



This is to certify that the

dissertation entitled

Auditor Costs for Issuing Going Concern Reports to Surviving Firms

presented by

Barbara Ann Waddington

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Accounting

Date 541, 30, 1997

MSU is an Affirmative Action/Equal Opportunity Institution

0-12771

# LIBRARY Michigan State University

PLACE IN RETURN BOX to remove this checkout from your record. TO AVOID FINES return on or before date due.

DATE DUE	DATE DUE	DATE DUE

MSU is An Affirmative Action/Equal Opportunity Institution cyclescides pm3-p.1

# AUDITOR COSTS FOR ISSUING GOING CONCERN REPORTS TO SURVIVING FIRMS

Ву

Barbara Ann Waddington

# A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

**DOCTOR OF PHILOSOPHY** 

Department of Accounting

1997

#### ABSTRACT

# AUDITOR COSTS FOR ISSUING GOING CONCERN REPORTS TO SURVIVING FIRMS

By

## Barbara Ann Waddington

This study examines costs to auditors for issuing initial going concern reports to firms that survive the subsequent year. Previous going concern research assumes that auditor costs exist in the form of switching and loss of reputation without testing the assumption. The current study empirically examines whether auditors lose clients and market share after issuing going concern audit reports to firms that survive the subsequent year.

Ninety-five initial going concern firms that survived the subsequent year (going concern survivors) are identified from the NAARS database from 1989-1992 as sample firms. Ninety-five distressed firms that did not receive going concern reports but did survive the subsequent year (non-going concern survivors) serve as control firms. These control firms are selected from the same time period as the sample firms. The distress levels and industries of the control firms are chosen to be consistent with the sample firms. All firms in the study are survivors because the costs to auditors examined are hypothesized to occur for surviving firms. Control variables identified from going concern, auditor switching and reputation literatures are included in the regressions. The research methodology includes logit regression analysis for the first three hypotheses

with dichotomous dependent variables and OLS regression analysis for the fourth hypothesis with continuous dependent variables.

The regression results are in the predicted direction, but some results are not significant. Going concern survivor firms switch auditors significantly more than non-going concern survivor firms. Going concern survivor firms that switch auditors most often dismiss their auditors and some report disagreements with their auditors indicating dissatisfaction. Going concern survivor firms that switch auditors are more likely to receive going concern reports after the switch than going concern survivor firms that do not switch auditors. This result indicates that sample firms are not successful at opinion shopping. Auditors that issue going concern survivor reports lose an insignificant amount of market share after issuing the reports.

#### **ACKNOWLEDGMENTS**

I would like to thank the members of my dissertation committee - Dr. Alvin Arens, Dr. Susan Haka, Dr. Craig Lefanowicz and Dr. Frank Boster for their encouragement, time and effort spent on my behalf throughout this process. I especially want to thank my chairperson, Al Arens, for the expert guidance and support he has provided me throughout the doctoral program. I would also like to give a special thanks to Dewey Ward for the experience gained as a research assistant.

I am grateful to the American Institute of Certified Public Accountants and the Michigan Association of Certified Public Accountants for their generous support during the doctoral program.

I would like to thank my family and friends, too many to mention individually, for providing me with help and encouragement throughout the doctoral program. A special thanks goes to my doctoral class - Brian Ballou, Norman Godwin and Dave Qi - for four years of friendship. I would like to thank my parents for instilling in me the qualities necessary to complete a doctoral program. I would like to thank my sister and her family, Denise, Jim and Emma, for their encouragement and support. I would also like to thank Dave for showing me how to have fun and be happy again. And to my son Christopher, who has endured the first eleven years of his life with either or both of his parents in college, I would like to say thank you for being such a good sport.

# **TABLE OF CONTENTS**

LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER 1 - INTRODUCTION	1
1.1 Motivation	3
1.1.1 Importance to Auditors	3
1.1.2 Importance to Standard Setters and Regulators	
1.2 Overview of Hypotheses Examined	
1.3 Overview of Sample Selection and Research Design	
1.4 Organization of the Dissertation	
CHAPTER 2 - THEORY AND HYPOTHESIS DEVELOPMENT	10
2.1 Going Concern Literature	10
2.1.1 Going Concern Reporting Model	
2.1.2 Going Concern Terminology	
2.1.3 Previous Going Concern Research	
2.2 Auditor Switching Background	
2.2.1 Previous Auditor Switching Literature	
2.2.2 Economic Rationale	
2.3 Reputation Literature	
2.4 Development of Hypotheses	
2.4.1 Auditor Switching	
2.4.2 Disagreements and Dismissals	
2.4.3 Opinion Shopping	
2.4.4 Auditor Reputation	
CHAPTER 3 - SAMPLE SELECTION	28
3.1 Going Concern Survivor Firm Selection	
3.2 Control Firms	
3 3 Alternative Control Firms	

CHAPTER 4 - RESEARCH DESIGN AND STATISTICAL METHODOLOGY	40
4.1 Hypothesis 1	40
4.2 Hypothesis 2	46
4.3 Hypothesis 3	
4.4 Hypothesis 4	
CHAPTER 5 - EMPIRICAL RESULTS	53
5.1 Regression Results for Hypothesis 1 - Switching	54
5.2 Results for Hypothesis 2 - Dismissals and Disagreements	
5.3 Regression Results for Hypothesis 3 - Opinion Shopping	60
5.4 Regression Results for Hypothesis 4 - Auditor Reputation	63
5.5 Summary of Empirical Results	66
CHAPTER 6 - SUMMARY, LIMITATIONS AND FUTURE RESEARCH	69
6.1 Summary of Research Findings	69
6.1.1 Switching Related Hypotheses	70
6.1.2 Reputation Hypothesis	
6.2 Contributions	
6.2.1 Contributions to the Going Concern Literature	72
6.2.2 Contributions to the Auditor Switching Literature	
6.3 Limitations	
6.4 Future Research	74

