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AN INVESTIGATION OF THE ASSOCIATION BETWEEN AUDITOR SWITCHING AND NEGATIVE INFORMATION

by

Michael M. Grayson, B.S.B.A., M.B.A., M. Acc.

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

COLLEGE OF ADMINISTRATION AND BUSINESS
LOUISIANA TECH UNIVERSITY

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LOUISIANA TECH UNIVERSITY

THE GRADUATE SCHOOL

February 24, 2001
Date

We hereby recommend that the dissertation prepared under our supervision by Michael M. Grayson entitled An Investigation of the Association Between Auditor Switching and Negative Information be accepted in partial fulfillment of the requirements for the Degree of **Doctor of Business Administration**

Supervisor of Dissertation Research

Head of Department
Accounting
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Recommendation concurred in:

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Approved:
Director of Graduate Studies

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ABSTRACT

This study investigates the premise that certain types of negative information are associated with auditor switches. A data set of 305 auditor switches from 1976 to 1994, extracted from the Compustat data base (limited subscription), was analyzed using tests of proportions and nonparametric sign tests. The data set consists of negative information extracted from the switching companies' income statements (i.e., net losses or extraordinary items) or calculated from the items extracted (i.e., net income adjusted to reverse the effect of extraordinary items).

The initial results, based on tests which assumed random movement of net income, did not support the notion that net losses or decreases in net income (with or without adjustment to reverse the effect of extraordinary items) occurred disproportionately in the year after the auditor switch compared to the year before the auditor switch. However, supplemental analyses which used a different expectation for net income (i.e., a 1972 finding by Ball and Watts that accounting net income each year is greater

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than or equal to the preceding year's net income) do support the notion that more negative information is reported in income statements following an auditor switch than preceding the auditor switch.

This study uses a data source, the Compustat data base, which has not been used much in previously published journal articles on auditor switching. (In fact, when the study was begun [in 1996], the author found no previously published study of auditor switching which had used this source.) Investigation of the underlying data indicates that (1) switches among non-Big audit firms are not available before 1989, (2) auditor code changes before 1990 which appear to indicate a change from non-Big audit firms to Big audit firms might actually be the result of a business combination of audit firms, and therefore should be subjected to further investigation, and (3) auditor codes should be visually examined over multiple years (for reasonableness) before using the codes as a basis for auditor switching studies. Additionally, the data set employed indicates that auditor switches by publicly-owned companies may frequently be a predictor of bad financial news which has not yet occurred.

Key words: auditor switching, negative information, submartingale, nonparametric tests

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DEDICATION

For their moral courage, I thank the following individuals: Ronald Barden, Jayaraman Vijayakumar, Elliott Slocum, and Frank Stabler of Georgia State University, plus Edward McIntyre and Rene Manes of Florida State University. There may be other individuals who deserve thanks who are not named here.

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CHAPTER 1

1.1 Introduction

Most top-level managers of sizable publicly-owned companies possess private information.[1] Arguably, when such private information is negative (negative information), managers have an incentive to delay disclosing such information. However, the attempts of managers to delay the disclosure of such information may be futile once the negative information becomes known to the external auditors. In an effort to delay the external auditors from finding and, in turn, requiring the disclosure of negative information, managers may choose to discontinue their company's relationship with their incumbent audit firm. In this regard, this study investigates the association between auditor switching and certain types of negative information.

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[1]For example, managers know about non-public negotiations in process with prospective major new customers (or vendors, etc.), the related potential positive (or negative) effect on their employing company's profitability and, in turn, the ultimate related positive (negative) effect on the value of the managers' bonuses, stock owned and stock options.

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1.2 Auditor Switching--An Overview

Based on the results of a literature review, Krishnan (1994, 210-211) gave the following reasons for auditor switching: dissatisfaction with service, dissatisfaction over fees, disagreements over accounting issues (opinion shopping), management change, change of engagement partner, (auditor) resignation, initial public offerings, rapid growth, and search for "credible auditors." While this list is not exhaustive, it provides insight into the diversity of possible reasons for auditor switching. The focus of this study is on a reason not specifically mentioned by Krishnan: management's desire to delay disclosing negative information.

1.3 Statement of the Problem

This study is grounded in the notion that managers switch auditors to delay disclosing negative information. The scenario underlying this notion follows. First, managers possess certain negative information and wish to delay disclosing such information. Second, managers believe that the present auditors are likely to discover the negative information if they continue as the company's auditors. Third, managers do not believe that they will be able to convince the auditors that the negative information

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is immaterial (i.e., the information is so insignificant that disclosure of such information is not considered necessary in the circumstances). Consequently, managers switch auditors in an effort to delay disclosure of negative information.

1.4 Objective of this Study

This study investigates the premise that certain types of negative information are associated with auditor switches. Specifically, this study seeks to determine if the proportion of certain types of negative information in financial statements increases in the year after the auditor switch (t+1) relative to the year before the auditor switch (t-1).[2]

There is no *a priori* reason to expect certain types of negative information in the financial statements to occur systematically with respect to the timing of auditor switching. If such items occur randomly rather than systematically, there is no reason to assume that there will be any greater number or proportion of them during the year after the auditor switch than during the year before the auditor switch. Accordingly, if a statistically

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[2]The logic underlying the use of the year after the auditor switch (t+1) rather than the year of the auditor switch (t) is discussed at length in section 3.4.

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significant relationship is found to occur, this suggests that certain types of negative information are somehow associated with auditor switching. In turn, such an association would support the notion that managers switch auditors to delay publicizing negative information.

1.5 Methodology

A data set containing 305 auditor switches from 1976 to 1994, extracted from the Compustat data base (limited subscription),[3] was analyzed using tests of proportions and nonparametric sign tests. In general, the data set consists of certain items extracted from the switching companies' income statements (i.e., net losses or extraordinary items) or calculated from the items extracted (i.e., net income adjusted to reverse the effect of extraordinary items).

In essence, the data proxy for negative information. Again, if the proportion of certain types of negative information in financial statements significantly increases in the year after the auditor switch relative to the year before the auditor switch, this supports the notion that managers switch auditors to delay disclosing negative information.

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[3]Sample selection is discussed at length in section 3.8.

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1.6 Differences from Earlier Studies

Dhaliwal, Schatzberg, and Trombley (1993, 23) posit the premise that certain negative information is known to the auditor (perhaps even before known to management). This study allows the possibility that management is aware of certain negative information before the auditor, and can act on that information before the auditor learns of it. For convenience, the term management is used here to mean managers collectively.

Knapp and Elikai's (1990) information suppression hypothesis assumes that management needs to suppress information permanently. This study allows for the possibility that management can sometimes be satisfied by suppressing information temporarily rather than permanently. Accordingly, this study is somewhat similar to Kluger and Shields (1991, 255), who discussed the possibility of auditor changes being associated with attempts to "***delay***[4] the release of unfavourable information."

This study is completely dissimilar to Teoh (1992, 2, citing Fried and Schiff 1981, Chow and Rice 1982, and Schwartz and Menon 1985), who, based on his review of prior

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research, concluded that a "switch signifies that the firm was attempting to influence the auditor." Auditor influence is not at issue in this study given that, in this study, the auditor is assumed to be unaware of the negative information at the time of the switch (or is assumed to be aware of the negative information but, due to "timely" dismissal/termination, is not in a position to cause disclosure of negative information). Stated otherwise, this study is grounded in the notion that management is attempting to *avoid* the auditor, not *influence* the auditor--perhaps because management knows it would be unable to persuade the auditors to not require disclosure of the negative information.

Chow and Rice (1982, 333) addressed negative information by testing for a relationship between auditor switching and type of audit opinion in the year following qualification. However, such a test does not measure whether management was successful in delaying the revelation of negative information. The financial statements for the year following an auditor switch could show a loss, resulting from the successful delay in reporting negative information, and the auditors would not qualify the opinion, yet management would have achieved its goal of delaying the revelation of negative information.

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Because of the purpose and nature of their test, Chow and Rice's test would show no such association even if one exists.

Campbell and McNiel (1985, 317) attributed concentration of client companies with particular auditors over time, after starting from an equal distribution among audit firms, as being the result of stochastic (random) forces. As Campbell and McNiel (1985, 322) stated, "when cumulated over time, pure luck may advance some firms to a position of dominance while relegating others to obscurity." This study assumes that purposeful actions by clients and auditors are more likely than random choices to shape the market for audit services and size of audit firms over a period of decades.

DeFond (1992, 17) reported that "managers seem to change auditors in anticipation of some agency conflicts...." The concept that managers/agents do not wish to disclose negative information to their investors/ principals and will take steps to prevent the auditors/monitors from learning of the negative information is consistent with an agency-model formulation. Intuitively, in an agency-model context, managers/agents wishing to delay disclosing negative information to their investors/principals would seek out low (lower) quality

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auditors (i.e., not-as-high quality auditors) to replace their current high (higher) quality auditors.

Significantly, prior research has not concentrated on managements' incentives and motivations to replace high-quality auditors with lower quality auditors. Rather, as indicated below, prior authors have assumed that managers were always moving to *higher* quality auditors rather than *lower* quality auditors.[5]

> The current paper argues that size alone alters auditors' incentives such that, ceteris paribus, larger audit firms supply a higher level of audit quality (DeAngelo 1981b, 184).
>
> Consistent with prior research, we treat audit quality as a dichotomous variable and assume that Big Six auditors are of higher quality than non-Big Six auditors (Becker, DeFond, Jiambalvo, and Subramanyam 1988, 1).
>
> Clients that switch from non-Big Eight to Big Eight auditors are defined as movers in search of credibility (Krishnan 1994, 211).

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[5]Prior authors have never discussed the facts that (1) the largest audit firms which clients switched *from* were the same firms which other clients switched *to*, and (2) each of the largest firms both lost audit clients to the other largest firms and also picked up audit clients from the other largest firms. Logically--at least, according to the theory of such prior authors that movement is always to a higher quality auditor--this means that each of these largest audit firms was simultaneously higher quality and lower quality than each of the other largest audit firms. This simultaneous existence of mutually exclusive states is of course an impossibility.

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This study allows for the possibility that managers might move from *high quality* auditors in an attempt to find *not-as-high quality* auditors.[6]

1.7 Conclusion

This study investigates the notion that managers switch auditors to delay disclosing negative information. An overview of this study was provided in this chapter. The remainder of this study is presented as follows. Chapter 2 is a review of relevant literature, including previous avenues of research and theories concerning why companies switch audit firms. Chapter 3 is a discussion of the methodology used in this study. Chapter 4 presents the results of the study. Chapter 5 presents a summary of the findings, the contributions of this study, and the implications for further research. There are also several appendices. Appendices A, B, C, and D discuss concepts which have not been explicitly addressed in the prior literature on auditor switching. Appendix E presents a new model of the economy. This new model in Appendix E was the original motivation for investigating auditor switching, though the same study can be motivated by other means as

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[6]The issue of auditor quality is addressed at length in section 2.3.

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mentioned in Chapter 3, Section 6. Appendix F explains that the type of auditor switch (auditor dismissal versus auditor resignation) is irrelevant for the purposes of this study.

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CHAPTER 2

2.1 Literature Review

The structure of the literature review is as follows. Section 2.2 provides a summary of reasons (or variables) which earlier researchers have hypothesized to be associated with auditor switching. In essence, this section provides the reader with an overview of the variety of research previously undertaken regarding auditor switching. Section 2.3 focuses on audit quality. The notion that audit quality differs among audit firms (or at least the notion that managers perceive that audit quality differs among audit firms) is critical to the underlying premise of this study. Stated otherwise, managers could not reasonably expect to delay the disclosure of negative information unless they hoped to find some difference (reduction) in audit quality between the predecessor audit firm and the successor audit firm. Section 2.4 gives additional considerations with respect to auditor switching. The chapter concludes at Section 2.5 with a brief summary.

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2.2 Auditor Switching: Previously Hypothesized Reasons (or Variables)

Why do managers switch from one auditor to another? One possibility is excessive fees (see Table 1, following). However, if excessive fees charged were the true reason for the switch, why are other auditees willing to engage that same audit firm as their new auditor in the face of knowledge that their new auditor has been overcharging its clients? Why, in an efficient marketplace, do other existing clients of the overcharging audit firm retain the overcharging auditor when they might reasonably conclude that they are also being overcharged?

Given that at any time, a manager can obtain a lower audit fee by switching (Garsombke and Armitage 1993, 93 and 96), why do managers switch infrequently?[7] Given that a manager can obtain a permanently lower fee by switching from a Big Eight/Six/Five[8] firm to a national, but non-Big

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[7]DeAngelo (1981b, 188) stated "...the uniform finding of extant studies...is that the rate at which client firms change auditors is low."

[8]Through business combinations, the Big Eight have become the Big Six and then the Big Five. Because the number of firms in the largest tier has been shrinking from eight to six to five, this study simply refers to the Big firms, with Big capitalized, to distinguish those firms--of whatever number, depending on time frame--from the others. For convenience, the terms Big Eight, Big Six, and Big Five are not converted to the term Big firm when found in quoted material.

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Table 1
Auditor switching related to fees charged

Author(s)	**Information about switch**	**Additional comments, if any**
Garsombke and Armitage 1993, 93 and 96	Clients can obtain a lower audit fee by switching audit firms.	DeAngelo 1981b, 188, citing seven studies, noted that "...the uniform finding of extant studies...is that the rate at which client firms change auditors is low."
Johnson and Lys 1990, 285, Table 1	Clients switching from a Big firm generally switch to another Big firm.	
Addams and Davis 1994, 40 and 41	Fees are not the dominant issue in auditor switching by the Inc. 500 firms surveyed.	

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Table 1 continued

Krishnan 1994, 211	At least some "switchers may not reveal their true reasons for switching."	Knapp 1988, 45: "...users...may infer that even when disagreements (between auditor and client) are not reported, an auditor change is likely a consequence of auditor-client conflict."
Eichenseher, Hagigi, and Shields 1989, 39; Williams 1988, 248	Outside shareholders are suspicious concerning management motives in auditor selection.	

firm,[9] why (as suggested by Johnson and Lys, 1990, 285, Table 1) do managers switching from a Big firm generally switch to another Big firm and pay the higher fees of a Big firm instead of the lower fees of a somewhat smaller firm?

In each of the above cases, managers forego opportunities to obtain audits for lower fees. This suggests that *fees are not necessarily the determining factor in selection of an auditor.* If excessive fees are not the primary motivation for switching, what other explanations exist for switching?

Table 2, following, provides a summary of reasons (or variables) which earlier researchers have hypothesized to be associated with auditor switching. No particular reason dominates the results. Therefore, each reason might account for *some* auditor switches without accounting for *most* auditor switches. Such a situation, where many causal factors exist, makes it difficult for researchers to establish the causation by use of statistical techniques, because so many other causal factors are simultaneously producing the same result.

Admittedly, some switches are easily explained without resort to nefarious motives (e.g., corporate takeovers or

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[9]Ettredge and Greenberg (1990, 208) stated "...prior studies...found a fee premium for the Big Eight when compared to all other auditors."

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some other management change in which the new managers wish to deal with the audit firm they previously dealt with). However, according to Schwartz and Menon (1985, 249), "a general theory that explains why firms change auditors is yet to emerge." As evidenced by the various studies cited in this chapter, research regarding auditor switching has continued to date.

This study continues in the tradition of examining potential reasons why managers change from one audit firm to another. Specifically, this study contributes to the literature by investigating a possibility not previously examined: an association between auditor switching and certain types of negative information.

2.3 Auditor Switching: Audit Quality

The notion that audit quality differs among audit firms (or at least the notion that managers perceive that audit quality differs among audit firms) is critical to the underlying premise of this study. Stated otherwise, managers could not reasonably expect to delay the disclosure of negative information unless they hoped to find some difference (reduction) in audit quality between the predecessor audit firm and the successor audit firm. However, researchers differ as to whether audit quality is at issue when managers switch auditors.

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Table 2

Auditor switching: previously hypothesized reasons (or variables)

Author(s)	**Reason(s) for, or variable(s) associated with, switching**	**Additional comments, if any**
Burton and Roberts (1967), as cited by Chow and Rice (1982, 327-328)	accounting standards disputes changes in management demand for additional services needs arising out of new financing	Chow and Rice said accounting standards disputes accounted for only six switches out of eighty-three examined by Burton and Roberts. Chow and Rice said "these[10] findings are supported by Carpenter and Strawser (1971) and a study by an ad hoc committee of the AICPA (1971)."

