.

TABLE 6E

MANN-WHITNEY U TESTS
CORPORATE ATTRIBUTES AND POSITION CHOICE

ED NONFILERS

Corporate Attributes	Means		U-test[a]
	Opposers	Supporters	
Firm Size			
Sales (000's)	$1,691,871	$780,117	.030
Assets (000's)	$1,791,198	$681,759	.016
No of employees	12,168	7,832	.040
Labor Intensity			
Employees/sales (millions)	11.16	11.21	.475
Leverage Position			
Debt/equity	2.13	1.08	.038
Effect of ED			
Plan status	.75	.65	.123
Number of ED supporters		41	
Number of ED opposers		33	

[a]One-tailed probability of Mann-Whitney U test.

study.[11] For example, the study on the interest capitalization issue examined a sample of 129 firm managers. Samples of 34 and 70 were used in the study on GPLA. Finally, the present study examined a sample of 43 comment letter filers. Based on a comparison of these sample sizes, it may be argued that the small samples used to analyze general price level and pension accounting reduced the power of these studies. In this case, the models of position choice may have been correctly specified but the small samples precluded significant findings.

The explanation offered for the inconsistency of the findings on different accounting issues may also apply to the differences found within this study between filers and nonfilers. The sample of nonfilers included 74 managers (41 ED opposers and 33 supporters) as compared to the sample of 43 filers. This larger sample size may have increased the power of the analyses for nonfilers. Future research is needed to examine the position choices of a large sample of filing and nonfiling managers on a single accounting issue. This research would provide evidence about the differences and similarities of the decision models used by each group. The findings from the present study may <u>not</u> be used to draw inferences about these differences and similarities.

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[11]An alternative explanation is that the position choices made by managers are not consistent across different accounting issues.

6.2.2 Participation Choice

The corporate attributes hypothesized in this study to affect manager position choice, were also hypothesized to affect participation choice. It was hypothesized that a manager who opposed the ED because of the corporate costs associated with it, may file a comment letter if those costs are high. Further, a manager who supported the ED may file a comment letter when the corporate costs associated with it are low (as compared to foreseeable alternatives).

The following statistical hypotheses on participation choice were derived from equation 6.2.2. (See hypotheses 2.0, and 2.2 through 2.4 in Section 3.6.2 for further discussion.) Hypotheses 1.1 through 1.4 pertain to the participation choice of a manager who opposed the ED. Hypotheses 1.5 through 1.8 pertain to the participation choice of a manager who supported the ED. Each of these hypotheses are based on the assumption that the ED resulted in a decrease in in reported pension expense.

$H_{1.0}$: The model described in equation 6.2.2 may be used to predict a manager's participation choice on the ED. This predictive ability will be evidenced by a significant chi-square on the probit analysis.

$\chi^2 > 0$ H_0: $\chi^2 = 0$

Hypotheses for ED opposers

$H_{1.1}$: The participation choice (V_i) of an ED opposer is positively

related to firm size (f_1).

$\beta_1 > 0$ H_0: $\beta_1 = 0$

$H_{1.2}$: The participation choice (V_i) of an ED opposer is positively related to labor intensity (f_2).

$\beta_2 > 0$ H_0: $\beta_2 = 0$

$H_{1.3}$: The participation choice (V_i) of an ED opposer is inversely related to firm leverage (f_3).

$\beta_3 < 0$ H_0: $\beta_3 = 0$

$H_{1.4}$: The participation choice (V_i) of an ED opposer is inversely related to pension plan status (f_4).[12]

$\beta_4 < 0$ H_0: $\beta_3 = 0$

Hypotheses for ED Supporters

$H_{1.5}$: The participation choice (V_i) of an ED supporter is inversely related to firm size (f_1).

$\beta_1 < 0$ H_0: $\beta_1 = 0$

$H_{1.6}$: The participation choice (V_i) of an ED supporter is inversely related to labor intensity (f_2).

$\beta_2 < 0$ H_0: $\beta_2 = 0$

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[12]As the pension obligation/pension asset ratio gets closer to one, the ED's effect on financial statements is smaller. Therefore, the manager with a higher ratio is less likely to file a comment letter.

$H_{1.7}$: The participation choice (V_i) of an ED supporter is positively related to firm leverage (f_3).

$$ß_3 > 0 \qquad H_0: \; ß_3 = 0$$

$H_{1.8}$: The participation choice (V_i) of an ED supporter is inversely related to pension plan status (f_4).[13]

$$ß_4 < 0 \qquad H_0: \; ß_4 = 0$$

Analyses of manager participation choice were run on the total sample of 48 comment letter filers and 209 nonfilers to provide a replication of prior research.[14] For the analyses of the total sample, it is asserted that a manager who files a comment letter on the ED is more likely to be an opposer than a manager who does not file. Further, a manager who both opposes and files a comment letter may expect to incur high corporate costs if the ED is adopted. Therefore, hypotheses 1.1 through 1.4 were applied to the analyses of the total sample of 257 managers.

The sample used in this study to test hypotheses 1.0 and 1.1 through 1.4 on the participation choice of an ED opposer included 28 comment letter filers and 41 nonfilers. Finally, the sample used to test hypotheses 1.0 and 1.5 through 1.8 on the participation choice of an ED supporter included 6 filers and 33 nonfilers.

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[13]The relationship between manager participation choice and pension plan status is based on the magnitude of the ED's effect on financial statements. Therefore, the hypothesized relationship is not dependent upon the manager's position choice.

[14]See Zmijewski and Hagerman (1981), Lasater (1982), Kelly (1982, 1985), and Griffin (1982, 1983).

The results of the probit analyses on manager participation choice are summarized in Table 6F and Appendix D. The results of the Mann-Whitney U tests are summarized in Tables 6G, 6H, and 6I for the total sample, ED opposers, and ED supporters, respectively. As discussed earlier, three probit analyses were run for each sample including each of three highly correlated corporate attributes used to proxy for firm size. The results from the models which included the book value of assets are presented in Table 6F.[15]

As shown in Table 6F, the participation choice model presented in equation 6.2.2 provided a good fit of the data in each analysis. Further, 84, 72 and 90 percent of manager participation choices were correctly predicted for the total sample, the sample of ED opposers and the sample of ED supporters, respectively.

Firm size was significantly and positively related to manager participation choice in each of the analyses. This finding provided support for Hypothesis 1.1 on the participation choice of ED opposers. However, a negative relationship was hypothesized between firm size and participation choice for an ED supporter ($H_{1.5}$).

Significant relationships have been found in prior research efforts between manager participation choice and corporate attributes - firm size and leverage.[16] However, prior researchers have not controlled for the position choice of a manager. The findings of this study on the total sample are consistent with those of prior studies.

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[15]The model including assets provided the best fit for the data.

[16]See Zmijewski and Hagerman (1981), Lasater (1982), Kelly (1982, 1985), and Griffin (1982, 1983).

TABLE 6F

PROBIT ANALYSES
CORPORATE ATTRIBUTES AND PARTICIPATION CHOICE

Corporate Attributes	Beta Coefficient[a] Total[b] sample	ED[b] Opposers	ED[c] Supporters
Constant	-1.1601	-.3144	-.9280
	(.00)	(.29)	(.23)
Firm size	.0013	.0022	.0050
	(.00001)	(.001)	(.03)
Labor intensity	-.0030	-.0378	-.0470
	(.15)	(.10)	(.29)
Leverage	-.0191	-.0734	-.4841
	(.35)	(.21)	(.28)
Plan status	-.0320	-.1750	-.1693
	(.47)	(.38)	(.44)
Number of filers	48	37	6
No. of nonfilers	209	41	33
Chi-square	44.61	26.29	16.89
(Significance)	(.0000)	(.0000)	(.0020)
Predicted	84%	72%	90%

[a]One-tailed probability of t-statistic in parentheses.

[b]A positive relationship was hypothesized between participation choice and firm size and labor intensity. An inverse relationship was hypothesized for leverage and pension plan status.

[c]An inverse relationship was hypothesized between participation choice and firm size and labor intensity. A positive relationship was hypothesized for leverage and pension plan status.

TABLE 6G

MANN-WHITNEY U TESTS
CORPORATE ATTRIBUTES AND PARTICIPATION CHOICE

TOTAL SAMPLE

Corporate Attributes	Means		U-test[a]
	Filers	Nonfilers	
Firm Size			
Sales (000's)	$ 1,254,560	$ 8,175,842	.0001
Assets (000's)	$ 1,194,829	$10,998,314	.0001
No. of employees	12,387	42,872	.0001
Labor Intensity			
Employees/sales	16.00	28.16	.0001
Leverage Position			
Debt/equity	1.44	2.22	.0001
Effect of ED			
Plan status	.81	.73	.0001
Number of nonfilers		209	
Number of filers		48	

[a]One-tailed probability of Mann-Whitney U test.

TABLE 6H

MANN-WHITNEY U TESTS
CORPORATE ATTRIBUTES AND PARTICIPATION CHOICE

ED OPPOSERS

Corporate Attributes	Means		U-test[a]
	Nonfilers	Filers	
Firm Size			
Sales (000's)	$1,691,872	$7,264,071	.0001
Assets (000's)	$1,750,759	$11,622,192	.0001
No of employees	12,169	47,825	.0001
Labor Intensity			
Employees/sales (millions)	11.16	33.50	.086
Leverage Position			
Debt/equity	2.13	2.48	.173
Effect of ED			
Plan status	.75	.72	.132
Number of nonfilers		41	
Number of filers		37	

[a]One-tailed probability of Mann-Whitney U test.

TABLE 6I

MANN-WHITNEY U TESTS
CORPORATE ATTRIBUTES AND PARTICIPATION CHOICE

ED SUPPORTERS

Corporate Attributes	Means		U-test[a]
	Nonfilers	Filers	
Firm Size			
Sales (000's)	$ 780,117	$18,639,152	.0005
Assets (000's)	$ 681,759	$15,011,871	.0005
No of employees	7,832	18,455	.007
Labor Intensity			
Employees/sales (millions)	11.21	4.67	.022
Leverage Position			
Debt/equity	1.08	1.28	.044
Effect of ED			
Plan status	.65	.67	.349
Number of nonfilers		33	
Number of filers		6	

[a]One-tailed probability of Mann-Whitney U test.

Further, the findings on the samples of ED opposers and supporters do not differ from the findings on the total sample.

The separate analyses on ED opposers and supporters in this study provides evidence about the theoretical constructs which may underlie corporate attribute proxies. As noted above, a positive relationship was found between firm size and the participation choice of an ED supporter. Firm size was asserted to proxy for political and administrative compliance costs. Therefore, these findings suggest that a manager facing high costs due to the ED's adoption was more likely to file a supportive comment letter on the ED than a manager facing lower costs. This relationship is opposite to that hypothesized.

One explanation for this finding is that firm size does not proxy only for corporate costs in the models of manager behavior. The findings from the tests of construct validity do not support this explanation. A significant correlation was found between firm size and manager expectations of political, labor, and administrative compliance costs, as discussed in Chapter 5 (Table 5C). Furthermore, significant correlations were not found between firm size and manager perceptions of the FASB which were hypothesized to affect participation choice. Stated otherwise, the evidence from the tests of construct validity support the use of firm size as a proxy for corporate costs.[17]

An alternative explanation for the positive relationship between firm size and an ED supporter's participation choice may be

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[17]It may be argued that the tests of construct validity address only the ability of two proxies to measure the same construct. They may not measure the true construct.

offered. The magnitude of costs associated with an accounting proposal may be indicative of that issue's general effect on the corporation. The manager of a company which would incur high costs due to a mandated change in accounting may have incentive to participate in the standard-setting process on that issue whether he supports or opposes the specific proposal. Additional research on the participation choices of managers who support an accounting pronouncement is needed to provide evidence about these relationships.