# LIST OF TABLES

<u>Table</u>	<u>Title</u>	
1	Descriptive Statistics for Sample and Control Firms	36
2	Descriptive Statistics for Sample, Control and Alternative Control Firms	39
3	Pearson Correlation Coefficients for Variables	55
4	Logistic Regression for Hypothesis 1, One Year Switch Rate	56
5	Logistic Regression for Hypothesis 1, Two Year Switch Rate	58
6	Logistic Regression for Hypothesis 3	62
7	Descriptive Statistics for Reputation Hypothesis	64
8	OLS Regressions for Hypothesis 4	65

# **LIST OF FIGURES**

<u>Figure</u>	<u>Title</u>	
1	Going Concern Reporting Model	12
2	Identification of Going Concern Survivor Sample Firms	29
3	SIC Code Descriptions for 95 Sample Firms	31
4	Summary of Variables Used in Hypotheses 1 through 3	43
5	Summary of Variables Used in Hypothesis 4	52
6	Summary of Empirical Results	67

#### **CHAPTER 1 - INTRODUCTION**

The purpose of this study is to examine whether auditors face costs for issuing initial going concern reports to firms that survive the subsequent year. The assumption that auditors face costs for issuing these reports is common in the going concern literature, but has not been empirically tested. The hypothesized costs to auditors for issuing such reports are loss of clients and loss of reputation.

The going concern terminology used in the current study is different than the terminology used in many previous going concern studies. In previous studies, reporting decisions that are inconsistent with the subsequent state of nature of the firm are usually called audit failures. In this study, firms that receive going concern reports and survive the subsequent year are referred to as "going concern survivors" and firms that do not receive going concern reports prior to bankruptcy are referred to as "non-going concern financial failures".

The previous auditor decision-making going concern studies reviewed by Asare (1990) focus on non-going concern financial failure firms. McKeown, Mutchler and Hopwood (1991) note that these reports "are of particular interest to the public and investigative bodies" (pg. 1). This interest results from the perceived role of the auditor to warn the public of potential financial failure [Hopwood, McKeown and Mutchler (1989)]. Studies that compare auditor going concern reports and bankruptcy find that auditors issue going concern reports in the year prior to bankruptcy only about half the time, while mechanical models can predict bankruptcy with about eighty percent accuracy [Altman and McGough (1974), Kida (1980), McKeown, Mutchler and

Hopwood (1991)]. Kida (1980) suggests that auditors can identify potential bankruptcy problems with similar accuracy as the prediction models, but they make the going concern reporting decision after also considering the potential costs of issuing going concern survivor and non-going concern financial failure reports. Kida (1980) finds that the auditors least likely to modify reports for going concern uncertainties are most likely to fear impaired client relations. These findings from previous research suggest a need to investigate costs to auditors for issuing going concern survivor reports.

Anomalous results have occurred in the previous going concern literature indicating that going concern survivor report costs may be important. McKeown, Mutchler and Hopwood (1991) find a higher proportion of non-going concern financial failures to all failing firms than going concern survivors to all distressed surviving firms. This could indicate that going concern survivor costs are higher than assumed in the prior literature.

The assumption that reporting decisions for clients in financial distress may be costly to auditors has only recently surfaced as an empirical question in auditing research. The assumption that non-going concern financial failure reports are costly to auditors is recently tested in Carcello and Palmrose (1994). They find costs to auditors in the form of litigation for failing to issue going concern reports to firms that subsequently fail. The current study tests whether auditors face costs associated with issuing going concern

<sup>&</sup>lt;sup>1</sup> Hopwood, McKeown and Mutchler (1994) show that auditors and bankruptcy models perform similarly after considering the actual conditions auditors face when making the going concern decision in practice. They note, however, that neither auditors nor bankruptcy models perform very well after considering population proportions, differing misclassification costs, and financial distress.

survivor reports. The costs examined are loss of clients and loss of reputation.

Recent changes in legal liability for auditors could reduce the relative cost of non-going concern financial failure reports and may, therefore, increase the relative cost of going concern survivor reports. Auditors pay large sums when they are sued in non-going concern financial failure firm cases. Auditors are viewed as having "deep pockets" and are often forced to pay more than their proportionate share after a bankruptcy. The Private Securities Litigation Reform Act, passed into law on December 22, 1995, replaces joint-and-several liability for class action lawsuits with proportionate liability. With proportionate liability, for example, auditors that are found 10% at fault pay 10% of the judgment. While class action lawsuits are not the only litigation auditors face, they are widely viewed as the most costly ("Statement of Position" by all Big Six firms, August 6, 1992). Litigation reforms are also taking place at the state level to reduce auditor legal liability [M.C.L. Section 600.2962]. Auditors have not yet seen the consequences of the recent liability changes. However, the changes should reduce liability costs which would decrease the relative cost of non-going concern financial failure reports.

#### 1.1 Motivation

Auditors, regulators and standard setters all have interest in the going concern reporting decision and the resulting consequences. Auditors are concerned about the costs and reputation effects of their decisions. Regulators and standard setters are concerned about the impact of regulations and standards on the behavior of auditors relating to the expectation gap and auditor changes.