[10]The findings referred to are those of Burton and Roberts (1967).

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Table 2 continued

Fried and Schiff (1981, 327)	changes in auditor fee structure client's need for additional services regular auditor rotation policy	
Chow and Rice (1982, 328)	They reported a significant association between receipt of a qualified opinion and switching auditors. Of the variables they used in a conditional logit analysis, "qualification is the only significant variable in explaining switching." (330)	A different analysis of the data shows that companies in certain industries are more likely to receive qualified opinions, and certain audit firms are more likely to issue qualified opinions. See their page 332.
Williams (1988, 247)	a management change in which new management wishes to deal with the firm it previously dealt with	

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Table 2 continued

Williams (1988, 250)	fast growth causing a need for a larger audit firm, and industry or other specialization available in the lead office or elsewhere in the firm	

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Table 2 continued

Francis and Wilson (1988, 668)	Francis and Wilson noted that "at best, only a very weak association has been demonstrated to exist between agency cost proxies and audit firm choice with little interstudy consistency."	
	managerial ownership	Francis and Wilson said Eichenseher and Shields (1986) found this significant, and Simunic and Stein (1987) found this significant for initial public offerings.
	bonus plans	Francis and Wilson said Palmrose (1984) tested these, but found them not significant.
	diffusion of ownership	

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Table 2 continued

Francis and Wilson (1988, 668): continued	leverage	Francis and Wilson said Eichenseher and Shields (1986) found a positive association, Simunic and Stein (1987) found a negative association, and insignificant results were reported by Palmrose (1984), Healy and Lys (1986), and Johnson and Lys (1986).

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Table 2 continued

Francis and Wilson (1988, 668): continued		However, Francis and Wilson appear to misinterpret Healy and Lys (1986), since Healy and Lys's reported test (1986, 258, 259, and 262) was a test of growth in debt, not a test of leverage nor any debt-to-equity or debt-to-total-assets ratio. Healy and Lys also tested growth in equity. If both debt and equity grow, but at the same percentage rate, then there is no change in leverage even though the company is growing.

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Table 2 continued

Francis and Wilson (1988, 668): continued	new securities issues	Francis and Wilson (1988, 668) stated that "new debt/stock, post auditor change was tested by Healy and Lys (1986) and was not significant. Johnson and Lys (1986) reported a positive and significant association with the choice of a larger auditor."
Knapp (1988, 42)	corporate managers' desire to manipulate their firm's reported financial condition	This is a reasonable interpretation of Bedingfield and Loeb (1974, 67), who examined the 8-K forms (reporting auditor changes) filed with the SEC between November 1971 and February 1973. Knapp cited Bedingfield and Loeb (1974), Klott (1984), and Laventhol & Horwath (1985).

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Table 2 continued

Haskins and Williams (1990, 56), citing various authors	opinion shopping (Chow and Rice 1982) "information suppression" (Kluger and Shields, 1987) agency-theory-based Big Eight vs. non-Big Eight "product differentiation approach" (Simunic and Stein, 1987; Francis and Wilson, 1988)	
Teoh (1992, 7)	Teoh's model posits the existence of a region related to a cost/benefit analysis where "no firm will switch auditors because the likelihood of a clean opinion from a new auditor is too low."	Elitzur and Falk (1996, 43) said: "The position of an auditor with respect to many reporting issues can be inferred from publicly available financial reports audited by a bidder, submissions to standards setting bodies, testimonies at hearings and in courts, and so forth. Auditors whose known opinions do not match those of the client are unlikely to be hired."

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Table 2 continued

Anderson, Stokes, and Zimmer (1993)	Corporate takeovers	
Garsombke and Armitage (1993, 95)	timeliness of service lack of responsiveness cost	Garsombke and Armitage surveyed "chief financial officers of the 272 firms identified on the January 1988 Disclosure II database as having changed auditors from 1986 to 1987."

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Table 2 continued

Addams and Davis (1994, 40)	accounting firm "not sufficiently proactive in delivering services to company" and "lack of responsiveness of CPA firm's service"	It is difficult to know how much credibility to assign to these reasons. Addams and Davis (1994, 38) surveyed CEO's of the 1992 Inc. 500 privately held companies. The respondents ranked twelve factors as reasons for selecting an audit firm initially, but ten different factors as reasons for changing to a different audit firm. Although not expressly stated in the article, it appears that Addams and Davis supplied lists for respondents to choose from, and the two lists did not contain any of the same factors.

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Table 2 continued

Addams and Davis (1994, 40): continued		Thus, personal relationships, technical expertise, and industry expertise were three of the four highest-rated reasons for selecting an audit firm in the first place, and ranked higher than any of the ten factors mentioned for changing audit firms, but they were not available to be chosen as factors for changing audit firms.

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Table 2 continued

Krishnan (1994, 210-211)	dissatisfaction with service	Carpenter and Strawser 1971, 57 surveyed firms which went public during the fourth quarter of 1969 and the first quarter of 1970. This was one of the survey responses.
	dissatisfaction over fees	This was another survey response in Carpenter and Strawser's 1971 study.
	disagreements over accounting issues, management change, change of engagement partner, resignation, initial public offerings, rapid growth, and search for "credible" auditors	Krishnan cited Dopuch and Simunic's 1982 conference paper, Johnson and Lys 1990, Menon and Williams 1991, and Simunic and Stein 1987.

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Table 2 continued

Krishnan (1994, 210-211): continued		While Krishnan had a number of significant variables (204-205), he stated that the dependent variable "represent the auditor's opinion in the year before the switch (203)." Thus, his article reported no test associating these variables with auditor switching; rather, his test associated these variables with the auditor's opinion, not with auditor switching.
Chaney, Jeter, and Shaw (1997, 439)	companies' response to audit firms' solicitations	Chaney, Jeter, and Shaw extracted information from the Compustat Annual Industrial Tape for the years 1980 through 1988, and compared audit clients in states which banned solicitation of clients to clients in states which allowed solicitation.

For example, some researchers (see Table 3, following) have assumed, implicitly or explicitly, that client companies are mere price shoppers. This view treats the audit as a commodity and audit firms as suppliers of commodities, not of differentiated services,[11] since clients value the audit report and place no value on the relationship with the particular audit firm. This view implicitly assumes that all audit firms have the same skill sets available, which is a necessary condition for them to be able to do any audit of any client. If an audit is merely a commodity which every audit firm can supply, then quality must not be an issue.

This view is troublesome given that if audits are undifferentiated commodities and managers (i.e., client companies) are mere price shoppers, then there is no reason for the managers who are purchasers of audits to purchase their audits from Big firms which charge a high price instead of from somewhat smaller audit firms which charge a lower price. Moreover, those somewhat smaller audit firms would themselves then grow larger by virtue of obtaining so many of these large audits of large client companies while the Big firms would shrink due to losing the large clients.

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[11]An actual or hoped-for difference in audit quality is a form of product differentiation as perceived by purchasers of audits.

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In contrast to the preceding, Nichols and Smith (1983, 534) considered audit services to be differentiated, stating that

> Dopuch and Simunic (1980) examined a wide variety of evidence that might tend to support or refute allegations of a lack of competition in the auditing profession. They ... argued that many of the ... characteristics of the industry could be explained by a product-differentiation hypothesis. More specifically, they hypothesized that different auditing firms provide auditing services which are perceived by investors to be different in quality....

It may be wise to consider economic theory for insight into this problem. Authors who viewed audits as undifferentiated services (see Table 3, following) made no attempt to explain why the Big firms were able to charge *more* for their services than small firms charge, when standard economic theory suggests that the ability to charge more for undifferentiated services would be competed away in the marketplace, leaving Big firms charging *less* than small firms due to the Big firms' economies of scale.

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Table 3
The audit as an undifferentiated service

Author(s)	Position of author(s)	Related information
Johnson and Lys 1990, 281	They assumed that client companies are mere price shoppers. They argued that "clients purchase audit services from the least costly supplier. ... ...when the incumbent's competitive advantage is lost, the client will change to a less costly supplier."	DeBerg, Kaplan, and Pany 1991, 25 and 27 reported evidence consistent with this view, testing a matched-pairs sample of switchers and non-switchers, and finding no differences in purchases of non-audit services before the switch, nor of purchases of tax, pension, and personnel services after the switch.
McConnell (1984, 44), citing the Cohen Commission (AICPA 1978, 111-112)	"...while public accounting firms go to great lengths to differentiate their services, there is little effective product differentiation from management's viewpoint."	This means that audits might be differentiated to producers of audits, but not to consumers of audits.

Moreover,

> In 1976, the U. S. Senate Subcommittee on Reports, Accounting, and Management (Metcalf Committee) ... concluded ... that monopolistic practices by the Big Eight have led to a two-tier structure in the audit industry--one tier consisting of the eight largest auditors and the second tier consisting of all other auditors.... (Nichols and Smith 1983, 534)

How does someone first attain a monopoly of a service industry of undifferentiated services when there are few barriers to entry? Continuation of a monopoly can occur through brand differentiation and the necessity for a new entrant to attain a large size--that is, causing the formerly undifferentiated services to become differentiated and raising a barrier to entry--but the initial attainment of the monopoly is unexplained.

As illustrated in Table 4, following, some researchers explicitly or implicitly considered audits to be a differentiated service. Thus, where competition exists among firms, the audit firms may be competing in attempting to provide *their firm's* audit rather than *the profession's standard* audit. So long as *the firm's* audit meets or exceeds the standards of the profession, each firm is free to plan the audit, perform the procedures, and formulate an opinion in a manner different from its competitors.

Audit firms actually differ, whether in audit structure, centralization versus decentralization of

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decision making, staffing mix strategies on engagements (e.g., level of expertise of staff members), standard

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Table 4
The audit as a differentiated service

Author(s)	Authors' position	Comments, if any
Danos and Eichenseher (1982, 604)	They reported finding economies of scale for CPA firms.	This means CPA firms can differentiate themselves if they choose to, in terms of the inputs employed to perform an audit.

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Table 4 continued

Nichols and Smith (1983, 534)	They considered audit services to be differentiated. "Dopuch and Simunic (1980) examined a wide variety of evidence that might tend to support or refute allegations of a lack of competition in the auditing profession. They ... argued that many of the characteristics of the industry could be explained by a product-differentiation hypothesis. More specifically, they hypothesized that different auditing firms provide auditing services which are perceived by investors to be different in quality...."	

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Table 4 continued

Healy and Lys (1986, 252)	"Big Eight firms are able to take advantage of economies of scale to provide specialized services at a lower cost than would be available from smaller audit firms."	
Teoh (1992, 8)	Teoh's model contains an underlying assumption: "The incentive to switch auditors comes from the positive revaluation of the firm by investors because a new audit partially reveals an initial adverse audit assessment error, and a consequent partial revelation of the firm's favorable information...."	This assumption implies differences in quality across auditors. It might also imply that new auditors are simply more careful than continuing auditors.

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Table 4 continued

Craswell, Francis, and Taylor (1995, 297)	They reported support for product differentiation even within the Big Eight. Industry specialist Big Eight auditors received a 34% premium over nonspecialist Big Eight auditors, and Big Eight auditors received a 30% premium over non-Big Eight auditors. They stated (298) there are two separate components of the premium received by Big Eight auditors, a general brand name premium just for having a recognizable brand name, and an industry-specific premium for industry specialization.	

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Table 4 continued

Deis and Giroux (1996, 55)	In "audits of Texas independent school districts, ...first year independent audits had statistically significant lower audit fees. Despite the lower fees, quality was higher and more audit hours were utilized."	This means that audits are of different quality.
Elitzur and Falk (1996, 41 and 42)	Regarding auctions for audit services, "...a bidder may underestimate the client's audit cost and subsequently reduce audit quality."	This means that some audits are different quality from others, even from the same office of the same firm.

billing rates, markups or markdowns from standard billing rates, or other matters. Accordingly, producers of audits can easily see that, to themselves, audits are differentiated. However, that does not establish whether consumers of audits consider audits to be differentiated, nor whether such consumers even care whether audits are differentiated. Nevertheless, other evidence, such as clients' willingness to pay premium fees (Simunic 1980, 180-181), does tend to establish that clients consider audits to be differentiated.

2.4 Additional Considerations

Appendix A contains discussion of the audit and associated audit report with respect to an economic bad. Prior research has considered the audit to be an economic good only. Prior researchers have not addressed an alternative hypothesis which is discussed in Appendix A. Appendix B contains considerations related to auditor size and audit quality. Appendix C discusses the market for audits and the information contained in the reactions of capital markets to auditor switches. Appendix D contains discussion of asymmetry of information. Prior researchers have not addressed an alternative hypothesis which is discussed in Appendix D. Appendix E contains a model which

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was the original motivation for this study of auditor switching.

2.5 Conclusion

Research regarding auditor switching has been extensive. This study contributes to the literature by investigating a possibility not previously examined: an association between auditor switching and certain types of negative information. The notion that audit quality differs among audit firms (or at least the notion that managers perceive that audit quality differs among audit firms) is critical to the underlying premise of this study. Stated otherwise, managers could not reasonably expect to delay the disclosure of negative information unless they hoped to find some difference (reduction) in audit quality between the predecessor audit firm and the successor audit firm. Appendix F explains that the type of auditor switch (auditor dismissal versus auditor resignation) is irrelevant for the purposes of this study.

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CHAPTER 3

3.1 Methodology

The structure of the chapter on methodology is as follows. Section 3.2 sets forth the theory underlying this study. Section 3.3 operationalizes the theory. Section 3.4 explains why the year after the auditor switch was used instead of the year of the auditor switch. Section 3.5 presents a nontraditional motivation of the research hypotheses. Section 3.6 presents a traditional motivation of the research hypotheses, and states the research hypotheses. Section 3.7 sets forth the method used to test the hypotheses. Section 3.8 explains the sample selection process. Section 3.9 discusses the limitations inherent in the study. Section 3.10 presents a summary of this chapter.

3.2 Theory Underlying this Study

This study is grounded in the notion that managers switch auditors to delay disclosing negative information. The scenario underlying this notion follows. First, managers possess certain negative information and wish to

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delay disclosing such information. Second, managers believe that the present auditors are likely to discover the negative information if they continue as the company's auditors. Third, managers do not believe that they will be able to convince the auditors that the negative information is immaterial (i.e., the information is so insignificant that disclosure of such information is not considered necessary in the circumstances). Consequently, managers switch auditors in an effort to delay disclosure of negative information. Thus, this theory is effectively a joint supposition that (1) management changed auditors with the intent of delaying reporting net losses until the year following the auditor switch, and (2) they were successful in obtaining such delay.

3.3 Operationalization of the Theory

This study investigates the premise that certain types of negative information are associated with auditor switches. Specifically, this study investigates whether the proportion of certain types of negative information in financial statements increases in the year after the auditor switch (t+1) relative to the year before the auditor switch (t-1).[12]

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[12]The logic underlying the use of the year after the auditor switch (t+1) rather than the year of the auditor

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There is no *a priori* reason to expect certain types of negative information to occur in the financial statements systematically with respect to the timing of auditor switching. If such items occur randomly rather than systematically, there is no reason to assume that there will be any greater number or proportion of them during the year after the auditor switch (t+1) than during the year before the auditor switch (t-1). Accordingly, if a statistically significant relationship is found to occur, this suggests that certain types of negative information are somehow associated with auditor switching. In turn, such an association would support the notion that managers switch auditors to delay publicizing negative information.

3.4 Use of the Year After the Auditor Switch

Data from the year after the auditor switch (t+1) were analyzed in lieu of data from the year of the auditor switch (t) for the following reasons. First, all auditors want to retain clients to obtain quasi-rents (DeAngelo 1981a; Teoh 1992, 2 and 16), which gives audit firms an incentive to approve whatever financial statements they can justify approving. Therefore, in the year of the switch (t), the incoming audit firm does not want to anger the new

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switch (t) is discussed at length in section 3.4.

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client by being overly strict in issuing an opinion. Moreover, in an initial audit, the auditor might not find every audit adjustment that is available to be found due to relative unfamiliarity with the client. As Knapp (1988, 52) said, "Users may perceive that since the newly-retained ... auditor is unfamiliar with the firm, the auditor's ability to find and correct errors may be somewhat less than if the firm had been a client for several years."