6.3 Manager Expectations Models

Prior researchers have relied on corporate attributes to proxy for the corporate contracting and monitoring costs associated with a mandated accounting change. These proxies have provided good predictors of manager participation choice, although they have not performed as well in models of position choice.[18]

In the present study, measures were obtained for manager expectations of the corporate contracting and monitoring costs associated with the ED's adoption. These measures were used in a correlation matrix to assess the validity of the corporate attribute measures used in prior studies.[19] The results of these tests for construct validity provided support for the use of certain corporate attributes as proxies for these costs. Further, as discussed above,

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[18]Although Lasater (1982) found a significant relationship between firm leverage and manager position choice on the interest capitalization issue.

[19]The construct validity of manager cost expectation proxies was also assessed.

the corporate attribute models provided a good fit on both position (for nonfilers) and participation choices.

The findings of this study provide support for the use of corporate attributes in models of manager position and participation choice. However, manager cost expectations may provide a better model of these choices. To test the relationship between manager cost expectations and manager position (D_i) and participation choice (V_i), the following empirical manager expectations model was used.

$$D_i = \alpha + \beta_1(c_1 + c_2 + c_4) + \beta_2 c_3 + \beta_3 c_5 \qquad (6.3.1)$$

$$V_i = \alpha + \beta_1(c_1 + c_2 + c_4) + \beta_2 c_3 + \beta_3 c_5 \qquad (6.3.2)$$

A manager's position and participation choice on the ED were hypothesized to be related to the manager's expectations of political (c_1), labor (c_2), debt (c_3), administrative compliance (c_4), and management compensation costs (c_5).

As shown in Table 5C, political, labor and administrative compliance costs were found to be highly correlated. Therefore, in the tests of construct validity, one proxy (administrative compliance costs) was used for all of these costs. An alternative approach would have been to sum the costs and treat them as one variable. This would be an acceptable alternative since the costs are each measured in the same units. To more fully utilize the data obtained for the study, the latter approach was used in the probit analyses on manager position and participation choice.

The results from the analyses of manager position and participation choice are discussed in Sections 6.3.1 and 6.3.2, respectively. These results indicate that the model described in equation 6.3.1 did not provide a good predictor of position choice. However, the model described in equation 6.3.2 provided a good predictor of manager participation choice.

6.3.1 Position Choice

The following statistical hypotheses on manager position choice were derived from equation 6.3.1. (See hypotheses 1.0 and 1.1 through 1.5 in Section 3.6.1.)

$H_{2.0}$: The model described in equation 6.3.1 may be used to predict a manager's position choice on the ED as evidenced by a significant chi-square on the probit analysis.

$\chi^2 > 0$ $\quad H_0: \chi^2 = 0$

$H_{2.1}$: A manager's position choice on the ED (D_i) is inversely related to expected increases in political, labor, and administrative compliance costs ($c_1 + c_2 + c_4$).

$\beta_1 < 0$ $\quad H_0: \beta_1 = 0$

$H_{2.2}$: A manager's position choice on the ED (D_i) is inversely related

to expected increases in debt costs (c_3).

$\beta_2 < 0$ $\quad H_0: \beta_2 = 0$

$H_{2.3}$: A manager's position choice on the ED (D_i) is inversely related to expected decreases in management compensation costs (c_5).[20]

$\beta_3 > 0$ $\quad H_0: \beta_3 = 0$

The sample used in this study to test these hypotheses on the position choice of nonfiling managers included 42 opposers and 36 supporters. (See Table 6B for detail on sample size reduction.) Analyses for the position choice of comment letter filers were not performed using manager cost expectations because a representative sample of ED supporter/filers was not obtained.

The results of the probit analyses and Mann-Whitney U tests which were run for ED nonfilers, are summarized in Tables 6J and 6K, respectively. As shown in those tables, the manager expectations model of position choice did not provide a good fit for its data. Further, no significant relationships were found between individual manager cost expectations and position choice.

The lack of significance for the manager expectations model of position choice may reflect weaknesses in the reliability of these measures.[21] As discussed in Chapter 5, individual managers may have been unwilling or unable to provide reliable estimates of the

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[20]In the questionnaire, managers were asked if the ED would result in a decrease in management compensation (see Appendix B).

[21]A coefficient alpha of .17 was computed on the measures of manager cost expectations. A coefficient of .50 or .60 is sufficiently reliable according to Nunnally (1967).

TABLE 6J

PROBIT ANALYSIS
MANAGER COST EXPECTATIONS AND POSITION CHOICE

COMMENT LETTER NONFILERS

Manager Cost Expectations	Beta Coefficients[ab]
Constant	-.1244 (.22)
Political, labor & admin comp costs ($c_1 + c_2 + c_4$)	.0016 (.22)
Debt costs (c_3)	-.0002 (.26)
Management comp costs (c_5)	-.0291 (.41)
Number of supporters	35
Number of opposers	42
Chi-square statistic	1.69
(Significance)	(.638)
Correctly predicted	55%

[a]An inverse relationship was hypothesized between manager position choice and each contracting and monitoring cost.

[b]One-tailed probability of t-statistic in parentheses.

TABLE 6K

MANN-WHITNEY U TESTS
MANAGER EXPECTATIONS AND POSITION CHOICE

COMMENT LETTER NONFILERS

Manager Expectations	Means[a] Opposers	Supporters	U-test[b]
Public relations costs ($c_1 + c_2$)	$3,710	$6,000	.335
Debt costs (c_3)	$227,120	$1,940[c]	.405
Administrative costs (c_4)	$23,770	$35,330	.352
Internal management (c_4)	$16,510	$15,750	.478
Management compensation (c_5)	.39%	.35%	.312
Number of opposers		42	
Number of supporters		35	

[a]Many corporate managers reported zeros for expectations of contracting and monitoring costs. Therefore, the reported means may be misleading in terms of differences. The Mann-Whitney U test is robust with respect to these nonnormal distributions.

[b]One-tailed probability of Mann-Whitney U test.

[c]Reflects ommission of one outlier.

corporate costs associated with the ED. Therefore, the large amount of random error in the manager cost expectation measures may preclude significant findings even if a significant relationship does exist.

The lack of significance for the manager expectations model of position choice may also reflect an underspecification of the empirical model used for testing. In Chapter 3, it was asserted that a manager would support an accounting pronouncement if it included the accounting method he was currently using. Otherwise, the manager would estimate the costs of a set of alternative accounting policies which the FASB might find acceptable. If the costs associated with the current pronouncement were less than those of the set of possible alternatives, the manager would support that pronouncement. Alternatively, if lower costs were associated with any of the set of possible alternatives, he would oppose the pronouncement.

Manager expectations of the costs associated with each alternative accounting policy were not obtained from the questionnaire. It was assumed that the greater the expected costs associated with the ED, the more likely these costs would exceed the costs associated with the set of possible alternatives. However, managers reporting high expected costs on the ED may have even higher cost expectations for the set of possible alternatives. In this case, the "greater cost" assumption may not hold, and significant relationships between manager cost expectations and position choice may not be found.

The manager expectations model of position choice for 77 nonfilers did not provide as good a fit for the data as the corporate attributes model of 75 nonfilers in terms of the chi-square test. The

positive results of the tests for construct validity, and the significance of the corporate attribute position choice model suggest that corporate attributes may be reliable and valid proxies for contracting and monitoring costs. Further, the results of the tests for reliability, and the insignificance of the manager expectations model indicate that reliable measures of manager cost expectations were not obtained for this study. Additional research is needed to develop alternative, reliable methods for measuring expected contracting and monitoring costs. These measures could be used to provide additional evidence about the construct validity of corporate attribute proxies.

6.3.2 Participation Choice

Manager expectations of the costs associated with the ED were hypothesized to affect manager participation choice if they were significant factors in the manager's position choice.[22] Since a significant relationship was not found between manager cost expectations and manager position choice it may be argued that no relationship should be found for participation choice. However, one explanation for the lack of significant findings on the model of manager position choice was that manager cost expectations were indicative of the importance of a mandated change in pension accounting. If these stated cost expectations reflect the importance of the pension accounting issue to managers, they may affect their

[22]It was hypothesized that a manager who opposed the ED because of the costs associated with it may be more likely to file a comment letter if those costs are high.

decision to lobby. Therefore, the following statistical hypotheses on participation choice were derived from equation 6.3.2. (See hypotheses 2.0 and 2.1 in Section 3.6.2 for further discussion.)

$H_{3.0}$: The model described in equation 6.3.2 may be used to predict a manager's participation choice on the ED as evidenced by a significant chi-square on the probit analysis.

$\chi^2 > 0$ H_0: $\chi^2 = 0$

$H_{3.1}$: The participation choice (V_i) of an ED opposer or supporter is positively related to the sum of the political, labor and administrative compliance costs associated with the ED ($c_1 + c_2 + c_4$).

$ß_1 > 0$ H_0: $ß_1 = 0$

$H_{4.2}$: The participation choice (V_i) of an ED opposer or supporter is positively related to the debt costs associated with the ED (c_3).

$ß_2 > 0$ H_0: $ß_2 = 0$

$H_{4.3}$: The participation choice (V_i) of an ED opposer or supporter is positively related to the management compensation costs associated with the ED (c_5).

$ß_3 > 0$ H_0: $ß_3 = 0$

The sample used to test hypotheses 4.0 through 4.3 on the participation choice of ED opposers included 28 filers and 42 nonfilers. Analyses for the participation choice of ED supporters

were not performed using manager cost expectations because a representative sample of ED supporter/filers was not obtained.

The results of the probit analyses and Mann-Whitney U tests are summarized in Tables 6L and 6M, respectively. As shown in Table 6L the participation choice model presented in equation 6.3.2 provided a good fit for the data. The chi-square statistic on the probit analysis was significant at the .0135 level, and seventy-three percent of the managers' participation choices were correctly predicted.

As hypothesized, the total of expected public relations and administrative compliance costs were significantly and positively related to manager participation choice in the probit analyses. However, as shown in Table 6M, significant differences were not found between comment letter filers and nonfilers on the individual cost expectations. Only the expected administrative compliance costs of ED filers were greater than those of nonfilers (at the .10 level). The findings from the Mann-Whitney U tests suggest that manager expectations of political and labor costs may not have been as significant as administrative compliance costs in the manager's decision to file. A review of the comment letters filed with the FASB supported this finding. The most consistent point of disagreement on the ED was the magnitude of disclosure requirements.[23]

The manager cost expectations model of participation choice provided as good a fit for its sample of 70 ED opposers as the corporate attributes model provided for its sample of 69 ED opposers. Further, political, labor and administrative compliance costs were

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[23]Ninety-four percent of the managers included in this study, who had filed comment letters, specifically mentioned the "excessive disclosure requirements" of the ED.

TABLE 6L

PROBIT ANALYSIS
MANAGER COST EXPECTATIONS AND PARTICIPATION CHOICE

ED OPPOSERS

Manager Cost Expectations	Beta Coefficients[ab]
Constant	-.4955 (.01)
Political, labor and administrative compliance costs ($c_1 + c_2 + c_4$)	.0070 (.02)
Debt costs (c_3)	-.0002 (.31)
Management compensation costs (c_5)	-.2317 (.14)
Number of filers	28
Number of nonfilers	42
Chi-square statistic (Significance)	10.69 (.0135)
Correctly predicted	73%

[a]A positive relationship was hypothesized between manager participation choice and manager cost expectations.