1.1.1 Importance to Auditors. Auditors have an important and difficult decision to make when considering issuing a going concern report even though it is an explanatory

paragraph, not a qualification. The explanatory paragraph in a going concern report states that there is substantial doubt about the entity's continued existence. Previous researchers have found a negative market reaction to going concern reports when disclosed by the media [Dopuch, Holthausen and Leftwich (1986)]. Also, Choi and Jeter (1992) find that earnings response coefficients are marginally negatively impacted after firms receive going concern reports.

The going concern decision process is complex. Kida (1980) suggests that auditors make their going concern decisions in two phases. In the first phase, auditors assess financial condition and consider management plans for the future. In the second phase, auditors consider costs that may be imposed on them by making incorrect decisions. Costs that auditors view as important are loss of client and loss of reputation for going concern survivor reports and litigation and loss of reputation for non-going concern financial failure reports [Kida (1980), Teoh (1992) and Nogler (1995)].

Auditors may be aware of the phase two costs, but the costs have not been tested empirically until recently. Accounting researchers generally only assume these costs exist. Carcello and Palmrose (1994) are the first to directly examine these phase two costs. They find that non-going concern financial failure reports are costly to auditors.

Costs of going concern survivor reports are typically treated as inconsequential in going concern research [Hopwood, McKeown and Mutchler (1994)]. Researchers assume that lost clients will simply be replaced with new clients. Theoretically, this may be a valid idea. Realistically, however, the audit market is competitive. Elliott (1994) notes that "financial statement audits are now sold in a buyer's market, with downward pressure on prices and intense competition" (p. 107).

Recent indications in the audit market support the notion that the market is competitive and auditors do not easily replace clients. Although articles in the recent press have discussed auditors firing their clients because of the threat of litigation [Business Week March 1, 1993 (p. 76)], auditor change filings with the SEC indicate that in most cases firms fire their auditors. This is true even when the firms are financially distressed [Schwartz and Soo (1995)].

This study examines whether auditors lose clients and industry market share after issuing going concern audit reports to surviving firms. The results of this study may help in estimating the potential costs of issuing such reports.

1.1.2 Importance to Standard Setters and Regulators. The AICPA is concerned about the expectation gap between auditors and users of financial statements. The AICPA issued nine Statements on Auditing Standards (SASs) in 1988 to help fill the expectation gap between auditors and users of financial statements [AICPA (1988)]. SAS No. 59, "The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern," is one of those standards. SAS No. 59 increases auditor responsibility for detecting and reporting going concern uncertainties [Bell and Tabor (1991)].

Theoretical going concern literature assumes auditors make going concern decisions to minimize costs of going concern survivor and non-going concern financial failure reports. The increase in auditor responsibility associated with SAS No. 59 was expected to decrease the proportion of firms that file for bankruptcy without receiving going concern reports. Carcello, Hermanson, and Huss (1995) find no change in the proportion of firms that went bankrupt without receiving going concern reports after SAS No. 59. Carcello and Palmrose (1994) find no change in the litigation costs faced by

auditors for non-going concern financial failures after SAS No. 59. According to the theoretical model [Teoh (1992)], no change in costs implies no change in reporting. If costs of issuing going concern survivor reports are found to exist in this study, these costs could impact the going concern decision making process as suggested by theoretical research and therefore be interesting to the AICPA in future standard setting.

The SEC and Congress are concerned about auditor changes. The SEC has changed the rules for reporting auditor changes several times in recent years to discourage opinion shopping and to decrease timing delays for reporting disagreements between firms and auditors [SEC (1976), SEC (1988), SEC (1989)]. The Treadway Commission also expressed concern over opinion shopping relating to auditor changes [Report of the National Commission on Fraudulent Financial Reporting (1987)]. The current study tests whether initial going concern survivor firms are more likely to receive standard unqualified reports than going concern reports when they hire new auditors after receipt of the first time going concern report. This test is included to see whether opinion shopping may have been driving the switching behavior.

# 1.2 Overview of Hypotheses Examined

The four hypotheses included in this study predict that auditors face costs from lost clients and lost reputation after issuing going concern survivor reports. The first three hypotheses address the costs of auditor switching. The first hypothesis predicts that going concern survivor firms switch auditors more frequently than similarly financially distressed non-going concern survivor firms.

The second and third hypotheses are included as specification tests of the first hypothesis. Hypothesis one implicitly assumes that going concern survivor clients switch

auditors because they are dissatisfied with their current auditor. Hypothesis two predicts that the going concern survivor auditors in hypothesis one face more dismissals and disagreements with management relating to the switches than the non-going concern survivor auditors. Results in the predicted direction for hypothesis one would support the assumption that these switching clients are dissatisfied with their auditors. The third hypothesis predicts that switching going concern survivor firms are more likely to receive subsequent going concern reports than non-switching going concern survivor firms. This hypothesis is included to test for opinion shopping, as opposed to dissatisfaction, as a potential reason for auditor switching after receiving going concern survivor reports.

The fourth hypothesis predicts that auditors lose industry reputation after issuing going concern survivor reports. This hypothesis predicts that auditors that issue going concern survivor reports lose industry market share following the issuance of such reports.