Second, after lowballing, a new auditor tends to raise fees each year, but it is not until the fourth year that the new auditor typically is charging a full fee to the new client (Simon and Francis 1988, 260; also cited in Ettredge and Greenberg 1990, 199). Therefore, in the second year of the new auditor's tenure (t+1), the risk/reward ratio is disproportionately large for the auditor to approve any questionable items which would otherwise be considered as borderline cases. Since switching to yet another auditor would constitute a signal to the market by the client firm, the year after the switch (t+1) is the year when the client firm is most likely to be "stuck" with its choice of a new auditor, no matter what opinion that new auditor deems appropriate and no matter what degree of risk that new auditor is willing to accept.

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Third, this is not the only study which compares years before and after switching auditors. Krishnan and Stephens (1995, 181) stated:

> Our study extends the analysis in Krishnan (1994) by examining the relation between independent auditor switching and the audit opinion in the years before *and* after the switch....

However, this may be misleading, because Krishnan and Stephens referred in their study to years (t-1), which is the year *before* the switch, and t, which is the year *of* the switch--but which they called the year *after* the switch. This study, by contrast, uses years (t-1), the year before the switch, and (t+1), the year after the switch.

3.5 Motivation of the Hypotheses--Nontraditional Motivation

Appendix E contains a playground model which originally led to the investigation of auditor switching. Because top managers can either select the auditors or influence those who do select the auditors, and because top managers wish to remain top managers unless they voluntarily choose to step down, they have an incentive to search out an audit firm which will render the report desired. The playground model views the economy as a playground with various players, teams, and games, and may

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be used instead of agency theory in at least some situations.

As the study progressed, it became clear that the same research study could be motivated without regard to the playground model. Consequently, the traditional motivation follows, and the playground model appears in Appendix E.

3.6 Motivation of the Hypotheses--Traditional Motivation

Unless management is attempting to delay the disclosure of bad news, then net losses, extraordinary items, lower net incomes, and a particular pattern of net income adjusted to reverse the effect of extraordinary items should occur randomly rather than systematically with respect to auditor switches. In this study, net losses are assumed to proxy for previous problems--that is, negative information--not yet found by the prior audit firm, and/or for a selection of net-income-accelerating choices in the year of the switch; management would make such choices to delay the revelation of negative information. This gives rise to the following hypothesis:

H_o1: Among client companies that switched auditors, the proportion of client companies with net losses in the year after the switch (t+1) was less than or equal to the proportion of client

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companies with net losses in the year before the switch (t-1).

H_a1: Among client companies that switched auditors, the proportion of client companies with net losses in the year after the switch (t+1) was greater than the proportion of client companies with net losses in the year before the switch (t-1).

An extraordinary item, by definition, is unusual, nonrecurring, and material, which implies that it should not be possible to predict the occurrence of extraordinary items by examining auditor switches.[13] This gives rise to the following hypothesis:

H_o2: Among client companies that switched auditors, the proportion of client companies with extraordinary items in the year after the switch (t+1) was less than or equal to the proportion of client companies with extraordinary items in the year before the switch (t-1).

H_a2: Among client companies that switched auditors, the proportion of client companies with

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[13]With respect to H_o2 and H_a2, the amount or direction (i.e., gain or loss) is not at issue. Rather, the focus of H_o2 and H_a2 is the mere existence (or nonexistence) of an extraordinary item. Amount and direction of extraordinary items are considered in H_o4 and H_a4.

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extraordinary items in the year after the switch (t+1) was greater than the proportion of client companies with extraordinary items in the year before the switch (t-1).

These one-tailed tests constitute a test of explicitly disclosed client-company-specific behaviors before and after an auditor switch. By structuring the test this way, each client company serves as its own control.

The tests for hypotheses one and two are related to negative information which is explicitly disclosed to the market by management. Management must publicly explain the reasons for net losses or extraordinary items or suffer the consequences as the market revalues the company. There may also exist some negative information which is not explicitly disclosed to the market. In that case, the negative information would be revealed only indirectly, through the company's reporting a smaller net income than would otherwise have been reported.

Ball and Watts (1972, 680) reported that accounting net "income can be characterized on average as a submartingale or some similar process." That is, each year the net income is expected to be greater than or equal to the preceding year's net income. However, Garsombke and Armitage (1993, 95) reported that forty-five companies

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which switched auditors from 1986 to 1986 had 26% lower net income in 1987 than 1986. Thus, either net income or the direction of change in net income may be associated with auditor switching.

If one accepts the Ball and Watts (1972) finding that net income is a submartingale, this permits testing for negative information which is not explicitly disclosed to the market. Further, instead of testing market reaction to auditor switches (e.g., Kluger and Shields 1991), an indirect test which derives from an *expectation*, this methodology directly tests a *fact*: what was publicly reported as audited financial information.[14]

H_o3: Among client companies that switched auditors, the net income in the year after the auditor switch (t+1) was greater than or equal to the net income in the year before the switch (t-1).

H_a3: Among client companies that switched auditors, the net income in the year after the auditor switch (t+1) was less than the net income in the year before the switch (t-1).

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[14]Note that even if the financial statements later are deemed to have been misstated, the financial statements were still publicly reported at one time. Their publication is a fact, even if their representation of the financial condition, results of operations, and cash flows of the firm are not correct in all material respects.

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Not all extraordinary items need be negative. If management decides to finally book a write-off or write-down, it could also engage in one or more transactions to partially or fully offset the negative information. This gives rise to the following hypothesis.[15]

H_o4: Among client companies that switched auditors, the net income, adjusted to reverse the effect of extraordinary items, in the year after the auditor switch (t+1) was greater than or equal to the net income, adjusted to reverse the effect of extraordinary items, in the year before the switch (t-1).

H_a4: Among client companies that switched auditors, the net income, adjusted to reverse the effect of extraordinary items, in the year after the auditor switch (t+1) was less than the net income, adjusted to reverse the effect of

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[15]Note that, if management is having a fee dispute with the incumbent audit firm (one of the previously hypothesized reasons for switching auditors), but not a problem with the services rendered or with the audit firm's application of professional standards or judgment, then management is concerned only about being overcharged by the audit firm. Presumably, when a company switches auditors merely to save money, management is investigating a whole range of expenditures, not just the audit, to attempt to reduce expenditures, and therefore one should expect net income to rise, not fall. Further, net income should rise from operations, not from utilizing accounting sleight-of-hand.

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extraordinary items, in the year before the switch (t-1).

3.7 Method

Hypotheses one and two were tested by computing the proportions of occurrences (i.e., net losses for H_o1 and extraordinary items for H_o2) in the last pre-switch year (t-1) and the first post-switch year (t+1), then statistically testing for differences in proportions, computed according to Devore and Peck (1986, 385). Due to the wide variations in dollar amounts of extraordinary items and net incomes, a parametric test for changes in raw values was inappropriate because a single change in a high-dollar-value company could easily have overwhelmed the effects of changes in many lower-dollar-value companies.

Hypotheses three and four were tested using a distribution-free sign test (Hollander and Wolfe 1973, 39 et seq.). This test analyzes the direction of movement, if any, and results in a pattern of ones (for movement in the hypothesized direction) and zeroes. For hypotheses three and four, once the direction of movement is determined, the ones and zeroes are distributed according to a binomial distribution (Hollander and Wolfe 1973, 40). For a large sample, the binomial distribution approximates a normal

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distribution. The sample of 305 auditor switches is considered a large sample, and therefore the standard deviation and the z score were computed according to Devore and Peck (1986, 223).

3.8 Sample Selection

The sample was selected from the Compustat data base (a limited subscription to Compustat composed of 4,106 companies) for the years available in the data base--in this case, 1975 through 1994. To be selected, companies must have had different auditor codes reported by Compustat from one year to the next, plus have had two following years of data. The purpose of using multiple years in which auditor switches occurred was to guard against any systematic effects in the economic environment causing auditor changes and/or net losses in particular calendar years. Auditor codes were not available from Compustat for banks, life insurance, or property and casualty companies (Compustat 1994, 5-26), so those companies were excluded from selection, but included in the 4,106 companies in the limited-subscription data base.

For each company which was determined to have switched auditors, and for which sufficient years of information existed, data were examined to ascertain whether any

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extraordinary items were reported for the last pre-switch year and the first post-switch year. This was consistent with DeFond's (1992, 23) sampling method (quoted below) which excluded firms that switched again soon after one switch, but unlike DeFond, this study included firms with multiple switches.

> Firms that switch more than once during a two-year period on either side of the selected switch date are excluded from the sample in order to eliminate firms that may be switching auditors simply to capture the short-term advantages of low-balling. (DeFond 1992, 23)

Additionally, Kluger and Shields (1991, 263) tested two bankruptcy prediction models based on companies which either switched or did not switch auditors two to three years before bankruptcy, and found that the switched companies were more likely to go bankrupt. By selecting companies which survived two fiscal years beyond switching auditors, any possible effects attributable to attempts to stave off bankruptcy, or to suppress information concerning severe financial distress culminating in bankruptcy, were lessened. In effect, a bias which would have operated to increase the likelihood of supporting hypotheses three and four of this study was either lessened or eliminated by this selection requirement.

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3.9 Limitations

This study did not make any distinction between auditor dismissals and auditor resignations because this study tested for an association between auditor switching (regardless of who initiated the switch) and certain types of negative information which may have become public after the switch. (See Wells and Loudder 1997, 138.) Wells and Loudder (1997, 140) stated, "empirical evidence suggests that resignations are associated with unfavorable events within a firm." There was no reason to infer that the negative information being examined herein would differ across auditor dismissals and auditor resignations, particularly when both dismissals and resignations could each be disguised as the other. See Appendix F for additional information.

The use of the Compustat data base caused a bias against finding the hypothesized effect, even if one existed. This bias occurred because the Compustat data base companies tend to be larger than the average of all publicly-owned companies. Those larger companies are more closely followed by market participants who may have, or seek, private information which may bear on price movements of the companies' securities. Consequently, the extra effort devoted to obtaining information about those

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companies made it less likely that managers could have known material negative information and kept it from the market for an extended period. Also because the Compustat firms tend to be larger than average, they tend to be audited mostly by the Big firms, and when they switch, they tend to switch within the same size auditors.[16] Thus the use of this data source might have a tendency to underrepresent those companies which were allegedly merely "seeking greater credibility" from their auditors by switching from a smaller firm to a larger firm.

3.10 Summary of this Chapter

This chapter has presented a discussion of the methodology used in this study, the research hypotheses, the statistical hypotheses, the data sources, and the method of testing. Chapter 4 presents some procedural matters and the results of the tests of hypotheses.

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[16]In this study, 257 of 305 auditor switches were from Big firm to Big firm, 16 of 305 auditor switches were from Big firm to small firm, 26 of 305 auditor switches were from small firm to Big firm, and 6 of 305 auditor switches were from small firm to small firm.

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CHAPTER 4

4.1 Results

The structure of the chapter on results is as follows. Section 4.2 discusses data quality. Section 4.3 discusses data set inclusions and exclusions. Section 4.4 compares the results of the tests performed on the full sample versus the various subsamples. Section 4.5 discloses the results of the statistical tests of hypotheses. Section 4.6 gives some additional findings observed during the study. Section 4.7 presents a summary of this chapter.

4.2 Examination of Data Quality in the Compustat Data Base

The data for all the companies in the Compustat data base which switched auditors were printed and visually examined. There appeared to exist some cases of questionable data in the data base (e.g., auditor codes in successive years of 4, 14, and 4). In such instances, an attempted verification of an auditor switch was made via an examination of The Wall Street Journal Index for the three years (t-1), t, and (t+1) for an announcement of an auditor

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switch. If no such announcement was found, verification was made by reference to Moody's Industrial Manual or other appropriate manual in the series (e.g., transportation; bank and finance).

This data examination procedure was followed because previous authors have used data sources other than Compustat, as shown in Table 5, following, and the present author was unaware of any published study which explicitly discussed the reliability of Compustat's auditor data. Although Louwers (1993, 45) used Compustat's auditor data to compute auditor tenure, and therefore must have computed when auditors were switched, he did not discuss any data examination procedures beyond noting (39) that "non-Big Eight auditing firms were not separately identified (prior to 1989) on Compustat...."

Visual inspection of the data, combined with reference to the various Moody's manuals and the author's personal knowledge of combinations among auditing firms, disclosed that Compustat auditor codes indicating a pre-1990 change from audit code 9 (i.e., all non-Big firms) to a code 1 through 8 (i.e., Big firm) were unreliable as indicators of an auditor switch, due to the great number of audit firm combinations during that period. Therefore, all such code changes before 1990 were excluded from the sample, although

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code changes from a code 1 through 8 to a code 9 were included in the sample because no Big firms were acquired by non-Big firms during that period. Further, Compustat lumped all non-Big auditors into one code, 9, before 1988 (Compustat 1994, pp. 5-25 and 5-26), so changes from one non-Big firm to another before 1989 were not available in the data base. To complicate matters further, an auditor switch in 1989 from one non-Big firm to another would appear as a change in Compustat auditor code from 9 to a two-digit number. For 1989 (i.e., the year of the data coding conversion), this was indistinguishable from continuing with the same non-Big firm, which would also appear as a change in Compustat auditor code from 9 to a two-digit number.

4.3 Data Set Inclusions and Exclusions

In 1989, Arthur Young and Touche Ross ceased to exist as independent entities, becoming part of Ernst & Young (formerly Ernst & Whinney) and Deloitte & Touche (formerly Deloitte Haskins & Sells) respectively (Compustat 1994, 5-25). A visual examination of the Compustat data showed some companies which had retained Arthur Young or Touche Ross for more than ten years prior to the audit firm combinations, but which switched after undergoing only one

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or two audits under the new regime. Those switches were included in the auditor switches tested.

Visual examination of the Compustat data, combined with references to the Moody's manuals, resulted in the exclusion of some companies for reasons such as changing the fiscal year at the same time as changing auditors; see Table 6 for a listing and explanation. The same data investigation procedure resulted in changing of some data reported by Compustat before performing analyses of the data set; see Table 7, Part A for a listing and explanation. One company was excluded from the data set due to possible unreliability of financial data; see Table 7, Part B. No attempt was made to verify all the Compustat data used in this study; verification was limited to apparently anomalous data.

There were 305 usable auditor switches in the Compustat limited-subscription data base: 257 Big to Big switches, 16 Big to small switches, 26 small to Big switches, and 6 small to small switches. Companies which switched auditors multiple times were included each time as part of the 305 auditor switches, provided the indicated switch was not from code 9 to a code 1 through 8 before 1989. Analyses of switchers by year of switch and by

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Compustat variable DNUM (equivalent to SIC code) are shown in Table 8.

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Table 5

Data sources and incidental information for authors cited herein who identified auditor switches

Note: n equals number of switches, and may be greater than the number of companies due to multiple switches by one company.

Authors	Year	Data source, and this author's comments[17]
Anderson, Stokes, and Zimmer	1993	Centre for Independent Studies Takeover Data Base (68); authors studied 60 takeovers to determine whether auditors were switched
Chaney, Jeter, and Shaw	1997	Compustat Annual Industrial Tape for the years 1980 through 1988 (439); their dependent variable R, for realignment, was modeled on nine variables plus mean value plus error;

[17]Numbers in parentheses, unless obviously dates, refer to page numbers within articles cited.