[b]One-tailed probability of t-statistic is in parentheses.

TABLE 6M

MANN-WHITNEY U TESTS
MANAGER COST EXPECTATIONS AND PARTICIPATION CHOICE

ED OPPOSERS

Manager Expectations	Means[a] Nonfilers	Means[a] Filers	U-Test[b]
Public relations costs ($c_1 + c_2$)	3,710	76,250	.281
Debt costs (c_3)	227,120	360	.460
Administrative costs (c_4)	23,770	77,680	.077
Internal management costs (c_4)	16,510	398,390	.464
Management compensation costs (c_5)	.39%	.19%	.488
Number of nonfilers		42	
Number of filers		28	

[a]Many corporate managers reported zeros for expectations of contracting and monitoring costs. Therefore, the reported means may be misleading in terms of differences. The Mann-Whitney U test is robust with respect to these nonnormal distributions.

[b]One-tailed probability of Mann-Whitney U test.

significant in the manager expectations model just as firm size was significant in the corporate attributes model.

These findings suggest that a manager's stated expectations of the costs associated with the ED may be indicative of the general importance of the accounting issue to the manager. In this case, these costs could be significant in the participation but not the position choice model.

6.4 Manager Perception Models

In Chapter 3, a manager's participation choice on the ED was hypothesized to be a function of corporate contracting and monitoring costs and manager perceptions of the FASB. The relationships between contracting and monitoring costs, manager perceptions of the FASB, and manager participation choice were examined in this study in three parts. First, a model of participation choice which included only manager perceptions of the FASB was tested. This model was analyzed to provide a comparison with the corporate attributes and manager expectations models of participation choice. In addition, a model which included both corporate attributes and manager perceptions, and a model which included both manager cost expectations and manager perceptions were tested. These models reflect the total participation choice model presented in Chapter 3.

The results of these analyses, which address only the ED opposer, suggest that manager perceptions of the FASB may be significant factors in an opposing manager's decision to file a comment letter. A

discussion of these results are provided in Sections 6.4.1 through 6.4.3.

6.4.1 Manager Perceptions of the FASB

To test the relationship between manager perceptions of the FASB and manager participation choice (V_i), the following empirical model was used.

$$Vi = \alpha + ß_1 pr_1 + ß_2 j + ß_3 pr_2 + ß_4 l \qquad (6.4.1)$$

Four manager perceptions were hypothesized to affect a manager's participation choice. These perceptions included the probability of influencing the policy outcome (pr_1), the costs of a change in the accounting standard-setting body (j), the probability of affecting the FASB's continuance (pr_2), and the costs of filing a comment letter (l).

The following statistical hypotheses on manager participation choice were derived from equation 6.4.1. (See hypotheses 2.5 through 2.8 in Section 3.6.2 for further discussion.)

$H_{5.0}$: The model described in equation 6.4.1 may be used to predict a manager's participation choice on the ED as be evidenced by a significant chi-square on the probit analysis.

$\chi^2 > 0$ H_0: $\chi^2 = 0$

$H_{5.1}$: A manager's participation choice (V_i) is positively related to his perception of the probability of influencing the policy influence (pr_1).

$ß_1 > 0$ H_0: $ß_1 = 0$

$H_{5.2}$: A manager's participation choice (V_1) is positively related to his expectations of the costs associated with a change in the standard-setting process (j).

$ß_2 > 0$ H_0: $ß_2 = 0$

$H_{5.3}$: A manager's participation choice (V_i) is positively related to his perception of the probability of affecting the continuance of the FASB by filing a comment letter (pr_2)

$ß_3 > 0$ H_0: $ß_3 = 0$

$H_{5.4}$: A manager's participation choice (V_i) is inversely related to his perception of the costs of filing a comment letter (l).

$ß_7 < 0$ H_0: $b_7 = 0$

The measures used for manager perceptions of the FASB were described in Table 4C. Two measures were obtained for the probability of influence and the costs of filing. Additionally, three measures were obtained for the costs of a change in the standard-setting body, and one measure for the probability of affecting the FASB's continuance. Twelve probit analyses were performed using different

combinations of the measures for each manager perception.[24] The results of those analyses are reported in Table 6N and Appendix E.

Each analysis provided a good fit for the data. The least significant chi-square was significant at the .0038 level. Further, the models from these analyses correctly predicted from 60 to 73 percent of manager participation choices.

The results of the manager perceptions analysis which provided the best fit of the data are shown in Table 6N. This analysis included the following measures: (1) the manager's perception of his ability to influence the ED outcome, (2) his general perception of the costs of filing, (3) his decision to contribute to the Financial Accounting Foundation, and (4) his perception of the probability of affecting the FASB's continuance by filing a comment letter.

As shown in Table 6N, significant relationships were not found between individual manager perceptions and participation choice. In fact, no significant beta coefficients were reported in any of the analyses. However, as reported in Table 6O, a significant difference between filers and nonfilers was found on three variables using a Mann-Whitney U test - filed to support the FASB (j), did not file since it would not help (pr_1), and did not file due to lobby costs (l). The contradictory findings on individual manager perceptions may be indicative of an interaction between these factors in the decision process.

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[24]There were three measures obtained for LRPV, one measure for probability of affecting the FASB's continuance, and two measures each for lobby costs and probability of influence. Therefore, there were twelve (3*1*2*2 = 12) separate analyses run.

TABLE 6N

PROBIT ANALYSIS
MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE

ED OPPOSERS[a]

Manager Perceptions	Beta Coefficient[bc]
Constant	.4301 (.16)
Probability of influencing the ED's outcome (pr_1)	-.4847 (.49)
Decision to contribute to FAF (j)	-.6191 (.09)
Probability of influencing the FASB's continuance (pr_2)	.0132 (.12)
Too costly to influence the FASB on any issue (l)	-.3569 (.49)
Number of filers	24
Number of nonfilers	41
Chi-square	25.32
(Significance)	(.0000)
Correctly predicted	73%

[a]This Table includes the results of one of twelve models - the one which provided the best data fit. See Appendix E for the other eleven models.

[b]An inverse relationship was hypothesized between manager participation choice and costs of filing. A positive relationship was hypothesized for LRPV and probability of influence.

[c]One-tailed probability of t-statistic in parentheses.

TABLE 60

MANN-WHITNEY U TESTS
MANAGER PERCEPTIONS AND PARTICIPATION CHOICE

ED OPPOSERS

Manager Perceptions	Means		U Test[ab]
	Nonfilers	Filers	
LRPV ($pr_2(j)$)			
Probability of LRPV	8.88	15.00	.094
Part I - FAF	.67	.67	.500
Part I - Shift to Gov't	12.52	41.93	.357
Part II - Support	3.35	9.97	.028
Probability of Influence (pr_1)			
Part I - Not responsive	10.54	3.44	.311
Part II - Wouldn't help	17.61	0.00	.000
Costs of Filing (l)			
Part I - Too costly	25.80	0.00	.000
Part II - Due to cost	18.17	.16	.017
Number of nonfilers		41	
Number of filers		24	

[a]An inverse relationship was hypothesized between manager participation choice and costs of filing. A positive relationship was hypothesized for LRPV and probability of influence.

[b]One-tailed probability of Mann-Whitney U Test in parentheses.

[c]No Mann-Whitney U statistic could not be computed because zeros reported by all filers.

An examination of the beta coefficients on the variables in the analyses reveals that these coefficients were in the hypothesized direction except for the coefficient on the manager's decision to contribute to FAF. The negative coefficient on FAF, which was significant at the .10 level, suggests that the manager of a company making contributions to FAF was less likely to file a comment letter on the ED than the manager of a company not making contributions. One explanation for this finding is that a manager who supports the FASB may not believe that its continuance will be positively affected by filing an opposing letter. In this case, a negative relationship between FAF contributions and the participation choice of an ED opposer may follow.

The manager perceptions model of participation choice provided a good fit for data on opposing managers even though no significant relationships were found for individual variables. In fact, the analysis presented in Table 6N performed as well as the corporate attributes and manager expectations models of participation choice, as shown in Table 6P. These findings suggest that manager perceptions of the FASB may be as important in a manager's decision to file a comment letter as the contracting and monitoring costs associated with that particular accounting issue.

6.4.2 Corporate Attributes and Manager Perceptions

To test the relationships between corporate attributes, manager perceptions, and manager participation choice for ED opposers, the

TABLE 6P

AN OVERALL COMPARISON OF THE CORPORATE ATTRIBUTES, MANAGER EXPECTATIONS AND MANAGER PERCEPTIONS MODELS OF PARTICIPATION CHOICE

ED OPPOSERS

Overall Statistics	Corporate Attributes	Manager Expectations	Manager Perceptions
No. of filers	37	28	24
No. of nonfilers	41	42	41
Total sample[a]	78	70	65
Chi-square	26.29	10.69	25.32
(Significance)	(.0000)	(.0135)	(.0000)
Correctly predicted	72%	73%	73%

[a]See Table 6B for detail on sample sizes.

following empirical model was used.

$$Vi = \alpha + \beta_1 f_1 + \beta_2 f_2 + \beta_3 f_3 + \beta_4 f_4 + \beta_5 (pr_1) + \beta_6 (j) + \beta_7 (pr_2) + \beta_8 (l). \quad (6.4.2)$$

The statistical hypotheses on manager participation choice derived from equation 6.4.2, were presented above in hypotheses 2.1 through 2.4 (Section 6.2.2) on corporate attributes, and in hypotheses 5.1 through 5.4 (Section 6.4.1) on manager perceptions. Additionally, the following overall statistical hypothesis is tested.

$H_{6.0}$: The model described in equation 6.4.2 may be used to predict a manager's participation choice on the ED as evidenced by a significant chi-square on the probit analysis.

$\chi^2 > 0$ H_0: $\chi^2 = 0$

As discussed above, two measures were obtained for the probability of influence and the costs of filing. Additionally, three measures were obtained for the costs of a change in the standard-setting body and firm size. Finally, one measure was obtained for the probability of affecting the FASB's continuance, firm leverage, and labor intensity. Thirty-six probit analyses were performed using different combinations of the measures for each variable.[25] The results of those analyses are reported in Table 6Q and Appendix F.

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[25]There were three measures obtained for firm size. Additionally, there were three measures obtained for LRPV, one measure for probability of affecting the FASB's continuance, and two measures each for lobby costs and probability of influence. Therefore, thirty-six (3*12 = 36) separate analyses were run.

TABLE 6Q

PROBIT ANALYSIS
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE

	ED OPPOSERS[a]
Corporate Attributes and Manager Perceptions	Beta Coefficient[bc]
Constant	-.4477
	(.31)
Firm size (f1) (assets)	.0030
	(.001)
Labor intensity (f2) (employees/sales)	-.0503
	(.14)
Firm Leverage (f3) (debt/equity)	.3601
	(.08)
Pension plan status (f4) (pension benefits/pension assets)	-.1818
	(.41)
Probability of influencing the ED's outcome (pr1)	-.1162
	(.50)
Decision to contribute to FAF (j)	-1.3523
	(.02)
Probability of influencing the FASB's continuance (pr2)	.0278
	(.03)
Too costly to influence the FASB on the ED (l)	-.4444
	(.50)

[a]This table includes the results of one of 36 models - the one which provided the best data fit. See Appendix F for other 35 models.