## 1.3 Overview of Sample Selection and Research Design

The sample for this study was selected using NAARS from 1989 through 1992. All firms receiving going concern reports were identified. Firms receiving a previous going concern report, firms filing for bankruptcy or otherwise failing to continue within one year and firms with insufficient data required for the study were eliminated from the sample. This process yielded 95 sample firms. Control firms were then identified for these sample firms. One control firm was chosen for each sample firm based on distress, industry, year and national exchange on which the firm is traded. This control sample selection procedure was chosen to reduce the potential oversampling bias of sample firms and aid in the testing of hypothesis four and was not intended as a matched sample, per

The statistical methodology employed in this study for the first three hypotheses is logistic regression because the dependent variables for these hypotheses are dichotomous. The logistic model for the first hypothesis examines the difference in the auditor switch rates between sample going concern firms and control distressed nongoing concern firms. The logistic models for the second hypothesis test whether firms that received going concern reports face more dismissals and disagreements than distressed firms that did not receive going concern reports. The third hypothesis is tested for going concern firms only. The type of report received in the subsequent year is the dependent variable; going concern or standard unqualified. Switching status is the independent variable of interest. The model is used to see if switching going concern firms were able to obtain subsequent standard unqualified reports from their new auditors.

OLS regression is the statistical method used to test for the fourth hypothesis because the dependent variables are continuous. Hypothesis four employs OLS regression and two measures to test for the change in market share experienced by sample and control firm auditors after issuing their respective audit reports.

#### 1.4 Organization of the Dissertation

The remainder of the dissertation is organized into five chapters. Chapter Two develops the underlying going concern theory and summarizes previous going concern, auditor switching, and reputation research to motivate the four hypotheses about auditor switching and reputation effects. Chapter Three describes the selection of the sample, control, and alternate control firms. Chapter Four describes the research design employed

in the study. Chapter Five contains the empirical results of the study. Chapter Six provides a summary of the study and describes the limitations of the study.

#### **CHAPTER 2 - THEORY AND HYPOTHESIS DEVELOPMENT**

This chapter explores the underlying theory and previous research drawn upon to develop the four hypotheses examined in this study. Going concern theory is central to all the hypotheses. The going concern reporting model and terminology are discussed first followed by a discussion of previous going concern research relevant to this study. Auditor switching and reputation literatures are examined as possible costs to auditors of issuing going concern reports to surviving firms. These literatures are also examined for important control variables.

Section 2.1 provides an overview of the going concern reporting model used in this study developed from earlier going concern studies, describes the going concern terminology used in this study, and reviews the previous going concern literature relating to this study. Section 2.2 examines the auditor switching literature including economic rationales for auditor switching. Section 2.3 highlights previous reputation studies focusing on those studies that examine negative reputation effects. Section 2.4 develops the four hypotheses in the study.

#### 2.1 Going Concern Literature

Going concern research is central to this study. The first two parts of this section explore the going concern model and terminology used in previous going concern studies and modify those models for the current study. The last part of this section examines the previous going concern literature focusing on why most previous going concern studies explore the issue of not issuing a going concern audit report prior to firm failure. The last part of the section also explains how this study can add to the going concern literature by examining costs to auditors for issuing going concern survivor reports.

2.1.1 Going Concern Reporting Model. Figure 1 represents an audit reporting model used frequently in going concern research beginning with Altman and McGough (1974). In this model, an auditor makes the going concern decision for a firm in one year, and the firm either survives or fails financially by the end of the subsequent year. Firms with reports in Quadrants A and C are considered correct reports and firms with reports in Quadrants B and D are considered audit failures.

Auditors may face costs for firms with reports in quadrants B and D. The costs are assumed to exist in some studies [Teoh (1992), Nogler (1995)] and tested in others [Kida (1980)]. The costs are litigation and loss of reputation for quadrant B and loss of client and loss of reputation for quadrant D. Investors are more likely to sue the auditor in an attempt to recoup their losses if the auditor does not give a going concern report prior to a financial failure as noted in Carcello and Palmrose (1994). Conversely, management views the going concern report as a negative signal to the market. Management may switch auditors in retaliation if a going concern report is issued and the firm survives the next year. Both quadrant B and D reports are assumed to bring reputation losses to the auditor.

2.1.2 Going Concern Terminology. Quadrant B and D reports are frequently labeled as audit failures in going concern research, but the AICPA and this study use different terminology. In SAS No. 59, the AICPA recognizes that the primary goal of an audit is not bankruptcy prediction.<sup>2</sup> Consistent with SAS No. 59 quadrants B and D are

<sup>&</sup>lt;sup>2</sup> Paragraph 4 of SAS No. 59 states, "The auditor is not responsible for predicting future conditions or events. The fact that the entity may cease to exist as a going concern subsequent to receiving a report from the auditor that does not refer to substantial doubt, even within one year following the date of the financial statements, does not, in itself,

# Going Concern Report in Year 1

	YES	NO
YES  Bankrupt by End of	Quadrant A Going concern financial failure	Quadrant B  Non-going concern financial failure
Year t + 1  NO	Quadrant D Going concern survivor	Quadrant C Non-going concern survivor

#### Notes:

- 1. Quadrants A and C are considered "correct reports" in the going concern literature.
- 2. Quadrants B and D are considered "audit failures" in the going concern literature. The costs imposed on auditors for issuing such reports are assumed to be litigation and loss of reputation for quadrant B and loss of client and loss of reputation for quadrant D.

Figure 1
Going Concern Reporting Model

indicate inadequate performance by the auditor. Accordingly, the absence of reference to substantial doubt in an auditor's report should not be viewed as providing assurance as to an entity's ability to continue as a going concern."

not labeled as audit failures or deficiencies in the current study. An audit failure for going concern reporting occurs if the auditor issued the inappropriate report given all the facts of the business being audited. The difficulty is measuring ex-post whether the correct report was issued, given the auditor's knowledge at the time. In this study, firms with quadrant D reports are called going concern survivors and firms with quadrant B reports are called non-going concern financial failures in an attempt to make sure there is no implication that quadrant B or D reports are necessarily audit failures.