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Table 5 continued

		three of the four statistically significant independent variables were values for the four years *following* the auditor switch
Chow and Rice	1982	Leasco Disclosure Journal; n=418 (328)
Craswell	1988	examination of annual reports of companies listed on the Sydney (Australia) Stock Exchange during the period 1950-79 (26); n=142 (27)
Danos and Eichenseher	1982	Who Audits America (607); only nonregulated client industries with 25 to 50 publicly owned companies, and regulated client industries with 25 to 100 publicly owned companies (609); no direct test of companies which switched auditors, so no n available
DeBerg, Kaplan, and Pany	1991	data source not stated; included only changes between Big Eight, and companies were listed on NYSE or AMEX as of the year of the change; n=83 (21)

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Table 5 continued

DeFond	1992	Who Audits America, June 1983; selected all 101 switches "that involved a change in auditor name-brand (*e.g.*, from a non-Big Eight to a Big Eight auditor);" DeFond then added 30 switches which did not involve such a change; one firm had incomplete information and was not used; n=130 (23-24)
Dhaliwal, Schatzberg, and Trombley	1993	"The treatment (disagreement) group comes from the sample examined in Smith (1988) consisting of all clients listed on the daily Center for Research in Security Prices common equity return tape (CRSP) that changed auditors between January 1, 1973 and December 31, 1982, and that reported a disagreement in the Form 8-K filing for the change in auditors.... ... The control (no disagreement) group also comes from the Smith (1988) sample, and consists of companies from the same industry as the disagreement firms

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Table 5 continued

		which changed auditors during the same ten-year period but did not report a disagreement. (26)" There were 71 auditor changes with disagreements and 71 changes without disagreements during the years 1973 to 1982.
Dunn, Hillier, and Marshall	1999	Listing provided by Registrar of Companies at Companies House (98); n=88. They investigated resignations of audit firms in the U.K. during 1988 to 1993 (98) and found that the market reacted negatively.
Eichenseher, Hagigi, and Shields	1989	Who Audits America (35); n=87 OTC companies switching between July 1980 and December 1982 (34)
Fisher and Fisher	1993	Who Audits America; sample consisted of firms "switching independent auditors which have an outstanding bond issue listed and rated in Moody's Bond Record during the three year periods prior to and subsequent to the switch;" switches were 1983-87; n=133 (51)

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Table 5 continued

Francis and Wilson	1988	Who Audits America (670); n=194 in the "continuous size" models and n=78 in the "brand name" probit models (672)
Fried and Schiff	1981	Corporate Profiles and Index of Corporate Events; n=48 (328)
Garsombke and Armitage	1993	survey sent to firms identified in January 1988 Disclosure II database as having changed auditors; n=45 (95)
Gul, Lee, and Lynn	1992	audit reports of Hong Kong listed companies between 1981 and 1988 (119); n=108 (114) out of 270 listed companies
Haskins and Williams	1990	Disclosure Online Database, SEC News Digest, and Who Audits America; had to be a switch from one Big Eight auditor to another; n=209 for 1986 (59)
Healy and Lys	1986	Who Audits America; n=110 in 1976 and 1978 (256-7)
Johnson and Lys	1990	Disclosure Journal and Who Audits America; client had to be listed in any Compustat data file (Industrial, Over-

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Table 5 continued

		the-Counter, or Research) in 1984 but not a utility, banking, insurance, or diversified financial services firm (284); n=603 cases occurring in 1973-1982 (285)
Kluger and Shields	1991	SEC News Digest 1981-1985; sample was over-the-counter companies which filed Chapter 11 bankruptcy (258); n=36 bankrupt switchers, paired with 36 non-bankrupt switchers (259)
Krishnan	1994	Disclosure Inc. data base for 1986-8; only companies with data available on CRSP (202); n=2,989 (204)
Louwers	1993	12,599 audit-years from 1992 Compustat file (40); auditor switches were determined only to compute auditor tenure with a client, where tenure was the variable of interest; years prior to 1984, and companies not audited by Big Eight firms, were excluded (38 and 40); regulated industries were excluded (38 and 40)

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Table 5 continued

McConnell	1984	SEC News Digest for auditor switches during the five years ended in 1978 (47); n=728 (47-8)
Nichols and Smith	1983	(not explicitly stated); switching firms had to file a Form 8-K reporting change in auditors during the period 1973-79, the change had to be either from a non-Big Eight to a Big Eight, or vice versa, the firm was listed on the New York Stock Exchange or American Stock Exchange, and data was available on CRSP; n=51 (537)
Raghunandan and Rama	1999	Public Accounting Report for 156 auditor resignations for January 1, 1994 to December 31, 1996. CD-SEC or Laser Disclosure for 375 auditor dismissals 1995-1997. (128)
Roberts, Glezen, and Jones	1990	school districts' audited financial statements and compliance reports, the Texas School Directory for the fiscal years 1980-81 through 1984-85, and other data, plus a survey mailed to all

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Table 5 continued

		1,047 Texas school districts (224); n=87 (225)
Schwartz and Menon	1985	The Wall Street Journal Index; NYSE and AMEX companies which filed bankruptcy petitions during 1974 to 1982; n=132 bankrupt switchers, matched with 132 non-switchers (253)
Schwartz and Soo	1995	sample of firms which filed a Chapter 11 bankruptcy petition during 1987-1992, and that switched auditors within three years prior to bankruptcy filing, was compiled from The Wall Street Journal Index and the National Newspaper Index; n=59, matched with non-bankrupt sample of auditor switchers obtained from COMPUSTAT (127)
Simon and Francis	1988	Who Audits America, plus samples used by Simon (1985) and Francis and Simon (1987); sample consisted of 214 companies which changed auditors over the period 1979-84, plus 226 companies which did not change auditors

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Table 5 continued

Smith	1986	SEC Digest, data purchased from Disclosure Inc., Compustat, and National Automated Accounting Research System (NAARS); n=139 for years 1982-84 (99)
Wells and Loudder	1997	Auditor resignations obtained from the 8-K filings in LEXIS database 1988 through 1991; n=86 (140). Fourteen of the firms traded on NYSE or AMEX.
Williams	1988	Who Audits America (1983) used to select companies; Moody's Industrial Manual used to determine length of time the company had retained its present auditor (250); variables collected from Compustat industrial tape and Moody's Industrial Manual (251); n=186 NYSE or AMEX companies which changed from one Big Eight to another Big Eight auditor between 1977 and 1982 (252)

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Table 6

Companies excluded from sample of auditor switches

Company	Reason(s) for exclusion
American Stores Co.	Auditor was switched simultaneous with change in end of fiscal year.
Chiquita Brands	Compustat indicates four changes in fiscal year end during 1975 to 1994.
Craig Corp.	Auditor was switched simultaneous with change in end of fiscal year.
Decorator Industries	Fiscal year end was changed within two years following auditor switch.
Dole Food Co Inc.	Auditor was switched simultaneous with change in end of fiscal year.
FoxMeyer Health Corp.	The company changed its fiscal year the year after switching auditors.
General Motors Class E	The company changed its fiscal year the year after switching auditors.

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Table 6 continued

Hondo Oil & Gas	The auditor switch occurred when Pauley Petroleum bought 81% of Hondo.
Placer Dome	Income and auditor data were incorrect.
Ranger Oil Ltd.	The auditor codes per Compustat were 9, 4, 4, and 6 for years ended 12/86 through 12/89. Per Moody's, the auditors were Thorne Riddell for 1985, Thorne Ernst & Whinney for 1986 to 1988, and Peat Marwick Thorne for 1989. This appears to be the same Canadian audit firm, but the audit firm changed affiliations during the period.

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Table 7

Companies excluded (E) or data changed (C)

Part A. Differences in auditor between Compustat and Moody's

Company	FYE	Auditor per Compustat	Auditor per Moody's
Avon Products (E)	12/88	6	Coopers & Lybrand
Crystal Oil Co.	12/86	8	Touche Ross
Crystal Oil Co. (C)	12/87	6	Touche Ross
Crystal Oil Co. (C)	12/88	8	Peat Marwick
Crystal Oil Co.	12/89	6	Peat Marwick
CSS Industries Inc. (E)	1/80	8	Arthur Andersen
Gerber Scientific (E)	4/75	N/A	Peat Marwick
Gerber Scientific (E)	4/76	7	Peat Marwick
Gerber Scientific (E)	4/77	6	Peat Marwick
Gerber Scientific (E)	4/78	6	Peat Marwick

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Table 7 continued

Lee Pharmaceuticals (E)	9/80	5	Deloitte Haskins & Sells
Lee Pharmaceuticals (E)	9/81	7	Deloitte Haskins & Sells
Lehigh Group Inc. (E)	12/91	1	KPMG Peat Marwick in summary listing, but mentions Arthur Andersen's audit report
Lehigh Group Inc. (E)	12/92	11	Arthur Andersen
Noble Affiliates	12/88	7	Price Waterhouse
Noble Affiliates (C)	12/89	1	Price Waterhouse
Noble Affiliates	12/90	1	Arthur Andersen
Placer Dome (E)	12/87	7	Clarkson Gordon; Price Waterhouse
Placer Dome (E)	12/88	14	Clarkson Gordon; Price Waterhouse
Placer Dome (E)	12/89	4	Ernst & Young; Price Waterhouse
Placer Dome (E)	12/90	7	Price Waterhouse
Ply-Gem Industries (E)	12/82	9	(not determined)

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Table 7 continued

Ply-Gem Industries (E)	12/83	7	Weinick, Sanders & Co.
Ply-Gem Industries (E)	12/84	9	(not determined)
Republic Gypsum (E)	6/88	2	Arthur Young
Republic Gypsum (E)	6/89	4	Ernst & Young
Republic Gypsum (E)	6/90	1	Ernst & Young
Republic Gypsum (E)	6/91	1	Ernst & Young
Scherer, R. P. (E)	3/89	1	(not determined)
Scherer, R. P. (E)	3/90	3	(unable to locate in Moody's)
Scherer, R. P. (E)	3/91	1	(not determined)

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Table 7 continued

Part B. Differences in net income between Compustat and Moody's

Company	FYE	Net income per Compustat	Net income per Moody's
Placer Dome (E)	12/87	121.672	C$158.2
Placer Dome (E)	12/88	219.996	C$262.4
Placer Dome (E)	12/89	108.036	C$125.1
Placer Dome (E)	12/90	164.583	C$191.0
Placer Dome (E)	12/91	-236.200	C$236.2 loss
Placer Dome (E)	12/92	111.000	C$111.0

Note: C$ indicates amounts in Canadian dollars. Data sources give net income in millions of dollars.

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Table 8
Analyses of audit switches
by Compustat variable DNUM (SIC code)
and by year of switch

Part A. Audit switches by Compustat variable DNUM (four-digit SIC code)

	Sample		
	Full	Large	Small
less than 1000	0	0	0
1000 series	24	9	4
2000 series	52	19	22
3000 series	110	37	35
4000 series	16	1	2
5000 series	52	19	14
6000 series*	21	1	2
7000 series	20	2	6
8000 series	9	0	3
9000 series	1	0	0
Total	305	88	88

"Full" means the full sample.
"Large" means the largest companies, based on price-adjusted total assets.
"Small" means the smallest companies, based on price-adjusted total assets.

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Table 8 continued

Part B. Audit switches by fiscal years ended within the following calendar years

	Sample		
	Full	Large	Small
1976	11	6	1
1977	24	4	8
1978	14	3	5
1979	13	3	4
1980	12	1	3
1981	20	5	2
1982	11	3	2
1983	12	1	4
1984	18	7	4
1985	14	6	4
1986	13	3	5
1987	22	6	6
1988	16	2	7
1989	19	8	4
1990	33	11	9
1991	33	11	11
1992	15	7	6
1993	4	1	2
1994	1	0	1
Total	305	88	88

See notes on next page.

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Table 8 continued

"Full" means the full sample.
"Large" means the largest companies, based on price-adjusted total assets.
"Small" means the smallest companies, based on price-adjusted total assets.

*Auditor codes are not available for banks, life insurance, or property and casualty companies (Compustat 1994, 5-26), so those companies are excluded.

Part C. Audit switches by fiscal years ended within the following calendar years--comparison to Cheney, Jeter, and Shaw's (CJS) population drawn from Compustat full subscription

	This study	CJS study
1976	11	
1977	24	
1978	14	
1979	13	
1980	12	23
1981	20	23
1982	11	18
1983	12	16
1984	18	35
1985	14	38
1986	13	38

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Table 8 continued

1987	22	55
1988	16	58
1989	19	
1990	33	
1991	33	
1992	15	
1993	4	
1994	1	
Total	305	304

4.4 Performance of Tests on Full Sample and Sub-Samples

All tests were performed three ways: (1) on the full sample (n=305) of auditor switches, (2) on a reduced sample (n=177) separated by size into a larger half (n=88) and a smaller half (n=88), and (3) on the full sample by size of audit firm (i.e., Big to Big, Big to small, small to Big, small to small). Because size of the company being audited may be a proxy for any number of unidentified variables, only those companies which switched auditors for which total assets for the year preceding the switch could be manually obtained from Moody's Industrial Manual were included in the tests by size; this effectively tested for both size and the attention hypothesis.

The total assets from the year preceding the auditor switch was used to separate switching companies by size because there may have been unusual occurrences or transactions which significantly changed total assets, and which were associated with the auditor switch, making the year preceding the switch (t-1) a better data source than the year of the switch (t). Because total assets represented different fiscal years with different real purchasing power, the total assets were then normalized

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(1982=100) using annual average producer prices from Statistical Abstract of the United States 1995, 491.

There were 177 companies with total assets for the year preceding the auditor switch available from Moody's Industrial Manual. The other companies either were not industrial companies, were not based in the United States, had unreliable data in Moody's (such as those switchers in which new companies were formed to acquire existing companies), or were not available in the Moody's Industrial Manual. Those 177 companies for which data were available in Moody's Industrial Manual were separated into two halves by size of 88 companies each; the median company was not included.

The information for the full sample was drawn from the Compustat computer data base (limited sample), while the information for the reduced sample tested for larger half and smaller half (88 auditor switches in each half) was obtained manually. There were no differences in results between (1) the full sample, (2) either of the samples by asset size, nor in (3) the auditor switches categorized by size of audit firm. Accordingly, the discussion of results in Chapter 4 is limited to discussion of the full sample.

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4.5 Results of Statistical Tests of Hypotheses

4.5.1 Statistical hypothesis one: Among client companies that switched auditors, the proportion of client companies with net losses in the year after the switch (t+1) was less than or equal to (alternative hypothesis: greater than) the proportion of client companies with net losses in the year before the switch (t-1).

The statistical test could not reject the null hypothesis. There were *fewer* client companies (sixty-five companies) with net losses the year after the switch than the year before the switch (seventy-four companies), which was the opposite of the prediction. Because the null hypothesis had no chance of being rejected unless there would have been more companies with net losses the year after the switch than there were the year before the switch, and that is not what was found in the sample, no test statistic was computed.

The results mean that, on average, the data do not support the joint supposition that (1) management changed auditors with the intent of delaying reporting net losses until the year following the auditor switch, and (2) they were successful in obtaining such delay. Even if that indeed was the reason for some or all of the switches, the

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conclusion is nevertheless not statistically supportable from this sample.

As an aside, there were 117 instances in which net income for the year of the switch (t) was lower than the year preceding the switch (t-1). Thus, if management did wish to delay reporting net losses until the fiscal year following the year in which they switched auditors, it appears that their success in doing so was limited--perhaps by the new auditors.

4.5.2 Statistical hypothesis two: Among client companies that switched auditors, the proportion of client companies with extraordinary items in the year after the switch (t+1) was less than or equal to (alternative hypothesis: greater than) the proportion of client companies with extraordinary items in the year before the switch (t-1).

Hypothesis two was tested by computing the proportions of occurrences of extraordinary items in the last pre-switch year and the first post-switch year, then statistically testing for differences in proportions, computed according to Devore and Peck (1986, 385). The null hypothesis (Devore and Peck 1986, 385) of no difference between the two proportions of occurrences was

$$H_o: \Pi_1 - \Pi_2 = 0$$

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where Π_1 (pi_1) was the population proportion for population one and Π_2 (pi_2) was the population proportion for population two. The formula for conducting the test (Devore and Peck 1986, 385) is

$$z = \frac{p_1 - p_2}{\sqrt{\frac{p_c(1-p_c)}{n_1} + \frac{p_c(1-p_c)}{n_2}}}$$

where p_c was the common probability of success, p_1 was the proportion of successes in sample one, p_2 was the proportion of successes in sample two, n_1 was the sample size of sample one, and n_2 was the sample size of sample two.

The computation was as follows. The single-sample probability of success (that is, the proportion of switchers that had extraordinary items) for the year preceding the auditor switch, denoted as p_1, was 68/305, or 0.222951, while the single-sample probability of success (that is, the proportion of switchers that had extraordinary items) for the year after the auditor switch, denoted as p_2, was 75/305, or 0.245902. As an intermediate step to computing the z statistic, it was necessary to know the common probability of success, denoted as p_c, which was found by the formula (Devore and Peck 1986, 385)

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$$p_c = \left(\frac{n_1}{n_1 + n_2} \right) p_1 + \left(\frac{n_2}{n_1 + n_2} \right) p_2$$

The terms have already been defined. The two sample sizes, n_1 representing the year before the auditor switch and n_2 representing the year after the auditor switch, were each 305. These were different fiscal years for the companies which switched auditors.