[b]An inverse relationship was hypothesized between manager participation choice and firm leverage and between participation choice and costs of filing. A positive relationship was hypothesized for firm size, labor intensity, pension plan status, FAF, and probability of influence.

[c]One-tailed probability of t-statistic in parentheses.

TABLE 6Q
(Continued)

Number of filers	20
Number of nonfilers	35
Chi-square	39.62
(Significance)	(.0000)
Correctly predicted	89%

Each analysis provided a good fit for the data. The least significant chi-square was significant at the .0068 level. Further, the models from these analyses correctly predicted from 72 to 89 percent of manager participation choices.

The results of the analysis which provided the best fit of the data, and the highest prediction rate, are reported in Table 6Q. This analysis included corporate attributes - assets, debt/equity, employees/sales, and pension benefits/pension assets. In addition, that analysis included the following manager perceptions:

1) probability of influencing the ED's outcome (stated in negative terms in the questionnaire),

2) decision to contribute to the Financial Accounting Foundation

3) the probability of affecting the FASB's continuance by filing a comment letter, and

2) the costs associated with filing a comment letter on the ED.

The models of participation choice, which included both corporate attributes and manager perceptions (the total model), correctly predicted a higher percentage of manager participation choices than the models which included only corporate attributes or manager perceptions. Further, the findings on the individual variables were relatively consistent between these models.

A significant positive relationship was found between firm size (assets) and participation choice in the total model, as found in the corporate attributes model. Further, FAF contributions were found to be negatively related to manager participation choice, as found in the manager perceptions model. However, statistically significant relationships were found in the total model between participation

choice and two manager perceptions - FAF contributions, and the probability of affecting the FASB's continuance. These factors were only marginally significant in the manager perceptions model. These differences in significance on individual variables in the total and the manager perception models may reflect the different samples used to test each model.

The results from the total model of participation choice provides evidence about the relationships between corporate attributes and manager perceptions in a manager's participation choice. The inclusion of corporate attributes and manager perceptions in the same model increased the correct prediction rate by an average of 23 percent. Correct prediction rates of 72 and 73 percent were reported for the corporate attribute and manager perception models, respectively. The correct prediction rate on the total model of 89 percent represents an increase of 24 and 22 percent over these rates, respectively.[26]

These findings suggest that corporate attributes and manager perceptions provide differentiable information about manager participation choice (for an ED opposer). Further research is needed to develop a stronger theory about the relationships between manager perceptions and participation choice and to develop stronger measures. The results of that research could be used to provide better predictions of manager participation choice. Further, evidence may be provided about relationships between manager perceptions and corporate attributes. Such evidence could be used to assess the discriminant

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[26]The 24 percent increase in predictability was computed as follows: (89%-72%)/72% = 24%.

validity of corporate attributes as proxies for contracting and monitoring costs.

6.4.3 Manager Cost Expectations and Perceptions

The relationships between corporate attributes, manager perceptions, and manager participation choice for ED opposers, were tested and the results were reported in Section 6.4.2. The inclusion of both sets of explanatory variables provided an increase in correct prediction rates of about 23 percent. To test the relationships between manager cost expectations, perceptions and participation choice for ED opposers, the following empirical model was used.

$$V_i = \alpha + \beta 1(c_1 + c_2 + c_4) + \beta_2 c_3 + \beta_3 c_5 + \beta_4(pr_1) + \beta_5(j) + \beta_6(pr_2) + \beta_7(l) \qquad (6.4.3)$$

The statistical hypotheses on manager participation choice derived from equation 6.4.3, were presented above in hypotheses 4.1 through 4.4 (Section 6.3.2) on manager cost expectations, and in hypotheses 5.1 through 5.4 (Section 6.4.1) on manager perceptions. Additionally, the following overall statistical hypothesis is tested.

$H_{7.0}$: The model described in equation 6.4.3 may be used to predict a manager's participation choice on the ED as evidenced by a significant

chi-square on the probit analysis.

$\chi^2 > 0 \quad H_0: \chi^2 = 0$

Twelve probit analyses were performed using different combinations of the measures for each manager perception variable.[27] The results of those analyses are reported in Table 6R and Appendix G.

Each analysis provided a good fit for the data. The least significant chi-square was significant at the .0015 level. Further, the models from these analyses correctly predicted from 69 to 84 percent of manager participation choices.

The results of the analysis which provided the best fit of the data, and the highest prediction rate, are reported in Table 6R. This analysis included the following manager perceptions:

1) probability of influencing the ED's outcome,

2) decision to contribute to the Financial Accounting Foundation (FAF),

4) the probability of affecting the FASB's continuance by filing a comment letter, and

2) the general costs associated with filing a comment letter.

The models of participation choice which included both manager cost expectations and manager perceptions (the total model) correctly predicted a higher percentage of manager participation choices than the models which included only manager cost expectations or manager

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[27]Only one measure was obtained for each manager cost expectation. There were three measures obtained for LRPV, one measure for probability of affecting the FASB's continuance, and two measures each for lobby costs and probability of influence. Therefore, there were twelve (1*1*1*3*1*2*2 = 12) separate analyses run.

TABLE 6R

PROBIT ANALYSIS
MANAGER COST EXPECTATIONS, PERCEPTIONS OF THE FASB,
AND PARTICIPATION CHOICE

ED OPPOSERS[a]

Manager Cost Expectations and Manager Perceptions	Beta Coefficient[bc]
Constant	.2779 (.47)
Public relations and administrative compliance costs ($c_1 + c_2 + c_4$)	.0077 (.02)
Debt costs (c_3) (employees/sales)	-.0002 (.34)
Management compensation costs (c_5)	.3546 (.34)
Probability of influencing the ED's outcome (pr_1)	-.4495 (.50)
Decision to contribute to FAF (j)	-.7980 (.06)
Probability of influencing the FASB's continuance (pr_2)	.0158 (.10)
Too costly to influence the FASB on any issue (l)	-.3338 (.49)

[a]This table includes the results of one of 12 models - the one which provided the best data fit. See Appendix G for other 11 models.

[b]An inverse relationship was hypothesized between manager participation choice and costs of filing. A positive relationship was hypothesized for expected costs, FAF, and probability of influence.

[c]One-tailed probability of t-statistic in parentheses.
[a]This table includes the results of one of 12 models - the one which provided the best data fit. See Appendix E for other 11 models.

TABLE 6R
(Continued)

Number of filers	20
Number of nonfilers	37
Chi-square	32.37
(Significance)	(.0000)
Correctly predicted	84%

perceptions. Further, the findings on the individual variables were consistent between these models.

A significant positive relationship was found in the total model between manager participation choice and the manager's expectations of public relations and administrative compliance costs. This same relationship was found in the manager expectations model. Further, FAF contributions were found to be negatively related to manager participation choice, as found in the manager perceptions model.

The results from the total model of participation choice provide evidence about the relationships between manager cost expectations and perceptions in a manager's participation choice. The inclusion of manager cost expectations and manager perceptions in the same model increased the correct prediction rate by approximately 13 percent. A correct prediction rate of 73 percent was reported for both the manager expectations and the manager perception models as compared to an 84 percent rate for the total model.

These findings suggest that manager cost expectations and perceptions provide differentiable information about manager participation choice (for an ED opposer). However, the 13 percent increase in correct predictions for the total manager cost expectations/perceptions model is relatively smaller than the 22 percent increase in the correct predictions for the total corporate attribute/perception model. These findings suggest that corporate attributes may provide more differentiable information than manager cost expectations with respect to manager perceptions of the FASB. Nevertheless, the 13 percent increase in predictive ability for the total manager expectations/perceptions model provides further evidence

that manager perceptions of the FASB may be important, predictive factors in a manager's participation choice.

6.5 Summary

The overall findings of the probit analyses on manager position and participation choice are presented in Table 6S. A discussion of these findings is also summarized below.

A replication of prior research efforts on manager position and participation choice was provided on the pension accounting issue. A corporate attribute model of position choice was tested on the sample of managers who had filed comment letters with the FASB. Additionally, a corporate attribute model of lobby choice was tested on a random sample of 257 NYSE firms. The results of these tests were consistent with the results reported by prior researchers on the GPLA, interest capitalization, and foreign currency translation issues. Significant relationships were found only between manager participation choice and firm size. Further, only the manager participation choice model provided a good fit for the data, as evidenced by a statistically significant chi-square.

As an extension of prior research, models of position choice for nonfiling managers, and separate models of participation choice for ED supporters and opposers were tested. A significant, positive relationship was found between the position choice of a nonfiling manager, and the size and leverage of the firm he represented. Additionally, significant, positive relationships were found between

TABLE 6S

SUMMARY OF FINDINGS ON PROBIT ANALYSES

	SIGNIFICANT FACTORS IN ANALYSES OF MANAGER	
	POSITION CHOICE	PARTICIPATION CHOICE
Corporate Attributes		
Filers	None[a]	
Nonfilers	Firm Size (-)	
	Leverage (-)	
Total sample		Firm size (+)
Opposers only		Firm size (+)
Supporters only		Firm size (+)
Manager Cost Expectations		
Nonfilers	Political, labor & admin costs (-)	
Opposers		Political, labor & admin costs (-)
Manager Perceptions		
Opposers		None[b]

[a]The overall chi-square statistic was not significant and there were no significant relationships found between manager position choice and the individual hypothesized variables.

[b]The overall chi-square statistic was significant but there were no significant relationships found between manager participation choice and the individual hypothesized variables.

firm size and the participation choices of both ED opposers and supporters.

These findings may indicate that the position choice of a filing manager differs from that of a nonfiler. However, it may also reflect the power of the analyses used to test the models. The sample used to test the model for comment letter filers included only 6 ED supporters and 37 opposers. Whereas, the sample used to test the model for nonfilers included 33 ED supporters and 41 opposers. The small sample of filing managers may have reduced the power of that test.

The consistency of the findings on firm size in the participation choice models of ED opposers and supporters suggests that there may be no need to differentiate between the two groups when modeling participation choice. However, these findings do not support the hypothesized relationship between firm size and participation choice. They suggest that a manager who faced high political and administrative compliance costs due to the ED's adoption was more likely to file a supportive letter than a manager who faced low costs. One explanation for this finding, which is consistent with the theory underlying the firm size proxy, is that the costs associated with the ED may be indicative of the general importance of pension accounting to the manager. In this case, a manager who faces high costs due to any change in pension accounting may be more likely to file a comment, regardless of his position, than a manager who faces lower costs.

A further extension of prior research was provided by obtaining measures of manager cost expectations. Models of position choice for nonfiling managers and models of participation choice for ED opposers were tested. These models did not provide a better fit for the data

than those models which included corporate attributes as proxies for contracting and monitoring costs. This may reflect weaknesses in the reliability of the measures obtained for manager cost expectations. If the primary purpose of research on manager behavior in the accounting standard-setting process is to predict manager behavior, future efforts to obtain manager cost expectations may not be useful. The evidence from this study suggests reliable measures of these expectations may not be obtainable.

However, if the purpose of this line of research is to explain manager behavior, further research on manager expectations of the costs associated with proposed accounting changes is needed. The theory underlying the use of corporate attributes in models of manager position and participation choice is that managers assess the expected costs of an accounting change. Further, that assessment is used to make a position and participation decision. If a link cannot be established between corporate attributes and manager cost expectations, the models derived may be used only to predict manager behavior.

Finally, manager perceptions of the FASB were included in models of participation choice for ED opposers. A model was tested which included only manager perceptions. Additionally, models were tested which included both manager perceptions and expected contracting and monitoring costs (total models). The manager perceptions model of participation choice provided a good fit for the data. Further, the total models provided improvements in predictability over the individual manager perceptions, manager cost expectations, and corporate attributes models of participation choice. These findings

suggest that manager perceptions of the FASB are important factors in a manager's decision to file a comment letter.