Going concern survivor reports and non-going concern financial failure reports can be costly to auditors even if they do not represent audit failures because of the expectation gap between auditors and users of financial statements. Shareholders, managers and politicians often have a different perspective of what an audit provides than auditors intend the audit to provide [(Carmichael and Pany (1993)]. These misunderstandings, as well as actual audit failures, may be costly to auditors.

2.1.3 Previous Going Concern Research. Much of the previous going concern research has focused on quadrant B in Figure 1: the failure to give a firm a going concern report prior to the firm failing. These non-going concern financial failure reports are generally assumed to be more costly to auditors than going concern survivor reports because lawsuits are the primary hypothesized cost for non-going concern financial failure reports while loss of clients is the primary hypothesized cost for going concern survivor reports. Lawsuits are considered more costly than lost clients. This assumption of higher cost for non-going concern financial failures has not been empirically tested in the literature [Bell and Tabor (1991)].

Early going concern studies developed bankruptcy prediction models that were found to be better than auditors at predicting bankruptcy [Altman and McGough (1974), Levitan and Knoblett (1985), Asare (1990)]. Hopwood, McKeown and Mutchler (1994), however, show that auditors perform similarly to bankruptcy models after considering statistical problems common to these studies.

Researchers have also tried to predict and explain the going concern audit reporting decisions of auditors. Studies have used client's financial and market variables [Dopuch, Holthausen and Leftwich (1987), Bell and Tabor (1991)] and have incorporated auditor specific characteristics and firm profiles into the models [Mutchler and Williams (1990)] to try to see if audit firms make going concern audit reporting decisions differently. Recently, researchers have included factors impacting auditors in making going concern decisions under the assumption that auditors report to minimize agency costs imposed on themselves [Law (1995), Louwers (1995)]. These studies all assume that quadrant B and D reports are costly to auditors.

Carcello and Palmrose (1994) directly examine the assumption that non-going concern financial failure reports (quadrant B) are costly to auditors. They select bankrupt firms and measure litigation against auditors in these bankrupt firms. Auditors face litigation 18% of the time for bankrupt firms in their study. Their study measures whether going concern audit reports protect auditors from litigation. In a univariate comparison, auditors are less likely to face litigation when going concern reports are issued prior to bankruptcy. In a regression controlling for other variables that might influence litigation relating to bankruptcy, however, going concern reports are not significant. Supplemental analysis indicates that auditors pay average settlements of \$1.2

million when all audit reports relating to the litigation contain going concern modifications, \$5.2 million when some reports relating to the litigation contain going concern modifications and \$9.5 million when no reports relating to the litigation contain going concern modifications. Their study provides evidence that going concern reports may not protect auditors from litigation, but may help to reduce the cost of settlement paid.

McKeown, Mutchler and Hopwood (1991) find going concern reporting error rates that are inconsistent with the argument that quadrant B reports are more costly to auditors than quadrant D reports. These researchers segregate sample firms in their study based on financial distress because previous research has shown that auditors consider issuing going concern reports only for firms in financial distress [Kida (1980) and Mutchler (1985)]. They expect to find a higher going concern survivor rate [# of firms with quadrant D reports/ (# of firms with quadrant C reports + # of firms with quadrant D reports)] than non-going concern financial failure rate [# of firms with quadrant B reports / # of firms with quadrant A reports + # of firms with quadrant B reports )] for stressed firms in their sample. This would mean that a higher proportion of failing firms did not receive a going concern report, than distressed surviving firms did receive a going concern report. However, the rates are 5% and 54%, respectively. This finding is contrary to argument that auditors prefer to report conservatively because the costs of non-going concern financial failure reports exceeds the cost of going concern survivor reports.

One explanation for the McKeown et al. (1991) result is that litigation costs may not be the sole costs considered by auditors when they make the decision whether to issue going concern reports. When considering other costs, going concern survivor reports may have more direct or higher costs to auditors than previously acknowledged in the literature. Behavioral research suggests that auditors assess a higher likelihood of losing a going concern survivor firm than being sued for a non-going concern failure firm and assess an equal likelihood of loss of reputation [Kida (1980)].

To further understand auditors going concern reporting decisions, this study seeks to examine whether auditors face costs after issuing going concern survivor reports. In particular, the study will highlight whether there are costs other than litigation affecting the auditors reporting decisions. Examining these costs may help to explain some anomalous results in the previous literature. Geiger, Raghunandan and Rama (1996) also examine auditor switching following the receipt of first time going concern audit reports for manufacturing firms in 1991. A comparison of the results of this 1996 working paper and the current study is shown in Chapter 5 during discussion of the results of this study.

#### 2.2 Auditor Switching Background

Firms switch auditors for a variety of reasons. Section 2.2.1 examines previous auditor switching studies. Most of these studies are general and do not find a consensus as to why firms change auditors. Section 2.2.2 is included to examine the economic rationale behind auditor switches in the going concern environment.

2.2.1 Previous Auditor Switching Literature. Numerous studies have investigated reasons why firms switch auditors. Many of these studies include the type of audit report issued during the previous audit as a reason for the switch. Chow and Rice (1982) find that audit qualifications are a significant factor explaining auditor switches, while DeAngelo (1982), Schwartz and Menon (1985) and Smith (1986) do not find a

significant relation. Knapp and Elikai (1988) conclude that there is an absence of general theory to explain auditor switching.