Substituting in the equation immediately above to find the common probability of success, one obtained

$$p_c = \left(\frac{68}{68 + 75} \right) 0.222951 + \left(\frac{75}{68 + 75} \right) 0.245902$$

which reduced to 0.234988. Then, substituting in the equation to compute the z score, one obtained

$$z = \frac{0.222951 - 0.245902}{\sqrt{\frac{0.234988(1-0.234988)}{305} + \frac{0.234988(1-0.234988)}{305}}}$$

which reduced to -0.668461. This was not statistically significantly different from zero, and therefore the null hypothesis could not be rejected.

This means that research hypothesis two (among firms that switched auditors, the proportion of firms with

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extraordinary items in the year after the switch was greater than the proportion of firms with extraordinary items in the year before the switch) was not supported. The observed increase in firms with extraordinary items from sixty-eight in the year before the auditor switch (t-1) to seventy-five in the year after the auditor switch (t+1) did not constitute a statistically significant change in proportion. Separately, it was observed that there were seventy firms with extraordinary items in the year of the auditor switch (t), which was not statistically significantly different from the sixty-eight firms in year (t-1).

4.5.3 Statistical hypothesis three: Among client companies that switched auditors, the net income in the year after the auditor switch (t+1) was greater than or equal to (alternative hypothesis: less than) the net income in the year before the switch (t-1).

Hypothesis three of no change in direction of net income was tested using the Fisher distribution-free sign test (Hollander and Wolfe 1973, 39-40). The null hypothesis was expressed (Hollander and Wolfe 1973, 39) as

$$H_o: \Theta = 0$$

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Although not explicitly defined in the text, theta represents the amount of movement of a sample from the population, or of one sample from another. The indicator variables were defined (Ibid.) as

$$\Psi_i = 1 \quad if \quad Z_i > 0$$

and

$$\Psi_i = 0 \quad if \quad Z_i < 0$$

Psi (Ψ) was simply an indicator variable, and Z was the indicator variable (one or zero) associated with a pair of sample observations when the numerical value of one member of the sample pair was compared to the other member of the sample pair. The test statistic *B* was computed as follows (Hollander and Wolfe 1973, 39):

$$B = \sum_{i=1}^{n} \Psi_i$$

"The statistic *B* is the number of positive *Z*'s (Hollander and Wolfe 1973, 39)." Thus, the test statistic *B* represented the number of times in the sample the movement from one number to its matched pair was in the hypothesized direction.

For a large sample, Hollander and Wolfe (1973, 40) showed

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$$B^* = \frac{B - E_o(B)}{[var_o(B)]^{1/2}}$$

in which the numerator was the test statistic, B, minus the expected value of B, and the denominator was the square root of the variance of B. To impose a severe condition for rejecting the null hypothesis, net income was assumed, for purposes of the statistical test herein, to be a random variable with equal probability of rising and falling, which caused the expected value of B to equal n/2. Note that this was contrary to the Ball and Watts (1972, 680) expectation of rising net income because an expectation of zero lower net incomes appeared unrealistic, and any other proportion of lower net incomes would necessarily have been arbitrarily selected.

The sample standard deviation could have been computed in either of two ways; both gave the same answer.

$$sample\ standard\ deviation = \sqrt{(305)\ (0.5)\ (0.5)}$$

or

$$sample\ standard\ deviation = \sqrt{\frac{n}{4}}$$

In both cases, the sample standard deviation was computed as 8.732125. When the sample is large, Hollander and Wolfe

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(1973, 40) show that B^* is approximately normally distributed. Thus, substituting, one obtained

$$z = \frac{\left(121 - \frac{305}{2}\right)}{8.732125}$$

which reduced to z = -3.60737. The observed number (that is, 121) of lower net incomes was fewer than the expected number (that is, 152.5), where the expected number was based on this study's assumption that net income varies randomly, rather than the Ball and Watts (1972, 680) expectation that net income rises. The statistical test resulted in a failure to reject the null hypothesis.

Research hypothesis three (the net income in the year after the auditor switch was less than the net income in the year before the switch) was not supported according to the theory utilized in this study for income expectation. If one were to use Ball and Watts' (1972, 680) income expectation of rising net income and therefore zero expected lower net incomes, the computation would have been 121 observed lower net incomes minus zero expected lower net incomes, all over 8.732125, for a z value of 13.9. Using the Ball and Watts (1972, 680) income expectation, hypothesis three did have strong support.

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There were 121 instances, out of 305 switches, in which the net income in the year after the auditor switch (t+1) was less than the net income in the year before the switch (t-1). Under the extremely restrictive income expectation adopted, and related test performed, no statistical significance to the incidence of lower incomes would have been found unless some number of lower incomes, statistically significantly greater than 153, would have been observed.

Ignoring sideways movements, there were four possible patterns of movement of net income in the year of the switch (t) and the following year (t+1): up up, up down, down up, and down down. In one pattern out of four(up up), the end state (i.e., the year following the auditor switch, or [t+1]) should be unambiguously up. This pattern of unambiguously up was the expectation for net income according to Ball and Watts (1972, 680) who reported that accounting net "income can be characterized on average as a submartingale or some similar process." That is, each year the net income is expected to be greater than or equal to the preceding year's net income. In one other pattern out of four the end state should be unambiguously down, but the two remaining patterns do not produce an unambiguous

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expectation for the year following the auditor switch unless the magnitudes of movement are fixed.

4.5.4 Statistical hypothesis four: Among client companies that switched auditors, the net income, adjusted to reverse the effect of extraordinary items, in the year after the auditor switch (t+1) was greater than or equal to (alternative hypothesis: less than) the net income, adjusted to reverse the effect of extraordinary items, in the year before the switch (t-1).

Research hypothesis four was tested the same way as research hypothesis three. The z score was computed as

$$z = \frac{\left(118 - \frac{305}{2}\right)}{8.732125}$$

which reduced to -3.95093. The observed number (that is, 118) of lower net incomes, adjusted to reverse the effect of extraordinary items, was fewer than the expected number (that is, 152.5), where the expected number was based on this study's assumption that net income varies randomly, rather than the Ball and Watts (1972, 680) expectation that net income rises. The statistical test resulted in a failure to reject the null hypothesis.

Research hypothesis four, given the income expectation used for this study, was not supported. However, as was

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the case with hypothesis three, the results of the test of hypothesis four depend on the expectation used for direction of net income. In this study, net income was treated as a random variable which could have moved up or down, resulting in hypothesis four not being supported. There were 118 instances out of the 305 auditor switches in which the net income, adjusted to reverse the effect of extraordinary items, was lower in the year after the auditor switch (t+1) than in the year preceding the switch (t-1).

By contrast, if one were to have used Ball and Watts' (1972, 680) income expectation of rising net income and therefore zero expected lower net incomes, the computation would have been 118 observed lower net incomes minus zero expected lower net incomes, all over 8.732125, for a z value of 13.5. Using the Ball and Watts (1972, 680) income expectation, hypothesis four would have been strongly supported.

Table 9, following, gives the results for each of the statistical tests.

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Table 9
Results of the statistical tests

	H_o1	H_o2	H_o3	H_o4
Full sample				
p_1	74	68		
p_2	65	75		
B			121	118
standard deviation	not applicable	not applicable	8.732	8.732
z	not computed	not computed	-3.607	-3.951
Large-company half				
p_1	18	12		
p_2	14	25		
B			31	30
standard deviation	not applicable	not applicable	6.633	4.690
z	not computed	not computed	-8.593	-2.985
Small-company half				
p_1	26	20		
p_2	22	22		
B			35	35
standard deviation	not applicable	not applicable	6.633	4.690
z	not computed	-0.353	-7.990	-1.919

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Table 9 continued

	H_o1	H_o2	H_o3	H_o4
Big to Big				
p_1	56	55		
p_2	50	66		
B			98	96
standard deviation	not applicable	not applicable	not computed	8.086
z	not computed	-1.140	not computed	-4.055
Big to small				
p_1	9	7		
p_2	6	5		
B			7	6
standard deviation	not applicable	not applicable	not computed	2.000
z	not computed	0.726	not computed	-1.000
small to Big				
p_1	7	6		
p_2	8	3		
B			17	15
standard deviation	not applicable	not applicable	2.550	2.550
z	-0.354	1.056	1.569	0.784
small to small				
p_1	2	0		
p_2	1	1		

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Table 9 continued

	H_o1	H_o2	H_o3	H_o4
B			3	1
standard deviation	not applicable	not applicable	not computed	1.224
z	not computed	-0.775	not computed	-1.632

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4.6 Additional Results

There were some additional results obtained in the course of analyzing the data. These results may be even more interesting than the results of the tests of the hypotheses. As stated earlier, "For the general event of auditor switches, there is some evidence...which indicates that there is negative market reaction around the time of the announcement of the switch. The difficulty in interpreting this result is that it is not clear what motivates this reaction." (Fried and Schiff 1981, 338-9) Among the 305 auditor switches in the sample, there were 80 instances in which the net income in both of years t and (t+1) were lower than in year (t-1). There were 109 instances in which there was a net loss for one or both of years t and (t+1). Given that 109 instances is more than one-third of the entire number of auditor switches tested herein, it appears that an auditor switch by a publicly-owned company is frequently a predictor of negative information which has not yet occurred nor arrived in the market.

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4.7 Summary of this Chapter

This chapter has presented the results of the tests of hypotheses. Chapter 5 presents a summary of the findings, the contributions of this study, and the implications for further research.

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CHAPTER 5

5.1 Concluding Remarks

The structure of the chapter on concluding remarks is as follows. Section 5.2 presents an interpretation of results. Section 5.3 presents the contributions of this study. Section 5.4 presents the implications for further research. Section 5.5 presents a summary of this chapter.

5.2 Summary of Results

The results of the study are summarized in this section. A separate subsection is provided for each of the four hypotheses tested.

5.2.1 Statistical hypothesis one: Among client companies that switched auditors, the proportion of firms with net losses in the year after the switch (t+1) was less than or equal to (alternative hypothesis: greater than) the proportion of client companies with net losses in the year before the switch (t-1).

Stated in terms of the research hypothesis, the expectation was for more companies with net losses the year

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after the switch than the year before the switch, but the test found *fewer* client companies with net losses the year after the switch than the year before the switch. The statistical test could not reject the null hypothesis. Therefore, the research hypothesis was not supported.

5.2.2 Statistical hypothesis two: Among client companies that switched auditors, the proportion of client companies with extraordinary items in the year after the switch (t+1) was less than or equal to (alternative hypothesis: greater than) the proportion of client companies with extraordinary items in the year before the switch (t-1).

Hypothesis two was tested by computing the proportions of occurrences of extraordinary items in the last pre-switch year and the first post-switch year, then statistically testing for differences in proportions. Stated in terms of the research hypothesis, the expectation was for more client companies having extraordinary items in the year after the switch than the year before the switch. However, the statistical test could not reject the null hypothesis. Therefore, the research hypothesis was not supported.

5.2.3 Statistical hypothesis three: Among client companies that switched auditors, the net income in the year after the auditor switch (t+1) was greater than or equal to

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(alternative hypothesis: less than) the net income in the year before the switch (t-1).

Hypothesis three of no change in direction of net income was tested using the Fisher distribution-free sign test (Hollander and Wolfe 1973, 39-40). Stated in terms of the research hypothesis, the expectation was for more client companies having lower net income in the year after the switch than the year before the switch. Using the expectation of random movement of net income, the statistical test of hypothesis three could not reject the null hypothesis. Therefore, the research hypothesis was not supported. On the other hand, anyone who would have used the Ball and Watts (1972) expectation would have found strong support for this hypothesis.

5.2.4 Statistical hypothesis four: Among client companies that switched auditors, the net income, adjusted to reverse the effect of extraordinary items, in the year after the auditor switch (t+1) was greater than or equal to (alternative hypothesis: less than) the net income, adjusted to reverse the effect of extraordinary items, in the year before the switch (t-1).

Hypothesis four was tested the same way as hypothesis three, using the Fisher distribution-free sign test (Hollander and Wolfe 1973, 39-40). Stated in terms of the

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research hypothesis, the expectation was for more client companies having lower net income, adjusted to reverse the effect of extraordinary items, in the year after the switch than the year before the switch. Using the expectation of random movement of net income, the statistical test of hypothesis four could not reject the null hypothesis. Therefore, the research hypothesis was not supported. On the other hand, anyone who would have used the Ball and Watts (1972) expectation would have found strong support for this hypothesis.

5.3 Interpretation of Results

The pattern of results obtained in the testing of the hypotheses herein is consistent with a conclusion that managers are, on average, limited in the amount of time they can delay revelation of material bad financial news to the market. The data pattern does not show any greater number of net losses the year after an auditor switch than the year before, nor any greater number of extraordinary items the year after an auditor switch than the year before. This implies that auditors of publicly-owned companies which are switching auditors tend to do a professional job in not permitting the companies to routinely delay recognition of negative information in the

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financial statements. This is consistent with Krishnan and Stephens (1995, 179), who said that "clients who switched were treated relatively conservatively by both predecessor and successor auditors...."

One may argue that the socialization of auditors is such that, by the time an accountant becomes a partner of a major accounting firm entrusted with leading the engagement of a publicly-owned company, that accountant is aware that a risk exists that new clients may have something they would rather gloss over, and so the audit partner does not even commit his firm to undertake the engagement unless they can perform it properly. Further, audit firms are not required to accept prospective audit clients, and audit partners are cognizant that they might not want all the audit engagements offered to the firm. In short, if the audit is too risky, the firm's procedures are designed to lessen the likelihood that the engagement would even be accepted.

This study contains no test of whether recognition of negative information was delayed during the time the relationship was better, during any years preceding the year of the auditor switch (t). In fact, even if some disclosure had indeed been delayed in previous fiscal periods, it may be that an audit firm's insistence on

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recognizing negative information, or a client firm's realization that the negative information cannot be delayed any longer, is what caused the relationship to deteriorate, thereby leading to a switch.

5.4 Limitations and their Effects

As explained in Section 3.9, the use of the Compustat data base caused a bias against finding any of the hypothesized effects, even if one or more existed. This bias occurred because the Compustat data base companies tend to be larger than the average of all publicly-owned companies. Those larger companies are more closely followed by market participants who may have, or seek, private information which may bear on price movements of the companies' securities. Consequently, the extra effort devoted to obtaining information about those companies made it less likely that managers could have known material negative information and kept it from the market for an extended period.

Choices were made during this study, such as using an expectation of random movement of net income rather than the Ball and Watts (1972) finding that net income is a submartingale, which may have resulted in unnecessarily severe constraints against finding the hypothesized

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relationships even if they exist. For example, although no support was found for hypotheses three and four using the expectation of random movement of net income, there was strong support if one were to use the expectation of increasing net income. Thus, even though this study reports a finding of no support for the hypotheses, the hypotheses might still be worthy of further investigation, and replication by a researcher using the full Compustat data base over a longer or different time period than that used herein.

5.5 Contributions of this Study

The contributions of the study are summarized in this section. A separate subsection is provided for each of five contributions. Other contributions, including the Playground Model, are documented in the various appendices.

5.5.1 Data source used: This study uses a data source, the Compustat data base, which has not been used much in previously published journal articles on auditor switching. (In fact, when the study was begun [in 1996], the author found no previously published study of auditor switching which had used this source, although at least one article subsequently appeared.) The author's investigation of the underlying data indicates that (1) switches among non-Big

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Eight auditors are not available before 1989, (2) auditor code changes before 1990 which appear to indicate a change from non-Big Eight auditors to Big Eight auditors might actually be the result of a business combination of audit firms, and therefore should be subjected to further investigation, and (3) auditor codes should be visually examined over multiple years before using the codes as a basis for auditor switching studies.

5.5.2 What are managers doing? While previous authors have stated or implied that managers are attempting to influence the auditor, this study shows that managers might be attempting to avoid the auditor.

5.5.3 What is being tested? As explained in Chapter 3, this study tests information contained in publicly reported financial statements rather than market reactions to auditor switches. Thus the study's tests are of facts (what was publicly reported--even if what was publicly reported was not correct) rather than of expectations (market reactions).

5.5.4 What years are involved in an auditor switch? This study demonstrates that the years of concern might be the year before the auditor switch (t-1), the year of the auditor switch (t), the year after the auditor switch

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(t+1), some other year relative to the auditor switch, or some combination thereof.

5.5.5 What does an auditor switch tell the market? Based on the data set employed of 305 switches (including 257 Big-to-Big switches) which show 109 instances in which there is a net loss for one or both of years t and (t+1), and 80 instances in which net income is lower in both years t and (t+1) than in year (t-1), it seems that auditor switches by publicly-owned firms are frequently a predictor of bad financial news which has not yet occurred nor arrived in the market.