Chapter 7 contains a discussion of the implications of this study. Additionally, limitations of the study are addressed.

CHAPTER 7

CONCLUSION AND LIMITATIONS

7.1 Introduction

The objective of this study was to add evidence to the existing body of knowledge about the behavior of corporate managers in the accounting standard-setting process. Prior researchers have addressed the relationship between manager position and participation choices and corporate attributes asserted to proxy for economic consequences (contracting and monitoring costs) associated with a mandated change in accounting. However, these researchers have not provided generalizable evidence about the corporate population taken as a whole. They have examined position choices only for comment letter filers. Further, on participation choice, they have performed analyses on samples which included the population of filers and a sample of nonfilers without controlling for position choice.

This study provided a replication of prior research efforts by applying the same research methodologies to the pension accounting issue (the ED). Corporate attributes were used to model the position choice of a filing manager and the participation choice of a randomly selected sample of managers which included both ED opposers and supporters. Additionally, several extensions of prior research efforts were offered. The position choice of a nonfiling manager and the participation choice of an ED opposer and an ED supporter were examined separately. Finally, manager expectations of the costs

associated with the ED and manager perceptions of the financial accounting standard-setting process were measured and included as independent variables in the models of position and participation choice.

The results from these analyses are summarized in the current section. Limitations of the study and their effect on the findings are discussed in Sections 7.2 and 7.3.

7.1.1 Position Choice

The findings from this study on manager position choice may be summarized as follows:

(1) The model for filing managers, which included corporate attributes as explanatory variables was not significant. (A model of position choice for filing managers was not analyzed using manager cost expectations due to the small sample of ED supporter/filers for whom data was available.)

(2) The model for nonfiling managers, which included corporate attributes was significant. Firm size and leverage were negatively related to manager position choice.

(3) The model for nonfiling managers, which included manager cost expectations was not significant.

7.1.2 Participation Choice

The findings on manager participation choice may be summarized as follows:

(1) The models for opposing and supporting managers, which included corporate attributes as explanatory variables, were each significant. Furthermore, firm size was positively related to a manager's participation choice regardless of his position choice.

(2) The model for opposing managers which included manager cost expectations was also significant. The sum of expected political, labor and administrative compliance costs was positively related to manager participation choice. (A model of participation choice for supporting managers was not analyzed using manager cost expectations due to the small sample of ED supporter/filers for whom data was not available.)

7.2 Conclusions and Limitations

7.2.1 Position Choice and Corporate Attributes

The insignificance of the model of position choice for comment letter filers, which included corporate attributes, may reflect weaknesses in the measures obtained for the dependent and/or explanatory variables. It may also reflect the small sample size used in the analysis (six ED supporters and 37 opposers).

A manager's stated position on an accounting proposal may not be his true position. A participant in a political setting, such as the accounting standard-setting process, may have incentives to state a position which is not his true position. In this case, the power of a study which uses stated positions may be weakened by unreliability or bias in the measurement of the dependent variable.

Further, the use of corporate attributes to proxy for the economic consequences (contracting and monitoring costs) associated with the ED may not be valid. Evidence is provided by this study to suggest that the corporate attributes - firm size and leverage position - have construct (theoretical) validity. However, as discussed in Chapters 4 and 5, the strength of that evidence, as derived from Campbell and Fiske's multimethod-multitrait correlation matrix, is dependent upon the number of proxies examined. The evidence provided by the present study on the construct validity of corporate attribute proxies is weak since only one alternative proxy was obtained for each construct. Further, the high correlation between firm size and manager expectations of political, labor and administrative compliance costs may not reflect the firm size hypothesis as set forth in Chapter 3. The correlation may reflect the fact that larger firms face higher costs simply because they are bigger.[1]

Finally, a small sample, or subsample reduces the power of a study by introducing bias and unreliability. The smaller the sample, the more likely it is to not be representative of the population. When the sample is not representative, a relationship which exists in the population may not be reflected in the sample. Alternatively, a relationship found in the sample may not reflect the population.

The position choice model for comment letter nonfilers (using corporate attributes) utilized a much larger sample size than the analysis of comment letter filers (74 nonfilers versus 43 filers).

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[1]On a relative cost per sales dollar basis, the correlation between firm size and expected political, labor and administrative compliance costs was insignificant.

This may account for the significance of the nonfiler model as compared with the model of position choice for comment letter filers.

An alternative explanation for the difference in significance on the two groups is that the position choice of comment letter filers differs from that of nonfilers. The findings from Lasater's study on the interest capitalization issue together with the results from the present study suggest that the latter explanation may hold. Lasater found a significant relationship between firm leverage and manager position choice in his analysis of comment letter filers. This finding is consistent with the relationship found between firm leverage and manager position choice for nonfilers on the pension accounting issue.

7.2.2 Position Choice and Manager Cost Expectations

The insignificance of the position choice model for nonfilers, which included manager cost expectations, may reflect weaknesses in the measures obtained for position choice as discussed above.[2] It may also reflect weaknesses in the measures obtained for the explanatory variables. As discussed in Chapter 5, the manager cost expectation measures obtained from the questionnaire did not demonstrate reliability. Biases may have also been introduced to the manager cost expectation measures through wording used in the questionnaire. For example, managers were asked if an increase in reported pension expense would result in a decrease in management compensation costs. A decrease in reported pension expense (which will be the ED's effect

[2]The analysis included 42 ED opposers and 36 supporters.

for most companies) was not addressed. Further, for all other hypothesized economic consequences, managers were asked to estimate increases in costs associated with the ED. Decreases in these costs were not addressed.

7.2.3 Participation Choice, Corporate Attributes and Manager Cost Expectations

The consistency of the models of participation choice across ED opposers and supporters suggests that a manager's participation choice may not be dependent upon that manager's position choice. Yet, as discussed in Chapter 5, the present study provides evidence that a manager's position and participation choice are dependent. These combined findings suggest that a manager's position choice is dependent upon his participation choice. Stated otherwise, a manager may first decide if he wants to file a comment letter on an accounting proposal. Then he may decide what position to take. The model of participation choice used in this study was based on the opposite assumption - that a manager first takes a position on an accounting proposal and then decides whether or not to file.

A difference in ordering may not affect the hypothesized relationships between the dependent and explanatory variables in each model. However, it may have implications for prior and future research efforts. If a manager's participation choice is independent of his position choice, it would not be necessary to control for position choice when examining participation choice models. Alternatively, if a manager's position choice is dependent upon his

participation choice, it would be necessary to control for participation choice when examining position choice models.[3]

7.2.4 Participation Choice and Manager Perceptions of the FASB

The models which included both manager cost expectations or corporate attributes and manager perceptions of the FASB provided better predictors of manager participation choice than the individual partitioned models. These findings suggest that the economic consequences associated with the ED and manager perceptions of the FASB were each important factors in a manager's decision to lobby on that proposal. The insignificance of the relationships between the individual manager perception factors and participation choice may reflect weaknesses in these measures. Although the questionnaire used in the study demonstrated overall reliability, construct validity of the measures obtained for manager perceptions of the FASB was not demonstrated.

7.2.5 Nonresponse Bias

As discussed in Sections 7.2.1 through 7.2.4, the power of this study was reduced by limitations in the models used for testing and in the measures obtained for the dependent and explanatory variables.

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[3]Prior studies of participation choice have not controlled for position choice, but studies of position choice have controlled for participation choice (by examining only the position choices of comment letter filers).

The generalizability of the results was also reduced by biases in the samples which were used for testing.

First, inferences from the study are limited to the population of NYSE firm managers. The behavior of AMEX and OTC managers was not addressed by the present study.

Second, although a sample was drawn randomly from the population of NYSE firms, data was obtained for only 44% (131 of 300) of the population. Further, these 131 firms were self-selected in that the managers of these firms chose to respond to the questionnaire which was used to collect data. Therefore, the sample used may not be representative of the population of NYSE firm managers. In fact, an assessment of this nonresponse bias indicated that the sample of 131 firms included a disproportionate number of comment letter filers (when compared to the total population of NYSE firms). This bias limits the inferences made from the study to the sample. Stated otherwise, the findings cannot be generalized to the total population of NYSE firm managers.

Finally, different samples (and sample sizes) were used for each analysis in the study.[4] Therefore, inferences drawn from comparisons between the analyses using corporate attributes, manager cost expectations, and manager perceptions of the FASB as explanatory variables may be subject to bias. Inferences made from comparisons

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[4]The samples used for each analysis included substantially the same firms. However, there was some variation as shown in Table 6B. For example, if a firm manager had filed a comment letter on the ED, that firm was included in the analysis of position choice using corporate attributes as explanatory variables. However, if that manager had not also responded to the questionnaire, the firm was not included in the analysis of position choice using manager cost expectations as explanatory variables.

between analyses of position and participation choice may also be subject to bias.

7.3 Summary

The results from the present study are subject to the following limitations:

1) Reliability and validity of the measures obtained for the dependent variable - position choice

2) Reliability and validity of the measures obtained for the explanatory variables - manager cost expectations and manager perceptions of the FASB

3) Validity of the measures obtained for the explanatory variables - corporate attributes

4) Under and/or mispecification in the models used for testing

5) Nonresponse bias and varying samples and sample sizes.

These limitations reduce the power of the study and reduce the generalizability of the inferences which may be drawn. Nevertheless, the findings from the study provide support for the theory that there is a relationship between manager position and participation choice, and certain corporate attributes, manager cost expectations, and manager perceptions of the FASB. However, the findings may not be generalized beyond the behavior of the sample of NYSE firm managers included in the study. Further, relationships found between the dependent variables and the proxies used to measure the explanatory variable constructs may not be generalized to the constructs themselves.

APPENDICES

APPENDIX A

A COMPARISON OF THE FINANCIAL STATEMENT REQUIREMENTS UNDER THE MARCH 1985 EXPOSURE DRAFT AND FASB STATEMENT 36 AND APB OPINION 8

APPENDIX A

A COMPARISON OF THE FINANCIAL STATEMENT REQUIREMENTS
UNDER THE MARCH 1985 EXPOSURE DRAFT AND
FASB STATEMENT 36 AND APB OPINION 8

Disclosures Required by the March 1985 Exposure Draft

Note 10 - Pension Plans

The company has a defined benefit pension plan covering substantially all of its employees. The plan is noncontributory and provides pension benefits that are based on the employee's compensation during the three years before retirement. Future years of service and salary increases are both considered for purposes of funding and pension expense accrual.

Net pension expense for 1986, which represents 6.3% of annual compensation for covered employees, is comprised of the following (in thousands):

Normal cost	$ 11,652
Amortization of prior service costs	324
Amortization of excess plan assets	(8,308)
Amortization of unrecognized actuarial gains or losses	0
Interest cost on projected benefit obligations	76,154
Return on investments	(77,192)
	$ 2,630

APPENDIX A (continued)

The following table sets forth the plan's funded status and amounts recognized in the company's statement of financial postion at December 31, 1986 (in thousands):

Actuarial present value of benefit obligations:	
Vested	$ 515,726
Nonvested	26,055
Accumulated benefit obligations	541,781
Effect of projected future compensation levels	267,231
Projected benefit obligations	$ 809,012
Plan assets at fair value:	
Common stocks and other equity securities	$ 892,092
Plan assets in excess of projected benefit obligations	$ 83,080

At December 31, 1986, the weighted-average discount rate and rate of increase in future compensation levels used in determining the actuarial present value of the projected benefit obligation were 9 percent and 6 percent, respectively. Those assumptions can have a significant effect on the amounts reported. To illustrate, increasing the discount rate assumption to 10 percent would have decreased the projected benefit obligation and pension expense by $346,270,000 and $2,564,000 respectively, for the year ended December 31, 1986. Increasing the rate of change of future compensation levels to 7 percent would have increased the projected benefit obligation and penhsion expense by $183,600,000 and $2,564,000, respectively, for the year ended December 31, 1986.