Several general findings from auditor switching studies are relevant to the current study. Auditor switching studies find four to six percent of firms switch auditors each year [Chow and Rice (1982), Krishnan (1994)]. Schwartz and Menon (1985) find failing firms are significantly more likely to switch auditors, thus suggesting a need to control for financial distress in auditor switching studies. Eichenseher and Shields (1983) find that smaller firms switch auditors more frequently than larger firms.

Krishnan (1994) suggests that firms switch auditors because of a harsher audit report than anticipated by management, not because of the audit report received per se. He uses an ordered probit analysis and accounting and market variables for each firm to determine the type of audit report the firm should have received. He then compares this result to the report actually issued (standard unqualified, uncertainty paragraph or going concern paragraph, which are in order of increasing severity). His study includes all going concern reports, not just initial going concern reports. He finds firms receiving a harsher report than anticipated switched auditors more frequently. Of all firms receiving going concern reports, the least distressed firms switched auditors most frequently in his study. This finding suggests that there may be an inverse relationship between financial distress and auditor switching for quadrant D reports in the current study.

The current study differs from previous research on auditor switching in several respects. First, most previous studies do not distinguish between initial and continuing going concern reports. Williams (1988) notes that initial qualifications are more relevant to auditor change studies since firms are likely to be more upset by the initial

qualifications. Other research suggests that once given, the going concern report will be changed back to a standard unqualified report in future years only in "exceptional circumstances" [Nogler (1995)]. Also, previous research does not distinguish between quadrant A and D reports in Figure 1. Both of these are going concern reports, but quadrant A reports are associated with financial failures, meaning the client filed for bankruptcy or otherwise ceased to exist. Auditor switching is a cost associated with going concern survivor reports (quadrant D) but not going concern financial failure reports (Quadrant A) because a failed firm does not have an incentive to switch auditors [Kida (1980)]. Thus, researchers should not expect to find significant auditor switching for going concern financial failure firms (Quadrant A). Therefore, including these quadrant A firms serves to dilute a sample being tested for switching behavior of going concern firms.

While most previous auditor switching research has tried to explain auditor switching behavior in general, the current study seeks to measure auditor switching as a result of being in a certain defined condition (quadrant D). The auditor switching literature, however, provides a good framework for identifying variables that may influence auditor switching. These variables need to be controlled in the current study to reduce the likelihood of correlated omitted variables.

2.2.2 Economic Rationale. The previous studies on auditor switching examined in this chapter discuss some possible motivations for auditor switching but do not closely examine the economic rationale for auditor switching. For example, Krishnan's (1994) results suggest that a harsher audit report by the auditor than anticipated by management is one rationale for switching.

The auditor or the client can initiate auditor switching. These two types of switches have different potential economic rationales. An auditor may decide not to audit a client because of previous problems on the engagement, lack of management integrity, non-payment of previous year fees, excess risk for the client or industry, or lack of economic feasibility to continue the engagement due to changes in the client or auditor's firm structure or size.

An auditor switch is generally costly to the client and the auditor, but clients more often than auditors initiate the switch of auditors even when the client firms are distressed [Schwartz & Soo (1995)]. The client must spend time and effort to train the new auditor. The time is also costly to the client in the form of higher initial audit fees to the auditor unless the auditor low-balls the initial fees [DeAngelo (1981A)].

Since most switches are initiated by the client, a client must believe that the switch is justified economically. In other words, the benefits of the switch must outweigh the costs of the switch. Possible economic reasons to justify the cost to going concern survivor firms include signaling to the market, a credible threat, or a general breakdown in relations. If a going concern survivor firm believes the going concern report was not justified as evidenced by survival, this firm may signal their dissatisfaction to the market by firing their auditor. In order to make a threat credible according to game theory, the retaliatory action must be carried out if the undesired outcome occurs. In the case of the going concern report, there may be an understanding between the client and auditor that the auditor would be fired if a going concern report was received and the client survived. In this case, the auditor must be fired or the threat is not credible. Finally, by the time a firm receives a going concern report, management may have experienced breakdowns in

relations with the auditor to the extent that a further relationship is not possible.

#### 2.3 Reputation Literature

Going concern survivor auditors may be viewed as lower quality auditors due to the issuance of reports that are perceived as incorrect. Audit quality can be viewed from the agency or the information perspective. From the agency perspective, a higher quality audit enhances the monitoring function [Francis and Wilson (1988)]. From the information perspective, a higher quality audit increases the perceived credibility of the financial statements and therefore reduces investor uncertainty about the financial statements [Wallace (1980)]. Actual audit quality, however, is generally unobservable to financial statement users.

Proxies for audit quality have been developed in the literature previously discussed. DeAngelo (1981B) posits that audit firm size is a proxy for higher quality auditors. She argues that the likelihood a given auditor will detect and report a breach in the client's accounting system is increasing in audit firm size because larger auditing firms have more to lose from an alleged failure to detect and report material financial statement discrepancies. Reputation or credibility is another proxy for audit quality [Dopuch and Simunic (1982)]. Dopuch and Simunic argue that the auditor's brand name must be a proxy for credibility since it is the only observable auditor characteristic to financial statement users. Dopuch and Simunic further note that changes in credibility will negatively impact the perceived quality of an auditor. The separation of Big Eight (Big Six) versus non-Big Eight (Big Six) auditors is often used as a proxy for auditor quality because that dichotomy captures both auditor size and name recognition. Teoh and Wong (1993) find that earnings response coefficients are higher for Big Eight audited

firms than for non-Big Eight audited firms.