5.6 Implications for Further Research

Although this study did not find that a desire to delay the revelation of negative information is *the* motivation for companies changing auditors, that still does not rule out the possibility that it is *a* possible motivation and this study simply failed to establish that. Krishnan and Stephens (1995, 194) stated that "it is difficult to determine the actual reason for the change in auditors...." Moreover, Krishnan and Stephens (1995, 180) examined opinion shopping as a possible motivation for auditor switching, and noted:

> Although many independent auditor changes may be unrelated to opinion shopping, the inherent

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> difficulties in determining the real reasons for change (McConnell 1984) make it impossible to ascertain the relative importance of opinion shopping in independent auditor change situations.

Thus, if any motivation sounds intuitively appealing to members of the profession, it may indeed account, wholly or partially, for some auditor switches, whether or not academic researchers can statistically find supporting evidence. The multitude of possible and actual reasons for switches may make it difficult or impossible to statistically support that reason or other reasons, even if valid.

Some possible future studies which would extend this work would include (1) examining cash flows from operations rather than income-statement figures, (2) testing for differences among individual Big firms, and (3) using expectations other than random movement of net income (e.g., the Ball and Watts [1972, 680] income expectation discussed earlier in this study).

5.7 Summary of this Chapter

This chapter has presented a summary of the findings, the contributions of this study, and the implications for further research.

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APPENDIX A

ADDITIONAL CONSIDERATIONS: THE ECONOMIC BAD

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APPENDIX A

ADDITIONAL CONSIDERATIONS: THE ECONOMIC BAD

A.1 An Economic Bad

Appendix A discusses an alternative hypothesis which might explain why at least some companies switch auditors. Prior authors had not reported any explicit consideration of the alternative hypothesis that the audit contains elements of an economic bad.

An economic good is something which, if obtained for zero cost, leaves the acquirer better off. However, there also exists an economic bad, which leaves the costless acquirer worse off. People are willing to pay a premium (i.e., a price) to avoid an economic bad, as can be seen from the existence of the insurance industry and also from the existence of the crimes of blackmail, extortion, and kidnapping.

Arguably, research to date has implicitly assumed that the audit is an economic good only. In contrast, if one properly understands that the audit also contains elements of an economic bad, then it becomes obvious that some companies might switch auditors to avoid an economic bad (disclosure of negative information) when given the

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opportunity to obtain an economic good (the audit opinion) without the economic bad.

A.2 Prior Authors Gave Evidence of An Economic Bad

Even though prior authors have not addressed the economic bad embedded in the audit and associated audit report, it is clear that they admitted that the economic bad exists and is associated with the audit:

1. Fisher and Fisher (1993, 51) stated: "Qualified audit opinions are widely believed to (be) a major factor for switching independent auditors. A qualified opinion is perceived to have an unfavorable effect on the firm's stock price and its ability to borrow funds.
2. Krishnan (1994, 214) reported that rates of auditor switching "seem to be higher when qualified opinions are based on conservative application of standards," i.e., when the quality level of the audit is higher than that desired by managers.
3. Krishnan and Stephens (1995, 189) reported that "the switching rate is not only positively associated with the receipt of a qualified

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opinion..., but increases with the seriousness of the qualification."

4. Roberts, Glezen, and Jones (1990, 227-228) studied Texas school districts and reported results which "suggest that auditors may be replaced for reporting information that reflects negatively on the school board," (i.e., the management group).
5. Teoh (1992, 2) recognized the possibility that "qualifications are costly."
6. In publicly owned companies, "managers wish to avoid qualified opinions because they may affect (a) the market price of the firm's shares and (b) the managers' compensation packages (Gul, Lee, and Lynn 1992, 112, citing Chow and Rice 1982)."

A.3 Prior Authors Gave Evidence That Managers Want A Particular Audit Report

Some managers might want a particular audit report, whether they deserve it or not. Consider what the following authors have said.

1. Williams (1988, 247) said, "Managers would prefer to select an accommodating auditor who would allow the manager to reflect a favorable image as a good steward of the shareholder's investment.

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An auditor who (a) allows agents to favorable interpret accounting principles in order to achieve a specific goal and (b) issues favorable opinions, are examples of an auditor helping to create the manager's image as a good steward."

2. Chow and Rice (1982, 332) reported results that, after controlling for size and industry, appeared to indicate that Price Waterhouse was less likely to qualify an opinion than other Big Eight firms. Wheeler, Pany, and Chewning (1993, 49) reported a similar finding.

3. Simunic (1980, 180-181) reported that client companies pay a higher fee for an audit by Price Waterhouse than by other Big Eight firms. As stated immediately preceding, Price Waterhouse was less likely to qualify an opinion than other Big Eight firms. (However, this does not rule out the possibility that clients perceive the firm to be better because it has developed sufficient expertise to be able to accurately give clean opinions when other firms would have hesitated, and the clients are willing to pay a higher price for a better firm.)

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A.4 Summary

This appendix illustrated that managers have incentives to attempt to avoid bad outcomes. Because undesired audit reports could have negative consequences for managers, this appendix has therefore demonstrated that the audit contains elements of an economic bad, not just an economic good.

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APPENDIX B

AUDITOR SIZE AND AUDIT QUALITY

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APPENDIX B

AUDITOR SIZE AND AUDIT QUALITY

B.1 Mistaking Auditor Size for Audit Quality

Various authors (DeAngelo 1981b, 184; Becker, DeFond, Jiambalvo, and Subramanyam 1988, 1; and Krishnan 1994, 211;) have stated that just because the audit firm receives higher prices, it is better. By omitting any consideration of other causes for the fact pattern observed, they have implicitly or explicitly concluded there can be no other cause which would result in the same fact pattern. Admittedly, their published articles do not report whether the conclusion was made implicitly or explicitly. See Table 10, following.

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Table 10
Bigness has been equated with high quality

Author(s)	**Authors' positions**	**Comments, if any**
DeAngelo (1981b, 184)	"the current paper argues that size alone alters auditors' incentives such that, ceteris paribus, larger audit firms supply a higher level of audit quality."	"DeAngelo defines audit quality as the joint probability of detecting and reporting material financial statement errors.... ... Taken literally, DeAngelo's argument suggests that a cardinal ordering of auditor size can be used to proxy for audit quality." (Francis and Wilson 1988, 664)

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Table 10 continued

DeAngelo (1981b, 184), continued		If one accepts the supposition that larger size means higher quality, then if two accounting firms merge but change nothing, the merged firm is higher quality than either constituent firm. Laventhol & Horwath grew by merger, but suffered a lowering of audit quality, and went bankrupt.
Becker, DeFond, Jiambalvo, and Subramanyam (1988, 1)	"Consistent with prior research, we treat audit quality as a dichotomous variable and assume that Big Six auditors are of higher quality than non-Big Six auditors."	If auditors learn through education, on-the-job training, and experience, why do they consider an ex-Big Six auditor working for a small firm to be lower quality than a present Big Six auditor who has not yet received the on-the-job training and experience?

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Table 10 continued

DeFond (1992, 16)	DeFond defined quality "as the probability that the auditor will both detect and report material breaches in the accounting system."	Since large accounting firms tend to have portfolios of large clients, material financial statement errors ought to be less likely to occur among such clients, because (1) the dollar threshold of materiality is higher, (2) such large client firms, possessing large pools of assets desirable to individuals, must typically have good operational controls and internal controls to enable them to survive, and (3) such large client firms can afford to hire the best employees, managers, specialists, and consultants.

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Table 10 continued

DeFond (1992, 16), continued		Thus, the large audit firms' portfolios ought to consist of firms which are *less* likely to have material financial statement errors than the portfolios of small audit firms.
Elitzur and Falk (1999, 41 and 42)	With respect to an auction for audit services, "a bidder may under-estimate the client's audit cost and subsequently reduce audit quality."	Because of their large portfolios of audit clients, the largest firms can afford to reduce audit quality to meet budget targets rather than purely as a considered professional response to what is found during the audit examination.

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Table 10 continued

Ettredge and Greenberg (1990, 200)	"If the Big Eight supply a higher-quality product, ceteris paribus, the product can be expected to have a higher price."	If smaller firms would not give a clean opinion but a larger firm would, the larger firm ought to be able to charge a higher price, especially if the audit client should not have received a clean opinion. These authors have not ruled out alternative explanations for the higher price.
Krishnan (1994, 211)	He assumed that Big Eight firms are better quality, but did not prove his assumption. "Clients that switch from non-Big Eight to Big Eight auditors are defined as movers in search of credibility."	All it shows is that the clients switched. The reason for the switch is assumed, not proved.

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Table 10 continued

McConnell (1984, 45)	"Underwriters frequently pressure companies issuing securities to obtain Big Eight audit opinions on the ground that a better offering price may result. Arnett and Danos (1979) suggest that a 'Bigness Syndrome' exists--the perception that bigness equals competence and quality...."	General Motors must have been the best automobile manufacturer in the world at one time. Why would their customers ever have bought cars from any other companies, such as Japanese companies, to get higher-quality automobiles? There has been no evidence proving that underwriters have actually investigated the quality of audits of various firms, rather than doing what is convenient for themselves and supplying a cover story for why they want the client company to switch auditors.

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Table 10 continued

Palmrose (1986, 108)	"The observed result, i.e., higher audit fees for Big Eight firms, is consistent with either higher quality services or monopoly pricing by the largest suppliers," and concluded "that the Big Eight designation is a quality surrogate."	The possibility exists that audit purchasers are paying for a brand name rather for intrinsic quality. Francis and Wilson (1988, 663) reported support for a brand name model of audit quality.
Palmrose (1986, 108), continued		Large audit firms, on average, might use more audit staff with less experience than do other firms who hire Big alumni. Therefore the large audit firms must spend more time on an audit and have a higher production cost for an audit, but they might have sufficient market power to charge a higher price.

Auditors at non-Big firms, technical personnel at the American Institute of Certified Public Accountants, and state boards of accountancy can point out that all auditors are responsible for the same body of knowledge, the same requirements for entrance to the profession, the same licensing requirements, and adherence to the same professional standards. Accountants in non-Big firms can claim that they do at least as good a job as the larger firms. Given that this second tier, by size, of audit firms is relatively stronger in middle-market companies (where owners are more likely to manage the business, or to have more-concentrated ownership interests) than in large publicly-owned companies (where ownership is likely to be dispersed and management is in the hands of agents), at least the following four possibilities exist:

1. It may be that second-tier audit firms actually perform higher-quality audits than the Big firms, and this is *precisely* the reason managers prefer the Big firms while owners prefer the second tier.[18]

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[18]Gul, Lee, and Lynn (1992, 111) reported that "small audit firms issue more qualified reports than large audit firms," but small firms may have riskier client portfolios, or portfolios of smaller clients for whom any given event must result in a qualified report, whereas the same event would be immaterial to a larger client. Thus, the fact that small audit firms issue more qualified reports than large

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2. It may be that smaller audit firms provide audits equal in quality to those of the Big firms, but the smaller audit firms do not charge as much.
3. It may be that smaller audit firms provide lower-quality audits than Big firms provide, but those lower-quality audits fulfill the needs of the purchasers and users of audits.
4. Regardless of the relative quality of audits performed by Big firms compared to audits performed by smaller audit firms, some purchasers of audits prefer to save money rather than buy the higher-priced audits of the Big firms. In the minds of the people paying the bill for at least some audits, they have a choice between paying a high price to have expensive people travel from out of town, charge them for travel, rental cars, hotel rooms, and meals in addition to the fee for the professionals' time spent doing the audit versus paying a lower fee for a smaller firm which is within daily commuting distance and which might even use more

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audit firms does not lead inexorably to a single conclusion.

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professional hours on the audit while still charging a lower fee.

Whichever is true, the Big firms are not higher quality in a way which determines the decisions of some purchasers of audits or else those purchasers would have bought their audit services from the Big firms. Using an analogy, while the highest-priced brand of car in the world might or might not also be the highest-quality brand of car in the world, it is not the only car which will get a person from Point A to Point B. Moreover, there may be some people who want and can afford less-expensive cars, but who cannot afford the most expensive car in the world.

B.2 Evidence That Big Firms Produce High-Quality Audits

Evidence exists that the Big firms cannot all be producing only low-quality audits, although some subset of offices or employees may be producing some small number of audits which are subsequently deemed low quality. (See Palmrose 1988 and St. Pierre and Anderson 1982 and 1984 for articles concerning lawsuits against accounting firms. If all audits were high quality, then presumably there would be few actual or threatened lawsuits against auditors.)

One of the Big firms had a well-defined program of financial support for audit research. This would be

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irrational if it recognized its own product as being low-quality and wished to keep it so. Support for audit research is consistent with an evaluation of competitors' quality as high (in which case the research would improve the environment in which auditors operate), and also with an evaluation of competitors' quality as low (in which case the research results would help the firm gain a competitive advantage).

Other Big firms did not have the same well-defined program of support for audit research. Nevertheless, each of those firms has provided ad hoc funding and access to audit researchers. This is not consistent with a rational action by a low-quality producer, since it would enable the identification of such a firm as a low-quality producer. In an open society such as the United States, it is doubtful that such an identification--if one were made--could be suppressed for long. However, published research exists on audit firm structure, auditor decision making, auditors' interpretation of terminology, the ethical levels of auditors at various stages of firms' hierarchies, and other topics, without any finding that even one of the Big firms is a low-quality producer. Surely if one or more Big firms were to be identified as nothing but low-quality producers of audits, it would have been learned and

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publicized by now. The absence of such evidence is suggestive, but not determinative, that Big firms are not low-quality producers of audits.

B.3 If Bigger Really Did Necessarily Mean Better

It is interesting to analyze what we would observe if a bigger organization really did mean the organization was better. We would not see many Japanese-brand vehicles on U.S. roads, because General Motors had more than half the market at one time; by this theory, General Motors must have been better than everyone else combined, so why would anybody be foolish enough to buy a vehicle from anyone else? Wal-Mart would never have grown beyond a single store, because Sears and K-Mart were large chains. A T & T would never have grown to any great size, because Western Union was already a large company which permitted people to communicate with each other. McDonald's would never have been able to attract franchisees, because White Castle already had many stores. U. S. students would leave U. S. universities and attend large foreign universities instead.

Consider this easily observed fact: in each of these instances, the people who made the purchasing decisions made the choice of buying from a smaller organization rather than a larger organization. This indicates that the

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larger organizations were not better to people who made purchase decisions, or else those people would have purchased from the larger organizations. Assume that the people who paid the money were maximizing their own utility. Because the smaller organizations successfully attracted purchasers, one can conclude that the people who paid the money found the smaller organizations to be better (i.e., higher quality on one or more dimensions which mattered) than the larger organizations. Thus, bigger does not necessarily equate to higher quality in the instances mentioned above, and there is no proof that the audit market is a special market where rules apply everywhere else in the universe except in that special market.

B.4 Summary

This appendix has considered whether a relationship necessarily and monotonically exists between auditor size and audit quality. This appendix has demonstrated that while the Big firms do produce high-quality audits, the mere fact that they are indeed Big does not automatically mean that they inevitably *must* be higher quality than smaller firms. As discussed in Appendix C, some purchasers of audits may desire a less than high-quality audit.

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APPENDIX C

THE MARKET FOR AUDIT OPINIONS AND THE CAPITAL MARKETS

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APPENDIX C

THE MARKET FOR AUDIT OPINIONS AND THE CAPITAL MARKETS

C.1 The Market for Audit Opinions--Consumer/ Purchaser View

If purchasers of audits seek out (1) a particular size of audit firm, or (2) audit firms which the purchasers perceive as being less strict in application of accounting principles and judgments, or (3) audit firms which the purchasers perceive as being more likely to render a clean opinion even if those firms detect something which raises questions in the minds of the people performing the audit procedures, then the market for audits is not a homogeneous market as previous authors may have consciously assumed, or may have implicitly assumed by the structure of their research. Rather, it is a segmented market in which firms produce audits at varying quality levels as demanded by the market segments. Those purchasers of audit services would, in at least some fiscal years, have an incentive to pay extra to avoid the more-strict outcomes perceived as bad. This would result in lenient firms garnering more business, and at higher prices, than their competitors.

This line of reasoning suggests that the price premium received by the largest firms may not be a premium for

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higher quality, but rather for a relative level of quality demanded by at least some purchasers of audits. The absolute level of quality still meets professional standards, but the purchasers of audits are paying a premium price to be sure they get what they want: an unqualified audit opinion with no major adjustments to the financial statements.