The following table presents information regarding the changes in the fair value of the plan's assets (in thousands):

Plan assets at January 1		$ 857,685
Add:	Employer contributions	2,630
	Income from investments including change in fair value	93,117
Deduct:	Pension benefits paid to participants	61,340
Plan assets at December 31		$ 892,092

APPENDIX A (continued)

The Disclosures Required by FASB Statement 36

Note 10 - Pension Plans

The company has a defined benefit pension plan covering substantially all of its employees. Pension expense was $38,368,000 in 1986. A summary of estimated accumulated plan benefits and net assets available for plan benefits for the company's plan is presented below (in thousands):

Vested	$ 515,726
Nonvested	26,055
Accumulated benefit obligations	$ 541,781

The discount rate used in determining the present value of accumulated benefits was 9.0%.

A Comparison of Balance Sheet and Income Statement Effects

Balance Sheet Effects:

No pension liability is recorded for the company under APB Opinion 8 or the March 1985 Exposure Draft because plan assets exceed projected benefit obligations by $83,080. However, if the company had disclosed an excess of projected benefit obligations over available plan assets, a liability would have been recorded (in compliance with the March ED) for the amount by which accumulated plan benefits exceed available plan assets.

Income Statement Effects (in thousands):

Pension expense under APB Opinion 8:	$ 38,368
Change in normal and prior service costs due to change from entry age normal actuarial method to the projected unit credit method	(26,392)
Amortization of the excess plan assets	(8,308)
Interest cost on projected benefit obligations	76,154
Return on investments	(77,192)
Pension expense under the March 1985 Exposure Draft	$ 2,630

APPENDIX B

THE COVER LETTERS AND QUESTIONNAIRE

APPENDIX B

THE COVER LETTERS AND QUESTIONNAIRE
FIRST REQUEST COVER LETTER

September 9, 1985

Mr. Vice President, Finance
Sample Corporation
25 Avenue
New York, NY 00000

Dear Mr. Vice President:

I am a Ph.D. candidate in accounting at Michigan State University, doing a dissertation on the financial accounting standard-setting process in general, and specifically, the pension accounting issue. Very little research has been undertaken to determine the costs experienced by companies as a consequence of the financial accounting standard-setting process. I hope that my research will begin to fill that gap.

I would appreciate your help in completing the attached questionnaire and returning it in the enclosed envelope by September 24, 1985. It should take approximately thirty minutes of your time. Please feel free to write in any comments or clarifications you may have as to your answers or the questionnaire itself.

You may be assured that your responses will be kept strictly confidential. The results of the survey of 400 executives will be reported in the aggregate and I will not associate your name or your company's name with any results that are reported.

Thank you for your helpful participation!

Sincerely,

Georgia R. Saemann, MBA, CPA

Enclosure

APPENDIX B (continued)

SECOND REQUEST COVER LETTER

October 11, 1985

Mr. Vice President, Finance
Sample Corporation
25 Avenue
New York, NY 00000

Dear Mr. Vice President:

I am concluding the data collection phase of my study on the Financial Accounting Standards Board (FASB) and the costs associated with mandated accounting changes. As of this date, I have not received a completed questionnaire from you.

I am certainly aware of the value of your time, but I also believe that my study offers an important opportunity to express the views of your company on the FASB and the current accounting standard-setting process (the pension issue in particular).

I would appreciate it very much if you would complete those portions of the questionnaire which you believe are relevant. Also, do not feel restricted by the format of the questionnaire. Additional comments are welcome and will be incorporated into the final report.

If you have any further questions or desire clarification on any aspect of this study, please call me at (517) 437-7341, extension 423. I will return you call if I'm not immediately available.

Thank you again for your time and participation!

Sincerely,

Georgia R. Saemann, MBA, CPA

Enclosure

APPENDIX B (continued)

QUESTIONNAIRE

A QUESTIONNAIRE ON YOUR COMPANY'S PARTICIPATION
IN THE FINANCIAL ACCOUNTING STANDARD-SETTING PROCESS AND
THE IMPACT OF THE PENSION ACCOUNTING ISSUE ON YOUR COMPANY

PART I: YOUR COMPANY'S PARTICIPATION IN THE
FINANCIAL ACCOUNTING STANDARD-SETTING PROCESS

1. Does your company* support the FASB through financial contributions to the Financial Accounting Foundation.

   _____ Yes, we contribute approximately $_____ per year

   _____ No

2. Do you believe that by filing a comment letter you increase the probability of the FASB's continuance?

   _____ Yes, by about _____ %

   _____ No

3. Does your company participate in the activities of the FASB?

   _____ Yes, we spend approximately _____ man-days per year attending FASB hearings and industry association meetings related to financial accounting standard-setting. This costs our company approximately $_____ per year.

   _____ No

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*The term "company" means the group of companies whose results are consolidated for financial reporting purposes.

APPENDIX B (continued)

4. How does your company attempt to influence the FASB in the accounting standard-setting process? (allocate 100 points*)

_____ By direct involvement with the FASB (i.e., attending FASB hearings and industry association meetings)

_____ By filing comment letters

_____ We do not attempt to influence the FASB because it is too costly

_____ We do not attempt to influence the FASB because we do not believe the Board is responsive to corporate constituents

_____ Other (please specify...)_____

_____

100

*A more comprehensive instruction would read: Please allocate 100 points to the responses below. The points represent the approximate weights or percentage points you would give to each reason for your decision.

Example

For a leisure weekend trip last January, I chose to take the four-hour train ride from East Lansing, Michigan to Chicago because:

10 I could do some reading en route

_____ The train schedule was good

~~20~~ 10 Regional airfare was high

80 Other reasons (please specify...) I don't like to fly

100 Total

APPENDIX B (continued)

5. Excluding independent auditor and annual report production costs, what does it cost your company per year for financial accounting, research and external reporting?

   Between $_____ and $_____

   Approximately how are these costs distributed? (allocate 100 points)

   _____ Reviewing and evaluating the effect of new FASB pronouncements on our company

   _____ Preparing comment letters for the FASB and participating in FASB public hearings

   _____ Other (please specify)_____

   _____

   100 Total

6. If financial accounting standard-setting shifted entirely to the governmental sector, what would be the effect on your company's total annual cost of financial accounting, research and external reporting activities? (please check one answer and fill in the (percent)

   _____ Increase by at least _____ percent

   _____ Decrease by at least _____ percent

   _____ Be about the same

APPENDIX B (continued)

7. Before a response can be prepared, a general review or synopsis of the FASB pronouncement and evaluation of its impact on your company may be needed. On whom does your company rely to review, evaluate and respond to FASB pronouncements? (allocate 100 points for each process)

	Review	Evaluation	Reponse
Our own technical staff	_____	_____	_____
Auditors	_____	_____	_____
Investment bankers	_____	_____	_____
Industry associations	_____	_____	_____
Other (please specify...)			
_____	_____	_____	_____
Total	100	100	100

8. Proposed accounting standards have the potential to affect your company's financial statements and costs of financial reporting. In evaluating the effect of a proposed standard on your company, which of the following factors are you likely to consider? (allocate 100 points)

_____ Effect on level of reported net income

_____ Effect on stability of reported net income

_____ Effect on leverage ratios

_____ Effect on audit and bookkeeping costs

_____ Effect on goodwill of business colleagues (i.e., pressure from clients or customers to file a comment letter, taking a prescribed position)

_____ Other (please specify...) _____

_____

100 Total

APPENDIX B (continued)

PART II: THE IMPACT OF THE PENSION ACCOUNTING ISSUE ON YOUR COMPANY

1. The following questions relate to the position of your company on several aspects of the pension accounting issue.

	Yes	No
Should pension cost measurement be standardized as to the allocation of total costs?	___	___
Should a liability for unfunded accumulated benefits be recognized on the balance sheet?		
For vested benefits	___	___
For nonvested benefits	___	___
Should an asset for overfunded accumulated plan benefits be recognized on the balance sheet?	___	___
Should the discount rate used to calculate the present value of pension liabilities be based on current prices for settling the employer's obligation?	___	___
Should the discount rate used to calculate the present value of pension assets be based on fair value?	___	___
Should the following disclosures be required?		
The weighted-average assumed discount rate and rate of compensation increase used	___	___
The effect on the projected benefit obligation and net periodic pension cost of a one percentage point change in the discount rate or rate of compensation	___	___
The components of net periodic pension cost	___	___
Reconciliation of the funded status of the plan with amounts reported in financial statements	___	___

APPENDIX B (continued)

2. With respect to the issue of pension accounting, which factors most affected your decision to file or not file a comment letter on the March 22, 1985, exposure draft on pension accounting? (allocate 100 points)

_____ The magnitude of the costs which our company could incur if the March 22, 1985 exposure draft were adopted

_____ The potential effect of the March 22, 1985 exposure draft on future accounting issues

_____ Pressure from clients or other business colleagues to file a comment letter taking a prescribed position

_____ We had already made our position clear in previous comment letters

_____ Our company's desire to support the FASB in its rulemaking efforts

_____ The cost and effort incurred to research the proposal and prepare a comment letter

_____ We did not believe that our participation would have any effect on the standard issued by the FASB

_____ We do not support the FASB's rulemaking efforts in general

_____ Other (please specify...) _____

_____

100 Total

3. Do you believe there will be a change in the stock price (per share) of your company if the March 22, 1985 exposure draft is adopted?

_____ Yes, it could increase by as much as $_____ per share

_____ Yes, it could decrease by as much as $_____ per share

_____ No

APPENDIX B (continued)

4. What specific costs do you believe your company may incur if the March 22, 1985 exposure draft on pension accounting is adopted? Please consider both the out-of-pocket and opportunity costs incurred to initiate compliance.*

   NOTE: You may believe that some or all of the following costs are insignificant. Please use a "0" in these cases.

   Administrative costs (including actuarial and audit fees, computer installations and other information processing costs) $_____

   Public relations costs (including the time spent to explain your pension plan to employees, investors, creditors or others) $_____

   Internal management costs (including the time spent to reeducate management and to maintain separate records if a different method is to be used for funding than is used for accounting) $_____

   Existing debt costs (including changes in interest rates on existing debt caused by a violation of indenture requirements) $_____

   Future debt costs (including changes in interest rates on future debt as a result of a change in bond ratings) $_____

   Other costs (please specify...) _____ $_____

   _____

5. Would a reduction in the reported income of your company as a result of a change in pension accounting affect the compensation of upper level management or any other profit sharing plan?

   _____ Yes, total management compensation could decrease by as much as _____%

   _____ No

*Out-of-pocket costs include corporate expenditures for additional employees, materials, etc., and opportunity costs include the costs of reduced attention to other problems or opportunities.

APPENDIX B (continued)

IF YOU WOULD LIKE TO RECEIVE A SUMMARY OF THE STATISTICAL RESULTS, PLEASE INDICATE TO WHOM THEY SHOULD BE MAILED:

_____

(Name)

_____

(Title)

THANK YOU FOR YOUR TIME AND CONSIDERATION IN COMPLETING THIS QUESTIONNAIRE. PLEASE RETURN IT IN THE ENCLOSED, SELF-ADDRESSED, STAMPED ENVELOPE.