Wilson and Grimlund (1990) test for negative effects resulting from situations believed to have damaged an audit firm's reputation. Previous to Wilson and Grimlund only anecdotal evidence suggested that adverse effects resulted from an event believed to have damaged the auditor's reputation. Their study empirically examines whether auditors have trouble attracting and retaining clients at a national and state level after facing SEC enforcement actions. They select SEC enforcement actions against auditors because these events are rare and only occur when the SEC contends that a firm has engaged in improper or unethical behavior. These conditions fit Dopuch and Simunic's (1982) criteria that credibility effects will result from negative public information about the auditor. Their study finds that auditors have trouble attracting and retaining clients, especially on the state level, after SEC enforcement actions. Their study provides some empirical support for the negative effects of damaged auditor reputations.

Behavioral research suggests that auditors are worried about the impact of going concern survivor reports on their reputations. Kida (1980) finds that the auditors least willing to modify audit reports containing potential going concern difficulties are also the auditors that are the most worried about potential reputation losses. The current study seeks to measure whether perceived negative reputation effects result in auditor costs following the issuance of going concern survivor reports.

# 2.4 Development of Hypotheses

In the first three sections of this chapter, existing research was described that links going concern, auditor switching and reputation literatures. This study examines whether auditors face costs for issuing going concern reports to firms that survive. The primary

and secondary costs are auditor switches and reputation respectively. These two costs are examined in hypotheses one and four. Hypotheses two and three are extensions of hypothesis one regarding auditor switching. Hypothesis two examines whether going concern survivors are more likely to dismiss their auditor and have disagreements with their auditor than control firms that did not receive going concern reports. Hypothesis three examines whether going concern survivor firms received subsequent going concern reports to address potential opinion shopping.

2.4.1 Auditor Switching. The previously discussed going concern literature assumes that auditors face costs for issuing initial going concern survivor reports in the form of firms switching auditors and loss of auditor reputation. These costs have been assumed in the literature for going concern survivors, but not empirically tested. Hypothesis 1 tests the primary hypothesized cost, auditor switching.

Hypothesis 1 tests whether going concern survivor firms switch auditors more than distressed non-going concern survivors. This hypothesis compares the auditor switch rates for financially distressed firms in quadrants C and D (from Figure 1).<sup>3</sup> Initial going concern survivor firms are expected to be more likely to switch auditors, while financially distressed quadrant C firms are expected to be content with their auditor because they are distressed but did not receive a going concern report.

H1: Initial going concern survivor firms (quadrant D in Figure 1) switch auditors more frequently than financially distressed non-going concern survivor firms (quadrant C in figure 1).

<sup>&</sup>lt;sup>3</sup> Firms in quadrants A and B are not included because these firms filed for bankruptcy. Bankrupt firms may not need an auditor at all if they have ceased operations or may change auditors for different reasons than those hypothesized in this study, such as changing to an auditor with bankruptcy expertise.

2.4.2 Disagreements and Dismissals. The second hypothesis is included to test the implicit assumption in the first hypothesis that sample firms are switching auditors because they are dissatisfied with the auditors that gave them going concern survivor reports. Auditor switches can be initiated by the auditor (resignation) or client (dismissal). A high dismissal rate would indicate that clients are dissatisfied with theirs auditors, while a high resignation rate would indicate that the auditors are dissatisfied with their clients or that their clients are too risky to audit. Disagreements reported by clients would also indicate dissatisfaction with the auditors.

Information about auditor changes, including resignation or dismissal and any disagreements, is required to be filed with the SEC. The SEC has acted several times in recent years to make auditor change reporting more timely and informative for financial statement users. The SEC issued Accounting Series Release (ASR) 165 to improve the timeliness of auditor change reporting by changing the event requiring disclosure, via form 8-K filings, from the hiring of a new auditor to the dismissal of the old auditor [SEC (1976)]. The SEC issued Financial Reporting Release (FRR) 31 to amend the rules for disclosing opinion shopping [SEC (1988)]. In 1989, the SEC modified FRR 31 with FRR 34 by reducing the maximum time to report an auditor change from 15 to 5 business days from the time of auditor dismissal. The auditor response time to the form 8-K filing also changed from 30 to 10 business days from the day of the filing [SEC (1989)].

SEC filings for a change of auditor contain information that has been examined by auditing researchers. Firms are required to disclose any major disagreements with their auditors prior to the switch. Additionally, the filing must state whether the auditor resigned or was dismissed by the firm. Schwartz and Soo (1995) find that auditors resign

more frequently for failing firms (19%) than non-failing firms (5%). Auditors face greater risks of loss and have more disagreements over accounting issues with failing firms.

These differences may cause the higher resignation rate for failing firms.

Auditor change filings can be used to further refine the auditor switch test in hypothesis 1 for the subsample of firms that switched auditors. Initial going concern survivor firms are expected to dismiss their auditors and have disagreements relating to the switches. Financially distressed non-going concern survivors are expected to be content with their auditors. They should be less likely to dismiss or have disagreements with their auditors. Hypotheses 2A and 2B expand the switching hypothesis by examining the form 8-K filings of firms in quadrants C and D that switched auditors.

Hypothesis 2A: For the subsample of firms that switched auditors in hypothesis 1, going concern survivor firms (quadrant D in Figure 1) are more likely to dismiss their auditors than non-going concern survivor firms (quadrant C in Figure 1).

Hypothesis 2B: For the subsample of firms that switched auditors in hypothesis 1, going concern survivor firms (quadrant D in Figure 1) are more likely to report disagreements with their auditors than non-going concern survivor firms (quadrant C in Figure 1).

Both firms and auditors may have incentives not to report disagreements honestly to the SEC following an auditor change [Dye (1991)]. These incentives may inhibit the testing of hypothesis 2B.