However, Krishnan (1994, 201) said, "...evidence...suggests that opinion shopping is generally futile." If significant quality differentials existed in the market for audit opinions, as would be the case if the largest firms were more lenient or lower quality than smaller firms, and if some providers of audit opinions did not provide audits of professional quality, then opinion shopping would be effective, not futile. Thus, if Krishnan was correct that opinion shopping is futile, another possibility exists: there are high-quality firms at both the Big and non-Big size level, but the Big firms are simply better at selling. Perhaps the Big firms became Big because they were better at selling their services, whether or not they were better at performing the work.

Are some firms better than others at selling? Yes. For example, when George Bailey went out on his own as a sole practitioner, he took Chrysler with him as a client

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(Grayson 1998, 25). Bailey then combined with other firms to become Touche, Niven, Bailey and Smart, which became the Touche Ross firm, now part of Deloitte and Touche (Ibid.). Not many small accounting firms obtain clients the size Chrysler was at that time. If any small accounting firm were to obtain one or more clients that size, the accounting firm would grow larger very quickly.

C.2 The Market for Audit Opinions--Supplier View

Do managers wish to avoid losing high pay, stock grants, stock options, perquisites which go with their positions, above-average pension programs, etc.? Do they wish to avoid having to search for another position which would be at least the equivalent? The answer ought to be obvious. Conceptually, if managers did not care about these things, we should observe a significant number of managers quitting their jobs with no definite plans of what to do next. On the other hand, if managers do care about such things, and if a negative audit report might cause them to lose their positions, pay, and perks, then managers would have an incentive to find an audit firm which would render the audit report they desire.

Can managers can avoid a bad audit report by finding an audit firm which will render the managers' desired

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report, even if that desired report is not deserved? Watts and Zimmerman (1979, 287) took the position that anyone who was willing to pay for an excuse or argument could find someone willing to furnish it for a price: "Given the rewards for supplying theories on controversial issues, we expect to observe competition in the supply of accounting theories related to those issues." The same theory in their argument applies to audit opinions. One could easily take the theory and state their position as, "Given the rewards for supplying opinions on financial statements, we expect to observe competition in the supply of audit opinions related to those financial statements." Thus, even if some auditors may be unwilling to render a clean opinion on a particular set of financial statements, other auditors, for a sufficiently high fee, may be willing to look for ways to justify the issuance of a clean opinion.

Watts and Zimmerman's argument can imply a higher fee for a lower-quality audit, but it can also imply a higher fee for a higher-quality audit. Consider the case in which an audit firm understands that the client wants a clean opinion. In order to be sure that the clean opinion desired by management really is deserved and can be justified, the audit firm assigns higher-quality personnel than would typically have been assigned to the audit, and

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permits a larger time budget for the engagement. Precisely because management of the client company is willing to pay such a high fee for the desired audit report, the audit firm can afford to expend more resources yet still make a big profit on the engagement. Thus, by paying a high price for an audit, managers find an audit firm to do the audit, the audit firm overaudits if necessary to be able to justify its opinion, and the client-company managers receive the audit report they wanted.

Managers might attempt to find an audit firm which would render the audit report they desire even if they cannot in actuality find such an audit firm. Particularly if managers have an internal locus of control, they might believe they can control something which they cannot control. Some people buy lottery tickets and select their own numbers. Conceptually, some of these purchasers are attempting to control the numbers which will be drawn for the prize--but most lottery tickets lose.

C.3 Capital Markets Considerations

An auditor switch is publicly available information which can be used by the capital markets to revalue security prices. The fact of the switch can also be

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related to other occurrences such as subsequently reported financial statements. The market associates an auditor switch with negative information, as evidenced by the following studies.

1. "For the general event of auditor switches, there is some evidence...which indicates that there is negative market reaction around the time of the announcement of the switch. The difficulty in interpreting this result is that it is not clear what motivates this reaction." (Fried and Schiff 1981, 338-9)
2. Garsombke and Armitage (1993, 95) reported that forty-five companies which switched auditors from 1986 to 1987 had 26% lower net income in 1987 than 1986.
3. Johnson and Lys (1990, 305) reported negative excess returns to common stock for the thirty-six months preceding announcement of an auditor change.
4. Fisher and Fisher (1993, 50) reported "that clients are likely to experience decreasing bond ratings prior to and subsequent to switching independent auditors."

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5. Raghunandan and Rama (1999, 125) reported that "many auditor resignations occur in potentially litigious situations."
6. Dunn, Hillier, and Marshall (1999, 95) examined only auditor resignations, and find a negative reaction.
7. Dunn, Hillier, and Marshall (1999, 97) cited a working paper of Davidson and Gribbin (1995), in which Davidson and Gribbin examine "36 auditor changes in the period 1983 to 1993 and found that the announcement of an auditor change was accompanied by a negative abnormal return."
8. Teoh (1992, 2) said

> the stock price response to the announcement of an auditor change depends on the preswitch audit opinion. Specifically, the stock price reaction to a switch will tend to be more negative after a clean than after a qualified opinion.... ... ...management intimidation of the auditor does not itself determine investors' reaction to an auditor switch.

However, association standing alone, without theory, is not sufficient to establish causation. The hypothesized causal chain whereby negative information leads managers to purchase audits from companies other than incumbent auditors (i.e., to switch audit firms) is discussed in Section 3.2 of Chapter 3.

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C.4 Summary

This appendix has considered the audit in the context of markets. Prior researchers who have assumed that client companies switched from lower-quality auditors to higher-quality auditors have not explained why the markets interpret auditor switches as either constituting, or else being associated with, negative news. Conceptually, switching from a lower-quality auditor to a higher-quality auditor, when the new, higher-quality auditor will charge a lower fee than the prior auditor (as established by DeAngelo 1981a, 114), ought to be good news, but that is not how the market reacts. Thus, researchers who say the auditor switch is from lower-quality auditor to higher-quality auditor, when the market reacts negatively, implicitly take one of two positions:

1. the market is correct. (If the switching cost were worthwhile compared to the cost savings on the audit, the market would have revalued the company upward. Because the market revalues the company downward, the market is concluding that the switching cost makes the switch not worthwhile. Therefore, client companies should never switch auditors.)

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2. the market is wrong. (The market lowers the value of a company which takes an action reasonably expected to improve its profitability.)

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APPENDIX D

ADDITIONAL CONSIDERATIONS: ASYMMETRY OF INFORMATION

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APPENDIX D

ADDITIONAL CONSIDERATIONS: ASYMMETRY OF INFORMATION

D.1 A Non-Homogeneous or Non-Fungible Product

This Appendix D discusses another alternative hypothesis, besides the one in Appendix A, which might explain why at least some companies switch auditors: asymmetry of information. Assume that managers typically have information which stockholders do not have. Observe that the audit is a non-homogeneous or non-fungible product with a standard label. While the *language of an audit report* is standard across firms, the *conduct of the audit* and the formation of an opinion are not. Auditors are free to exercise professional judgment in expanding or limiting scope, designing and conducting tests, deciding what evidence is competent and relevant, interpreting the evidence, and deciding how much evidence it takes to be sufficient.

While this does point to a situation where auditors have some power over managers, managers are not powerless with respect to auditors. Managers are free to obtain a replacement for an auditor who performs a more thorough audit than management desires, who performs a less thorough

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audit than management desires, who takes too long to complete the audit, who is too intrusive on the personnel of the company, who keeps assigning different personnel to the audit (whether within one year or over successive years), or who charges too much. When auditors are replaced, whether by being fired or by ostensible resignation, that is a publicly disclosed event which conveys information to the market.

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Table 11
Second alternative hypothesis not reported
as having been considered by prior authors

Alternative hypothesis	**Implication(s)**	**Comments, if any**
There is an information asymmetry between managers and stockholders, plus a non-homogeneous product with a standard label. While the *language* of an audit report is standard across firms, the *conduct* of an audit (including the formation of an opinion) is not standard across firms.	Managers interview auditors before selecting an audit firm. They can therefore contract for the level of quality they desire (which does not have to be the best quality available) without disclosing the quality level to stockholders.	Gul, Lee, and Lynn (1992, 113) reported: "Would not another auditor just render the same opinion? If a qualified opinion is not the correct opinion, and the correct opinion is an unqualified opinion, then why is management unable to convince the auditor before issuance of a qualified opinion?"

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Table 11 continued

		Kluger and Shields (1991, 257) referred to "the extent that the company is successful in predicting whether a new auditor will be cooperative...." Teoh (1992, 2) recognized "the need to search and solicit presentations from potential auditors...." Addams and Davis (1994, 38) referred to this time, from the standpoint of the prospective selectee, as the courting stage.

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Table 11 continued

		Craswell (1988, 23) stated: "For example, as early as 1904, Dodd discussed the role of auditors in Australia and suggested that it was the view of managers that 'a too vigilant watch-dog must be cleared out, and one of less pronounced efficiency substituted for him." (1904, p. 777)

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Table 11 continued

	In situations where information asymmetry does not exist, or at least is not so pronounced, there is no need to pay a premium price to make the owners believe that managers are obtaining a high-quality audit, because owners either know or can ascertain the actual quality level. If significant owners are also the managers, because they are paying the cost of the audit, they may be less likely to pay the premium price charged by the Big firms.	Kamin and Ronen (1978, 141) reported differences in smoothing behavior between management-controlled firms and owner-controlled firms. This suggests that owner-managers and hired managers may have different utility functions, and therefore different purchasing behaviors, concerning reported financial results and the related audits.

D.2 The Signaling Function of the Audit

By contracting at a high price with a brand-name auditor which is known to be capable of producing high-quality audits, both management and the auditor imply that the audit is high quality, whether it really is or not. The payment of a high price itself implies high quality, because to the stockholders, it does not appear rational to pay a high price for low quality. To the managers, it is rational to always pay a high price, no matter what quality level is actually contracted for, because by doing so, the price always signals high quality while managers have actually contracted for a desired audit report. In the United States, large publicly-owned companies overwhelmingly have their audits done by the Big audit firms, which charge higher fees than smaller audit firms.

The managers consider that they are paying a high price for an audit report, and the audit firm had better provide it. The audit firm, in return for the high fee, wants to provide the desired audit report if it can justify doing so, but adherence to professional standards means that the audit firm cannot always provide the desired audit report. Thus, to the managers who contracted at a high price, the audit firm which requires adjustments to be made to the financial statements or else it will not render a

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clean audit opinion has not provided the contracted-for audit report. This situation may lead to auditor dismissals or auditor resignations.

As quoted immediately below, Healy and Lys (1986, 253) assumed that larger audit firms are higher quality than smaller firms, and suggested that client companies want the audit reports they wanted, rather than the audit reports they may sometimes have deserved.

> We view auditor investments in reputation or brand name as serving two related functions. First, they represent a bond by the audit firm to assure its clients that they will receive contracted-for audit quality (see Klein et al. 1978, and Klein and Leffler 1981). If the audit firm fails to supply the contracted-for quality, it dissipates the value of its brand name capital. Second, brand names signal the audit firm's quality to the readers of the audit report, lowering their information costs.

However, client-company managers have an incentive to "receive contracted-for audit quality" without that quality necessarily being the highest quality available. Managers might be perfectly willing to use the company's money to pay a high fee to a brand-name auditor, even if the auditor misses something the managers do not want the auditor to find and report, because that proper technical outcome would be bad politically for the managers.

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D.3 The Confusion Function of the Audit

By using a large, brand-name auditor, the contracted-for quality level is harder for a user of financial statements to assess. "...the costs of assessing audit quality increase if the audit firm supplies different quality audits to each client, since it is costly for the users of audit reports to distinguish differences in quality across clients (Healy and Lys 1986, 253)." However, they immediately stated, "The audit firm therefore has an incentive to supply the same quality to all its clients (Ibid., 253-254)."

While the audit firm may have an incentive to supply the same quality to all its clients, this is not the one and only incentive experienced by the audit firm. Auditors are capable of operating at differing quality levels. (If auditors were not capable of operating at different quality levels, then audit firms and internal audit departments would hire only from certain accounting programs, since graduates of other accounting programs would be unable to operate at the quality level of that employing entity. Moreover, accounting programs would supply graduates to a small set of mostly unchanging employers, since those employers would be the only ones operating at the quality level of the graduates of the programs.) If auditors are

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paid to supply audits of differing quality, the incentive of payment may be stronger than the incentive of uniformity of quality level. Indeed, DeFond (1992, 16) stated that "differing quality levels are demanded by clients...."

D.4 Summary

In reviewing the literature and analysis related to the information asymmetry between managers and stockholders and also the non-homogeneous or non-fungible product with a standard label, it appears that more firms than just the Big firms are capable of producing high-quality audits. The Big firms tend to receive higher prices for audits, and so the Big firms are relatively more attractive to manager-controlled firms which engage in signaling than to owner-controlled firms which have no need to conduct such signaling.

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APPENDIX E

THE PLAYGROUND MODEL

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APPENDIX E

THE PLAYGROUND MODEL

E.1 Introduction

This is the playground model which originally gave rise to the notion that managers may switch auditors in order to delay the disclosure of negative information. This model is the nontraditional motivation mentioned in Chapter 3, Section 5 which gave rise to this study. Because of its broad intuitive and logical appeal, the model may be useful on its own and also as an alternative to agency model formulations.

The playground model is the creation of the author. It is formulated as a sports analogy because many business magazines, in interviews and profiles, report sports analogies--some used by business leaders and some used by the people who write about those business leaders. The analogies are not confined to one sport. The business leaders themselves are often referred to as "captains of industry." Captains play team sports, not individual sports.

One strength of the playground model is that it depicts the behavioral complexities of team play. In essence, the model suggests that "it's not how well you

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play the game, it's whether you get to continue to play the game." The reason that how well you play the game does not matter is that captains can make decisions to cause the team's individual score to be approximately what the captains decided ahead of time they wanted it to be, and on which they placed bets.

The appendix is organized as follows. First, the playground model is presented. Second, the significance of the model is discussed in terms of its critical underlying assumption. Third, the relationship of the model to auditor switching is discussed. Fourth, additional considerations concerning auditor switching are discussed. And finally, limitations of the model are provided.

E.2 The Playground Model

It has been said that "the difference between men and boys is the cost of their toys." Heads of large companies are referred to as "captains of industry." Let us think of the economy as a big playground. There are various teams (companies, non-profit organizations, government agencies, etc.) playing various games on different parts of the playground. The teams have to pay various charges (i.e., fees and taxes) to use the playground. Spectators pay a fee to watch (i.e., buy goods and services), but may go to any convenient part of the playground to watch the games

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and teams they like best (i.e., may buy from any seller willing to engage in the transaction).

The players themselves report the scores of the games while the games are in progress, either privately (e.g., file tax returns) or publicly (i.e., periodically publish financial statements). One of the team members is designated as scorekeeper (i.e., chief financial officer) and he can get other members to help with the task. Teams can score in numerous ways, including what they have already done several plays ago (e.g., valuation of inventory) and what they claim they will do in the future (e.g., valuation of accounts receivable at their net realizable value).

Betting (i.e., purchase and sale of securities and options) is permitted on some of the teams which have previously told the adults that they will permit betting (i.e., they have registered securities).[19] Key team members are encouraged to engage in this betting, despite the fact that they are betting against spectators (i.e., the public) and that team members know what plays they are going to call, how aggressively they intend to play, and can even rig the score by recruiting new team members,

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[19]Note that this is consistent with Jensen and Ruback (1983, 43) who discussed the possibility "that the corporation has no owners. Instead, stockholders are agents ... who specialize in riskbearing."

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kicking existing team members out, or ending play even when they could have continued the game. Key team members have another advantage through attendance at inter-team conferences (e.g., industry conferences, management training sessions), where they can learn information which enables them to place better bets on the performance of many teams in addition to their own.

To attempt to assure reasonably accurate reporting of scores, teams on which betting is permitted are required to have verifiers (i.e., auditors) periodically tell the spectators and the adults whether or not each team's score, reported separately by each team, is reasonably close to the true score. This score is the score of the *team*, not the score of the *game*. These verifiers spend little or no time watching the teams play; mostly they go over the records kept by each team's own scorekeeper, who, as you recall, is a team member. In order to establish some sense of order in how verification should be done, representatives of the verifiers have gotten together to draw up some rules concerning the verification process, but it is mostly up to the verifiers themselves to comply with their own group's rules.