APPENDIX C

PROBIT ANALYSES
CORPORATE ATTRIBUTES AND POSITION CHOICE

APPENDIX C

PROBIT ANALYSES
CORPORATE ATTRIBUTES AND POSITION CHOICE

COMMENT LETTER NONFILERS
(41 opposers and 33 supporters)[a]

Corporate Attribute	Beta Coefficient[bc] Analysis 1 (Sales)	Analysis 2 (Assets)	Analysis 3 (Employees)
Constant	.7482	.7629	.5506
	(.050)	(.045)	(.098)
Firm size	-.00000	-.00000	-.00001
	(.066)	(.042)	(.170)
Leverage	-.2103	-.2026	-.2084
	(.044)	(.045)	(.043)
Labor intensity	-.0111	-.0135	.0020
	(.302)	(.266)	(.462)
Pension plan benefit/assets	-.4100	-.3312	-.4579
	(.158)	(.212)	(.131)
Chi-square	8.79	10.10	7.00
(Significance)	.0665	.0387	.1360
Predicted	55%	57%	54%

[a]See Table 6B for detail on sample size reduction.

[b]A positive relationship was hypothesized between manager position choice, firm leverage, and pension plan status. An inverse relationship was hypothesized for firm size and labor intensity.

[c]One-tailed probability of t-statistic in parentheses.

APPENDIX D

PROBIT ANALYSES
CORPORATE ATTRIBUTES AND PARTICIPATION CHOICE

APPENDIX D

PROBIT ANALYSES
CORPORATE ATTRIBUTES AND PARTICIPATION CHOICE

EXPOSURE DRAFT OPPOSERS
(37 filers and 41 nonfilers)[a]

Factor	Beta Coefficients[bc] Analysis 1 (Sales)	Analysis 2 (Assets)	Analysis 3 (Employees)
Constant	-.1103	-.3144	.2979
	(.413)	(.284)	(.285)
Firm size	.00000	.00000	.00003
	(.009)	(.0005)	(.003)
Leverage	.0009	-.0733	.0031
	(.493)	(.208)	(.475)
Labor intensity	-.0352	-.0378	-.0851
	(.093)	(.096)	(.003)
Pension plan benefit/assets	-.3326	-.1750	-.4233
	(.265)	(.374)	(.238)
Overall Statistics			
Chi-square	16.67	26.30	20.13
(Significance)	.0022	.0000	.0005
Predicted	70%	72%	65%

[a]See Table 6B for detail on sample size reduction.

[b]An inverse relationship was hypothesized between manager participation choice, firm leverage and pension plan status. A positive relationship was hypothesized for firm size and labor intensity.

[c]One-tailed probability of t-statistic in parentheses.

APPENDIX E

PROBIT ANALYSES
MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE

APPENDIX E

PROBIT ANALYSES
MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE
(FAF and probability of affecting the FASB's continuance)

ED OPPOSERS
(24 filers and 41 nonfilers)[a]

Manager Perceptions[d]	Beta coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.2779	.4301	.0232	.1204
	(.249)	(.160)	(.475)	(.375)
Pr (influence)	-.0087	-.4847	-.0103	-.0677
	(.134)	(.494)	(.111)	(.500)
FAF contribution	-.5355	-.6191	-.1615	-.2918
	(.107)	(.092)	(.343)	(.245)
Pr(LRPV)	.0130	.1312	.0086	.0150
	(.113)	(.117)	(.167)	(.084)
Lobby cost	-.3330	-.3569	-.4777	-.4899
	(.489)	(.493)	(.490)	(.491)
Log likelihood	-32.76	-29.21	-33.98	-30.49
Chi-square	18.20	25.32	15.76	22.74
Significance	.0011	.0000	.0034	.0001
Predicted	71%	73%	68%	70%

APPENDIX E (continued)

PROBIT ANALYSES
MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE
(Shift to government and
probability of affecting the FASB's continuance)

ED OPPOSERS
(26 filers and 36 nonfilers)[a]

Manager Perceptions[d]	Beta coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	-.0209	.0635	-.0209	-.0120
	(.462)	(.385)	(.460)	(.477)
Pr (influence)	-.0092	-.5297	-.0102	-.0625
	(.121)	(.494)	(.109)	(.497)
Shift to government	.0010	.0017	.0018	.0019
	(.302)	(.303)	(.261)	(.314)
Pr(LRPV)	.0097	.0097	.0057	.0115
	(.188)	(.189)	(.267)	(.149)
Lobby cost	-.3158	-.3346	-.4822	-.4651
	(.491)	(.499)	(.492)	(.489)
Log likelihood	-33.54	-29.72	-34.44	-31.14
Chi-square	17.24	24.89	15.46	22.05
Significance	.0017	.0001	.0038	.0002
Predicted	60%	69%	61%	63%

APPENDIX E (continued)

PROBIT ANALYSES
MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE
(Filed comment on ED to support the FASB)

ED OPPOSERS
(28 filers and 46 nonfilers)[a]

Manager Perceptions[d]	Beta coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.0037	.1063	.0156	.0725
	(.492)	(.278)	(.465)	(.343)
Pr (influence)	-.0096	-.5075	-.0114	-.0528
	(.109)	(.494)	(.083)	(.489)
Filed to support FASB	.0079	.0060	.0079	.0068
	(.186)	(.248)	(.185)	(.220)
Lobby cost	-.3152	-.3350	-.1177	-.1185
	(.490)	(.493)	(.080)	(.096)
Log likelihood	-42.99	-38.82	-43.56	-40.43
Chi-square	19.63	27.96	18.48	24.75
Significance	.0002	.0000	.0003	.0000
Predicted	60%	68%	60%	65%

[a]See Table 6B for detail on sample size reduction.

[b]An inverse relationship was hypothesized between manager participation choice, Pr of influence (which was measured in negative terms), and lobby cost. A positive relationship was hypothesized for filed comment to support the FASB.

[c]One-tailed probability of t-statistic in parentheses.

[d]Measures for "pr(influence)/lobby costs".

APPENDIX F

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE

APPENDIX F

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Sales, FAF and probability of affecting the FASB's continuance)

ED OPPOSERS
(20 filers and 35 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.1922	-.0898	-.0774	.0088
	(.40)	(.46)	(.46)	(.50)
Sales	.0015	.0017	.0015	.0017
	(.02)	(.02)	(.02)	(.02)
Debt/equity ratio	.0448	.8629	.0272	.2968
	(.24)	(.02)	(.33)	(.10)
Employees/ sales ratio	-.0078	-.0380	-.0124	-.0422
	(.42)	(.19)	(.37)	(.15)
Pension benefits/assets	-.3278	-.9233	-.1732	-.3306
	(.32)	(.16)	(.39)	(.33)
Pr (influence)	-.0068	-.2890	-.0081	-.1089
	(.24)	(.50)	(.21)	(.50)
FAF contribution	-.9243	-1.4817	-.5628	-1.0493
	(.03)	(.01)	(.11)	(.03)
Pr(LRPV)	.0152	.0241	.0080	.0238
	(.12)	(.05)	(.21)	(.05)
Lobby cost	-.3200	-.3193	-.5137	-.5107
	(.49)	(.50)	(.49)	(.49)
Chi-square	24.33	37.05	21.12	31.87
(Significance)	(.0020)	(.0000)	(.0068)	(.0001)
Predicted	78%	87%	78%	82%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Sales, shift and probability of affecting the FASB's continuance)

ED OPPOSERS
(23 filers and 33 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	-.2805	-.4742	-.3193	-.2829
	(.33)	(.29)	(.30)	(.35)
Sales	.0018	.0019	.0020	.0021
	(.02)	(.03)	(.02)	(.02)
Debt/equity ratio	.0464	.5522	.0263	.1868
	(.29)	(.06)	(.34)	(.15)
Employees/ sales ratio	-.0349	-.0668	-.0372	-.0674
	(.18)	(.06)	(.17)	(.06)
Pension benefits/assets	-.1051	-.4324	.0136	-.0657
	(.44)	(.29)	(.49)	(.46)
Pr (influence)	-.0057	-.2417	-.0083	-.0867
	(.28)	(.50)	(.21)	(.50)
Shift to government	-.0114	-.0111	-.0104	-.0114
	(.11)	(.15)	(.16)	(.15)
Pr(LRPV)	.0184	.0220	.0121	.0221
	(.07)	(.04)	(.11)	(.05)
Lobby cost	-.2860	-.2772	-.4928	-.4997
	(.50)	(.50)	(.49)	(.50)
Chi-square	24.96	35.78	22.53	32.92
(Significance)	(.0016)	(.0000)	(.0040)	(.0001)
Correctly predicted	75%	80%	77%	77%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Sales, and filed comment on ED to support the FASB)

ED OPPOSERS
(28 filers and 41 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.0804	.4117	-.0224	.2421
	(.45)	(.25)	(.49)	(.33)
Sales	.0012	.0012	.0012	.0012
	(.04)	(.05)	(.03)	(.05)
Debt/equity ratio	.0158	.0804	.0042	.0625
	(.39)	(.18)	(.47)	(.21)
Employees/ sales ratio	-.0248	-.0436	-.0254	-.0483
	(.20)	(.08)	(.21)	(.07)
Pension benefits/assets	-.3895	-.6169	-.2562	-.3757
	(.26)	(.17)	(.32)	(.26)
Pr (influence)	-.0072	-.4350	-.0075	-.0609
	(.20)	(.50)	(.20)	(.49)
Filed to support FASB	.0049	.0030	.0055	.0042
	(.30)	(.38)	(.28)	(.33)
Lobby cost	-.3008	-.3223	-.0698	-.0574
	(.49)	(.50)	(.25)	(.30)
Chi-square	26.01	34.32	23.55	30.75
(Significance)	(.0005)	(.0000)	(.0014)	(.0001)
Correctly predicted	74%	81%	74%	78%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Assets, FAF and probability of affecting the FASB's continuance)

ED OPPOSERS
(20 filers and 35 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	-.2333	-.4331	-.3084	-.4477
	(.40)	(.33)	(.35)	(.31)
Assets	.0031	.0029	.0030	.0030
	(.001)	(.003)	(.001)	(.001)
Debt/equity ratio	-.0820	.8508	-.1224	.3601
	(.21)	(.03)	(.17)	(.08)
Employees/ sales ratio	-.0323	-.0463	-.0297	-.0503
	(.24)	(.18)	(.25)	(.14)
Pension benefits/assets	.0778	-.8106	.0388	-.1818
	(.46)	(.20)	(.48)	(.41)
Pr (influence)	.0064	-.2016	.0033	-.1162
	(.28)	(.50)	(.39)	(.50)
FAF contribution	-1.3065	-1.6946	-.9044	-1.3523
	(.01)	(.005)	(.04)	(.02)
Pr(LRPV)	.0245	.0285	.0139	.0278
	(.05)	(.04)	(.10)	(.03)
Lobby cost	-.3052	-.2984	-.4401	-.4444
	(.49)	(.50)	(.49)	(.50)
Chi-square	36.21	43.11	32.96	39.62
(Significance)	(.0000)	(.0000)	(.0001)	(.0000)
Correctly predicted	85%	87%	85%	89%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Assets, shift and probability of affecting the FASB's continuance)