When performing a verification, before the verifiers tell the spectators and the adults what they think of the

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reported score, the verifiers get the scorekeeper and the team captain to sign a paper saying that the score reported by the team really is the score (i.e., a representation letter). The verifiers also have a relatively new requirement to report whether the scorekeeping method looks as though it can be used to keep a reasonably accurate score (i.e., make a representation on the state of internal accounting control).

Since it is cumbersome for the spectators to find other spectators to take the opposite side of a bet, there are some betting booths set up in the various spectators' stands (i.e., geographic areas). The concessionaires who run these booths (i.e., securities firms) make money in two ways: first, by handling more bets (i.e., increasing trading volume), and second, by making good bets for themselves (i.e., trading for their own accounts). If the concessionaires want to handle more bets, this means that at least some of their bettors have to win, so the concessionaires employ guessers (i.e., securities analysts) to guess what teams will report what scores. The guessers are usually able to improve their guesses by talking to key members of the various teams. Maybe in return for indicating what their *own* team is likely to report as a score, some of the key team members are given information

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about what scores *other* teams are likely to report; that would be a plausible motive for sharing private team information.

The concessionaires have been able to make good bets by noting betting imbalances and placing the concessionaires' own bets before those for spectators who bet (i.e., front-running). The concessionaires are also in a position to act more quickly than the spectators on what the guessers find out from key team members; they can post what the guessers say, and immediately act, while the spectators are still trying to figure out what the posted information means.

From time to time, not all the playground is usable, as when night falls and only a portion of the playground is lit (e.g., economic contraction). In such a case, some of the teams shrink so they can continue to play their games in a smaller space, while other teams disband entirely (i.e., companies lay off employees or even go out of business entirely). When this happens, individuals who are no longer playing on a team are reduced to looking for another team which will invite them to play (i.e., search for other employment), or to try to start their own team (i.e., become self-employed). At least some of the children who do not get to play on any of the teams,

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whether through never being selected or through being expelled, are paid to be spectators (i.e., receive welfare payments or other transfer payments). However, since these paid spectators have little money to spend on the best admission seats or to spend on refreshments or to bet, few teams or players bother to court them as an audience.

One event which strikes fear into the hearts of the key members of the various teams is losing control over their teams to the occasional playground bully (i.e., corporate raider). When that happens, they are likely to go looking for an adult (i.e., judicial system or government intervention) to help them keep their places on their teams.

To tell the truth, the key members of the various teams have an even bigger fear: teams from other playgrounds (i.e., countries) coming and using this playground. The captains, especially, are afraid that the spectators and bettors will like the other players better (i.e., buy imported goods and services), especially if the other teams play a more skillful or more exciting game (i.e., produce better goods and services).

The adults (i.e., governmental and judicial system) tell the children playing the games to play their best, according to the rules, and try to win. The adults tell

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the verifiers to be sure that the scores reported are honest ones. Thus, the stated objective for the teams (i.e., companies) is to do well (i.e., turn in a good performance), whereas the children quickly learn that the *real* objective is to continue to play. To continue to play, the team has an incentive to report a score that the bettors (i.e., market) *want* to hear, rather than the score they *ought* to hear (i.e., the truth as defined in some absolute sense).

Likewise, the stated objective for the verifiers is to do a good job verifying (i.e., auditing), and getting the teams to report the scores they ought to report, but the verifiers quickly learn that the *real* objective is to have teams to verify. If the verifiers do not have teams to verify, they will have to try to join a team (i.e., leave public accounting for industry, government, or a non-profit organization), try to find teams that will use them as verifiers (i.e., start their own public accounting firm), or go home (i.e., become unemployed).

The playground can get somewhat complicated, because from time to time the adults change the rules concerning playing and scoring. If any player or verifier tells any adult or bettor that the team is not playing or scoring according to the rules, the "almost inevitable" response is

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to kick that individual off the team (i.e., fire him), and sometimes even off the playground (i.e., frustrate his efforts to get another decent job) (National Commission on Fraudulent Financial Reporting, 1987, 114).

There are some controversies on the playground.

1. Some of the teams on which there is no betting not only play by unclear rules, but also have no accepted standard way of scoring points (i.e., governmental accounting, and achievement of program goals).

2. There are people dealing mood-altering drugs (i.e., management fads which turn out to be ineffective at improving performance).

3. Some of the teams and bettors claim that when night comes and the field is poorly lit, so that the usable area shrinks, certain of the teams on which no betting is permitted (i.e., government agencies) get first pick of where to play on the remaining lighted portion (i.e., have the power of taxation to assure that they continue in existence) regardless of how well they are playing.

4. Since the adults want certain games to be played on the playground, and want certain game scores to occur, those same no-betting teams pay money to other teams to get them to play the games the adults want played (i.e., give contracts, tax breaks, debt guarantees, etc., all of which

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have been authorized by legislation). However, sometimes, and especially when the usable area of the playground shrinks at night (i.e., economic contraction), those subsidized teams do not or cannot play the desired game and achieve the desired score. When that happens, the no-betting team has to hire a team to play the preselected game and obtain the preselected score; this is more expensive than merely offering a team an inducement to play a different game than they were going to play.

5. The adults have forced the boys to let the girls play, instead of just being cheerleaders, but the girls say that the boys still will not let them into positions where the girls can call the plays.

E.3 An Assumption Underlying the Playground Model Which is a Significant Contribution to the Understanding of Top Managers

Rather than assuming that people get utility only by scoring points and winning (i.e., beating the competition), this model assumes that *people get utility by continuing to play the game (i.e., be employed)*. At an adult level, payment is received for *playing* the game. If people get their utility only by *winning* games, they would seek the best players for the team, regardless of gender, race, or ethnic background, and coach (i.e., mentor) them as

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necessary, but even a casual observation of the playground leads some people to believe that this has not happened.

In this view, scoring some minimum expected number of points is necessary so that the team supports the team member, but beyond the minimum, there is little reward to a non-key team member personally for scoring more points, while there is a risk that if he scores "too many" points over a period of time, the key team members will come to expect such scores from him on a regular basis, and expel him if he does not continue to produce them. This expulsion may occur even if he is objectively better than any possible replacement. Also in this view, the team's score and number of games won are important only in that they must be good enough to induce people to continue to pay to watch the games (i.e., buy from the company) and/or to bet on the outcome (i.e., trade the company's securities).

This model allows for the possibility that verifiers get utility by having games to verify (i.e., entities to audit and provide other services to), rather than solely by doing a good job. When utility is received through having games to verify, verifiers' strategies include:

1. attempting to obtain agreements to verify many teams (i.e., grow in number of clients served).

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2. providing a level of verifying which does not provoke too many complaints from the bettors (i.e., investors) about being too lax.
3. providing a level of verifying which does not provoke too many complaints from the teams (i.e., clients) about being too strict concerning the number of points scored, particularly where the scoring of points by a strong team may be subject to variations in estimates or in interpretation of the rules of play.[20]

Once in a great while, the adults suspect that at least some of the verifiers have not been doing a good job (e.g., various Congressional investigations). However, unless the adults themselves are going to do the job, there appears to be no danger to the verifiers of losing the verification franchise.

E.4 Relationship to Auditor Switching

This concept of team play leads to the realization that when audit firms give anything other than an unqualified opinion, or appear ready to, then management

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[20]Knapp (1985, 207), in a study of the ability of auditors to resist management pressure, reported "that auditors are perceived to be most susceptible to client pressure in those situations where the client is financially strong and the conflict issue is not dealt with precisely by technical standards."

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might feel the auditors are no longer "on the team" and therefore should be replaced. Thus, although Smith (1986) examined audit reports which contained other than unqualified opinions, yet failed to find any cause for auditor switching, perhaps the type of report is not as important as the feeling by management that someone is or is not on the team. In short, Smith was looking at a different motivation than the one hypothesized in this study. Further, as McConnell (1984, 46) stated,

> Not acknowledging known unreported disagreements in his exhibit letter reviewing client disagreement assertions allows an auditor to avoid potential litigation, as well as the stigma of being "a poor loser."

Thus, other authors have implicitly accepted the concept of using games to explain phenomena related to auditor switches. This playground model illustrates that people with power on their own teams want to continue to play, so they have an incentive to replace too-strict verifiers of their team's score with less-strict verifiers. This gave rise to the concept that client companies have an incentive to seek out lower-quality auditors when they perceive their incumbent auditors as higher quality than managers desire.

Concerning auditors, it is important to remember from the playground model presented herein:

> This score is the score of the *team*, not the score of the *game*. These verifiers spend little or no time

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> watching the teams play; mostly they go over the records kept by each team's own scorekeeper, who, as you recall, is a team member.
>
> One event which strikes fear into the hearts of the key members of the various teams is losing control over their teams....
>
> ...the stated objective for the verifiers is to do a good job verifying (i.e., auditing), and getting the teams to report the scores they ought to report, but the verifiers quickly learn that the *real* objective is to have teams to verify.

E.5 Naturalistic Observations from the Playground

Sports are generally played on a surface or field of some type. Upon reflection, a playground has many similarities to a psychological view of the economy, even if a playground is not a perfect model. This study uses a playground as the generic location for playing sports, and assumes this playground to be the functional equivalent of self-selected analogies in verbal protocols by many subjects over a long period. Top-level managers are referred to as captains.

If we observe children playing a pick-up game, we see them choose sides and play the selected game. Sometimes, one side is so far superior to the other that the losing side no longer wants to play. When that happens, we often see the winning side voluntarily exchange some of its good players with the losing side. From this, it is evident

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that there are people who get utility from *playing* the game, not merely from *winning* the game. Further, at the adult level, so long as there is a sufficient payment to induce someone to play, there is utility derived from playing, in addition to the utility derived from the payment. This contrasts with previous research in which authors have implicitly assumes that people get utility only from winning.

Because team captains and other key team members obtain utility by continuing to play, they have an incentive to do what is necessary to assure both that (1) they can continue to play and (2) they either remain in their accustomed positions or else move to a better position. This means they have an incentive to suppress, or at least delay the disclosure of, negative information. Kicking people off the team who claim negative information exists (i.e., whistleblowers) (National Commission on Fraudulent Financial Reporting, 1987, 114) is consistent with an attempt to suppress or delay disclosing negative information. Although such termination of whistleblowers does not prove that unreported negative information exists,

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the information provided by whistleblowers often is subsequently verified.[21]

E.6 Managers' Need for Power; Why Whistleblowers Get Fired

Top managers score high on McClelland's need for power. In fact, it is their dominant motive from among McClelland's trichotomy of needs for affiliation, achievement, and power (Harrell and Stahl 1984, 242). Disposing of whistleblowers is consistent with an attempt to exercise more power than a competitor. Even if no unreported negative information presently exists, an expulsion (1) signals that the captain does not want any future negative information to be reported before he is ready to allow it to be reported, (2) reinforces the idea that the team captain has both legitimate and coercive power, and (3) deprives the former team member of the inferior level of legitimate power he possessed.[22] This operates to enable the captain to delay the revelation of negative information, due to the personally devastating

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[21]The author has found no study which examined whistleblowers' assertions and reported what percentage were subsequently validated.

[22]Szilagyi and Wallace (1990, 337) defined these and other types of power. "**Legitimate power** is derived from an individual's position in the structure or hierarchy of the organization. ... **Coercive power** is derived from the ability to punish others...."

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consequences to anyone else who dares to disclose the negative information.

Ordinarily, the captains' purpose is served merely by delaying the explicit revelation of negative information, without the need to suppress it entirely. This gives the captains the opportunity to change sports bettors' (i.e., investors') expectations about the scores (i.e., financial results) to be reported in the future.[23] If the team does significantly worse than expected, the key team members may be booed off the field by the bettors, but if expectations can be shifted downward before more bets are placed, then the same performance does not result in the same outcome to the key team members.[24] As a result, after a shift in

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[23]King, Pownall, and Waymire (1990, 120) stated, "Empirical research has not produced a consensus on why managers release forecasts...." They mentioned the signaling view, the role of disclosure in mitigating agency issues, and Ajinkya and Gift's expectations adjustment hypothesis. (Ibid., 121) If managers have a reason for wanting the market to think like the managers, or if managers simply want "official news" to be old hat (rather than a shocking revelation) by the time it is announced, then there is theoretical support for the expectations adjustment hypothesis. This study assumes that managers engage in actions which lead the market to adjust its expectations, and that dismissing an incumbent auditor can be a ploy to allow time to manipulate expectations.

[24]Ruland, Tung and George (1990, 712), in a study of managers' forecasts, stated, "The disclosure of positive information may also satisfy personal objectives such as job retention." They did not report any consideration of the possibility that the disclosure of negative information may serve the same purpose.

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expectations, different bets have been made (i.e., portfolios have been adjusted), and the key team members can continue to play without being booed because the bettors can now win those different bets. As far as bets are concerned, anyone attending a sporting event is likely to observe that winning bettors cheer more loudly than losing bettors.

E.7 Strengths and Limitations

The use of verbal protocols as a form of tracing of the decision process is well established in psychology research; indeed, verbal protocols constitute "the most common and historically important process-tracing method...." (Carroll and Johnson 1990, 74) The researcher asks the subject to report aloud the subject's thinking and decision process. Often, the subject will use an analogy to make the description more easily understandable. Sometimes the analogy is suggested by the researcher, and sometimes the analogy is self-selected by the subject. It is intuitively appealing to believe that a self-selected analogy is more likely to reflect the underlying decision process than an analogy suggested by the researcher, particularly if the analogy is self-selected by many subjects separated both geographically and temporally.

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However, there are potential limitations inherent in the use of this formulation. First, no individual subject self-reported the complete analogy. It may therefore be inaccurate. Second, some other unreported analogy may be a better representation of the decision processes of managers.

E.8 Summary

This appendix has observed that people who run large companies have themselves used sports analogies to describe how they manage their companies. By creating a playground model of the economy, it has become obvious that at least some managers have incentives to delay disclosing negative information, and have punished employees who have disclosed negative information. While external auditors are not employees, managers often do control the selection and retention of external auditors. Managers may wish to punish not only employees, but also non-employees who disclose negative information. This was the original motivation for this study of auditor switching.

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APPENDIX F

THE IRRELEVANCE OF AUDITOR DISMISSAL VERSUS AUDITOR RESIGNATION

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APPENDIX F

THE IRRELEVANCE OF AUDITOR DISMISSAL VERSUS AUDITOR RESIGNATION

Auditor switching, as a strategy to delay the disclosure of negative information, is not possible if managers do not control the selection of auditors. Knapp (1991, 41, Table 1) reported that managers do control the selection of auditors, either by selecting them outright or by giving the board of directors a list from which the board is permitted to select. Kluger and Shields (1991, 270) confirmed this when they stated that

> the CPA is effectively selected and compensated by top management.... The CPA serves as an advocate in tax and management consulting matters, but is expected to remain independent when conducting the audit. Finally, there is considerable career pressure on the individual professional within the CPA firm to maintain good relationships with important clients.

If management perceives that the auditors are getting too close to discovering what management wishes left alone, management can *decide* to have a fee dispute with the incumbent auditors, and change to a new audit firm. Since new auditors lowball their fees (DeAngelo 1981a, 114), observers see the lower fee charged by the new auditor and are apt to believe the dispute really was about fees, and only about fees. That is, the fact that the dismissal of

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the incumbent auditor was a ploy to delay the disclosure of negative information is never publicly disclosed.

In contrast, in some instances the incumbent auditor may wish to cease performing an audit for a particular client. For example, if the auditor perceives that negative information exists with respect to a client, but the auditors have not found and documented exactly what it is, the auditors can assess their business risk related to that client as high. Then the incumbent auditor may simply raise the fee quote so high that management will decide to engage another audit firm. Similar to the auditor dismissal scenario previously noted, the true reason for the auditor's resignation from the audit engagement is never brought to public attention since the observers, again, see the lower fee charged by the new auditor and are apt to believe the dispute really was about fees, and only about fees.

Since, in either scenario, an auditor switch occurs, and management is provided with an opportunity to delay disclosing negative information, distinguishing between auditor dismissal and auditor resignation is not crucial to this study. This is especially true given the fact that the incumbent auditor cannot leak negative information not yet known. Even if the former audit firm becomes aware of

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the negative information after the auditor switch occurs, the former audit firm would look like a poor loser if that firm has a role in the public disclosure of that negative information after losing the client. Therefore, even though this study assumes that management is the party attempting to delay the reporting of the negative information, when negative information exists, the auditor switch might be initiated by either management or the incumbent audit firm.

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