ED OPPOSERS
(23 filers and 33 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	-.7752	-.7876	-.5966	-.6758
	(.15)	(.19)	(.20)	(.21)
Assets	.0032	.0027	.0031	.0030
	(.001)	(.005)	(.001)	(.002)
Debt/equity ratio	-.0499	.4816	-.1277	.1863
	(.33)	(.10)	(.21)	(.21)
Employees/ sales ratio	-.0591	-.0789	-.0572	-.0808
	(.11)	(.06)	(.11)	(.06)
Pension benefits/assets	.2529	-.2015	.2534	.1379
	(.36)	(.40)	(.35)	(.42)
Pr (influence)	.0049	-.1835	.0018	-.0813
	(.33)	(.50)	(.44)	(.50)
Shift to government	-.0148	-.0137	-.0134	-.0142
	(.08)	(.10)	(.11)	(.10)
Pr(LRPV)	.0261	.0264	.0187	.0262
	(.02)	(.02)	(.04)	(.02)
Lobby cost	-.2666	-.2830	-.4165	-.3999
	(.50)	(.50)	(.50)	(.50)
Chi-square	34.84	40.68	32.88	39.00
(Significance)	(.0000)	(.0000)	(.0001)	(.0000)
Correctly predicted	82%	79%	84%	82%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Assets and filed comment on ED to support the FASB)

ED OPPOSERS
(28 filers and 41 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	-.2829	.0691	-.2362	.0526
	(.32)	(.46)	(.34)	(.47)
Assets	.0022	.0020	.0019	.0017
	(.003)	(.01)	(.002)	(.01)
Debt/equity ratio	-.0809	-.0184	-.0905	-.0224
	(.24)	(.46)	(.17)	(.44)
Employees/ sales ratio	-.0243	-.0361	-.0311	-.0472
	(.23)	(.14)	(.17)	(.08)
Pension benefits/assets	-.1570	-.3809	-.0883	-.2388
	(.40)	(.28)	(.44)	(.34)
Pr (influence)	-.0018	-.4271	-.0012	-.0614
	(.43)	(.50)	(.45)	(.50)
Filed to support FASB	.0032	.0016	.0052	.0040
	(.37)	(.44)	(.29)	(.34)
Lobby cost	-.2909	-.3157	-.0419	-.0346
	(.49)	(.50)	(.28)	(.32)
Chi-square	34.43	39.51	31.13	35.53
(Significance)	(.0000)	(.0000)	(.0001)	(.0000)
Correctly predicted	81%	84%	75%	81%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Employees, FAF and probability of affecting the FASB's continuance)

ED OPPOSERS
(20 filers and 35 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.8666	.9880	.5805	.9330
	(.14)	(.18)	(.21)	(.15)
Number of employees	.00003	.00003	.00003	.00003
	(.02)	(.03)	(.01)	(.01)
Debt/equity ratio	.0298	.6259	.0159	.2232
	(.31)	(.05)	(.39)	(.14)
Employees/ sales ratio	-.0772	-.1112	-.0842	-.1193
	(.04)	(.02)	(.03)	(.01)
Pension benefits/assets	-.5961	-1.2121	-.3655	-.6646
	(.22)	(.12)	(.30)	(.22)
Pr (influence)	-.0045	-.2435	-.0061	-.0986
	(.33)	(.50)	(.27)	(.50)
FAF contribution	-.9359	-1.4277	-.6206	-1.0846
	(.03)	(.01)	(.09)	(.03)
Pr(LRPV)	.0131	.0206	.0062	.0202
	(.15)	(.07)	(.27)	(.08)
Lobby cost	-.3232	-.3309	-.5380	-.5348
	(.49)	(.49)	(.49)	(.49)
Chi-square	25.20	36.17	23.15	33.19
(Significance)	(.0014)	(.0000)	(.0032)	(.0001)
Predicted	76%	87%	76%	84%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Employees, shift and probability of affecting the FASB's continuance)

ED OPPOSERS
(23 filers and 33 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.2297	.2284	.2096	.3414
	(.36)	(.39)	(.36)	(.31)
Number of employees	.00003	.00002	.00003	.00003
	(.02)	(.03)	(.01)	(.02)
Debt/equity ratio	.0294	.3799	.0131	.1448
	(.32)	(.13)	(.42)	(.16)
Employees/ sales ratio	-.0978	-.1204	-.1044	-.1315
	(.02)	(.01)	(.01)	(.01)
Pension benefits/assets	-.1625	-.4430	-.0497	-.1535
	(.41)	(.29)	(.47)	(.42)
Pr (influence)	-.0038	-.2921	-.0060	-.0817
	(.36)	(.59)	(.28)	(.50)
Shift to government	-.0059	-.0044	-.0045	-.0045
	(.24)	(.32)	(.31)	(.31)
Pr(LRPV)	.0159	.0185	.0100	.0183
	(.09)	(.07)	(.15)	(.07)
Lobby cost	-.2871	-.2948	-.5032	-.5056
	(.49)	(.50)	(.49)	(.49)
Chi-square	25.46	35.42	24.20	34.06
(Significance)	(.0013)	(.0000)	(.0021)	(.0000)
Predicted	77%	84%	75%	82%

APPENDIX F (continued)

PROBIT ANALYSES
CORPORATE ATTRIBUTES, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Employees, and filed comment on ED to support the FASB)

ED OPPOSERS
(20 filers and 35 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.4362	.7537	.3416	.5870
	(.22)	(.11)	(.26)	(.15)
Number of employees	.00003	.00003	.00003	.00003
	(.01)	(.02)	(.01)	(.01)
Debt/equity ratio	.0162	.0993	.0067	.0746
	(.39)	(.17)	(.45)	(.19)
Employees/ sales ratio	-.0709	-.0899	-.0719	-.0944
	(.02)	(.01)	(.02)	(.01)
Pension benefits/assets	-.4589	-.7035	-.3237	-.4429
	(.24)	(.17)	(.29)	(.24)
Pr (influence)	-.0062	-.3995	-.0067	-.0632
	(.25)	(.50)	(.24)	(.49)
Filed to support FASB	.0029	-.0050	-.0025	-.0043
	(.39)	(.31)	(.41)	(.34)
Lobby cost	-.3007	-.3215	-.0791	-.0707
	(.49)	(.49)	(.23)	(.26)
Chi-square	22.23	36.74	25.92	33.73
(Significance)	(.0002)	(.0000)	(.0005)	(.0000)
Predicted	72%	78%	72%	78%

APPENDIX F (continued)

[a]See Table 6B for detail on sample size reduction.

[b]An inverse relationship was hypothesized between manager participation choice, firm leverage, pension plan status, Pr of influence (which was measured in negative terms), and lobby cost. A positive relationship was hypothesized for firm size, labor intensity, FAF, shift to government, and filed to support the FASB.

[c]One-tailed probability of t-statistic in parentheses.

[d]Measures for "pr(influence)/lobby costs".

APPENDIX G

PROBIT ANALYSES
MANAGER COST EXPECTATIONS, MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE

APPENDIX G

PROBIT ANALYSES
MANAGER COST EXPECTATIONS, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(FAF and probability of affecting the FASB's continuance)

ED OPPOSERS
(20 filers and 37 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	.0454	.2779	-.2989	-.2993
	(.46)	(.47)	(.26)	(.25)
Admin & public relation costs	.0078	.0077	.0083	.0082
	(.02)	(.02)	(.02)	(.02)
Debt costs	-.0002	-.0002	-.0002	-.0002
	(.34)	(.34)	(.34)	(.34)
Mgmt comp costs	-.1551	.3546	.1495	.5420
	(.41)	(.34)	(.41)	(.25)
Pr (influence)	-.0112	-.4495	-.0130	-.0660
	(.11)	(.50)	(.09)	(.50)
FAF contribution	-.8732	-.7980	-.4882	-.5307
	(.04)	(.06)	(.15)	(.13)
Pr(LRPV)	.0141	.0158	.0117	.0187
	(.12)	(.10)	(.12)	(.06)
Lobby cost	-.3210	-.3338	-.4643	-.4624
	(.49)	(.49)	(.49)	(.49)
Chi-square	26.33	32.37	23.38	29.82
(Significance)	(.0004)	(.0000)	(.0015)	(.0001)
Correctly predicted	80%	84%	80%	82%

APPENDIX G (continued)

PROBIT ANALYSES
MANAGER COST EXPECTATIONS, MANAGER PERCEPTIONS OF THE FASB AND PARTICIPATION CHOICE
(Shift to government and probability of affecting the FASB's continuance)

ED OPPOSERS
(22 filers and 35 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	-.4690	-.4120	-.5083	-.5107
	(.06)	(.10)	(.04)	(05)
Adm & public relation costs	.0053	.0055	.0056	.0060
	(.06)	(.07)	(.06)	(.05)
Debt costs	-.0002	-.0002	-.0002	-.0002
	(.30)	(.29)	(.25)	(.30)
Mgmt comp costs	.6671	.6925	.9202	.7317
	(.14)	(.17)	(.09)	(.16)
Pr (influence)	-.0117	-.5427	-.0099	-.0631
	(.09)	(.49)	(.14)	(.50)
Shift to government	.0016	.0068	.0025	.0081
	(.23)	(.34)	(.25)	(.31)
Pr(LRPV)	.0101	.0103	.0068	.0119
	(.19)	(.19)	(.25)	(.16)
Lobby cost	-.2859	-.3004	-.4350	-.4399
	(.49)	(.49)	(.49)	(.49)
Chi-square	23.89	30.89	23.75	29.23
(Significance)	(.0012)	(.0001)	(.0013)	(.0001)
Correctly predicted	77%	77%	79%	79%

APPENDIX G (continued)

PROBIT ANALYSES
MANAGER COST EXPECTATIONS, MANAGER PERCEPTIONS OF THE FASB
AND PARTICIPATION CHOICE
(Filed comment on ED to support the FASB)

ED OPPOSERS
(28 filers and 42 nonfilers)[a]

Variable Measures[d]	Beta Coefficients[bc] Analysis 1 (Pt I/Pt I)	Analysis 2 (Pt II/Pt I)	Analysis 3 (Pt I/Pt II)	Analysis 4 (Pt II/Pt II)
Constant	-.2271	-.1243	-.2881	-.2435
	(.17)	(.31)	(.11)	(.15)
Adm & public relation costs	.0055	.0056	.0069	.0071
	(.06)	(.07)	(.03)	(.04)
Debt costs	-.0002	-.0002	-.0002	-.0002
	(.27)	(.26)	(.28)	(.28)
Mgmt comp costs	.0525	.1146	.2002	.3078
	(.45)	(.40)	(.33)	(.26)
Pr (influence)	-.0130	-.4993	-.0143	-.0536
	(.07)	(.49)	(.07)	(.49)
Filed to support FASB	.0019	.0001	.0011	-.0001
	(.42)	(.50)	(.45)	(.49)
Lobby cost	-.3021	-.3217	-.1337	-.1495
	(.49)	(.49)	(.10)	(.09)
Chi-square	24.76	32.43	23.84	29.55
(Significance)	(.0004)	(.0000)	(.0006)	(.0000)
Correctly predicted	73%	69%	71%	73%

APPENDIX G (continued)

[a]See Table 6B for detail on sample size reduction.

[b]An inverse relationship was hypothesized between manager participation choice, Pr of influence (which was measured in negative terms), and lobby cost. A positive relationship was hypothesized for manager cost expectations, FAF, shift to government, and filed to support the FASB.

[c]One-tailed probability of t-statistic in parentheses.

[d]Measures for "pr(influence)/lobby costs".

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