2.4.3 Opinion Shopping. The third hypothesis is also included to test the implicit assumption in hypothesis 1 that going concern survivor firms are switching because they are dissatisfied with their auditors. Opinion shopping is another explanation for auditor changes by firms receiving initial going concern audit reports. Successful opinion shopping would constitute receiving a going concern report in one

year, then changing auditors and receiving a standard unqualified report in the subsequent year. If sample firms are successfully opinion shopping, they should have a high proportion of standard unqualified opinions in the year following the switch.

Several studies have tested whether audit firms were successful at opinion shopping. Chow and Rice (1982) examine a sample of firms receiving qualified audit reports. They find that switching firms are less likely to receive standard unqualified reports in the subsequent year than non-switching firms. Smith (1986) also finds no evidence of apparent opinion shopping in 139 cases examined. These previous researchers conclude that opinion shopping does not appear to be occurring following the receipt of qualified audit reports. It should be noted that these previous studies include many different types of auditor qualifications including going concern reports.

These results from previous research are not surprising for several reasons. First, auditors should set inherent risk higher for new client firms which causes them to be more cautious [Arens and Loebbecke (1994)]. Also, if the conditions still exist that caused the old auditor to issue a going concern report and the new auditor gives a standard unqualified report, the new auditor may face scrutiny from the SEC. Finally, many of the auditor switches following going concern reports do not occur until just before the subsequent year end. This does not give the subsequent auditor much time to investigate the going concern issues and may cause them to rely more on the work of the previous auditor.

Hypothesis 3 is included as a test for opinion shopping as the motivation for auditor switching following the receipt of initial going concern survivor reports. Sample firms may be successful at opinion shopping if they are able to switch auditors are receive

standard unqualified opinions from their new auditor.

Hypothesis 3: For going concern survivor firms (quadrant D in Figure 1), firms switching auditors are more likely to receive going concern reports in the subsequent year than firms not switching auditors.

2.4.4 Auditor Reputation. In addition to increasing the rate of auditor switching for the firms that received going concern survivor reports, going concern survivor reports are thought to damage auditors' reputations among current and potential clients [Kida (1980)]. The market for audit services can punish the auditors for being "too conservative" if the market perceives the reports as undeserved. This can happen even if the firms appropriately received the going concern audit reports. Thus, the reputation among other current and potential clients of the auditors could be impacted as a secondary effect.

Hypothesis 4 predicts that auditors of going concern survivor firms (quadrant D) face greater negative industry market share effects than auditors of non-going concern survivor firms (quadrant C). Change in market share is used as the proxy for loss of reputation in this study. The change in market share is examined at the industry level to get the strongest possible test. Firms keep close watch over their competition in an industry. Therefore, another firm in the same industry as the going concern survivor may be concerned about the possibility of inappropriate auditor reporting, while a firm in a different industry may not be concerned.

This secondary effect may be difficult to detect even if it does exist because the audit market is competitive and impacted by many factors. Firms are concerned about many factors when they select their auditors other than their competitors receiving going concerns reports and surviving.

Hypothesis 4: Auditors of initial going concern survivor firms (quadrant D in Figure 1) face greater negative industry reputation effects than auditors of non-going concern survivor firms (quadrant C in Figure 1).

#### **CHAPTER 3 - SAMPLE SELECTION**

This chapter describes the sample and controls firms used in this study. The sample consists of 95 going concern survivor firms from 1989-1992. These firms are tested against 95 distressed non-going concern survivor firms from 1989-1992.

Section 3.1 explains how the going concern survivor firms were identified.

Section 3.2 describes how the distressed non-going concern survivor firms were selected.

Section 3.3 discusses an alternative control sample selection.

3.1 Going Concern Survivor Firm Selection. The sample firms (quadrant D firms in Figure 1) are selected using the National Automated Accounting Research System (NAARS). NAARS contains over 6,000 annual reports for companies on all three national stock exchanges for the time period used in the study, 1989-1992. NAARS has been used as the source of going concern reports for previous going concern studies [Chen and Church (1992), Nogler (1995)]. Going concern reports are identified on NAARS through key word searches. The sample firms are identified initially by searching NAARS from 1989-1992 for such phrases as "going concern" and "substantial doubt" for the SAS No. 59 time period and "going concern", "continue in existence" and "realizability of assets" for the SAS No. 34 time period.<sup>4</sup>

Based on these searches, 756 firms were identified on NAARS as potential sample firms because they received a going concern report between 1989 and 1992. Some firms identified do not fit the criteria for this study. Going concern reports are

<sup>&</sup>lt;sup>4</sup> SAS No. 59 was issued in 1988 and became effective for years ending on or after 12/31/89. Some firms with fiscal year ends earlier in 1989 chose to adopt SAS No. 59 in 1989.

excluded from the sample for the following reasons as noted in Figure 2.

Firms identified on NAARS through key word searches from 1989-1992	756
Less:	
Going concern report received within the previous two years	293
Firm did not survive or is missing data	204
Financial services, foreign or subsidiary	155
Audited by Laventhol & Horwath	9
Total number of going concern survivor firms included in study	95

Figure 2
Identification of Going Concern Survivor Sample Firms

293 firms are excluded because they received a going concern audit report or disclaimer due to going concern uncertainty in either of the two previous years.<sup>5</sup> This exclusion eliminates recurring going concern reports from the sample.

Firms are also eliminated if they did not survive the subsequent year (thus quadrant A and B reports from Figure 1 are excluded) or are missing data required for this study. Firms are considered survivors and retained in the sample if they did not file for bankruptcy within one year from the balance sheet date and filed a 10-K with the SEC including all financial statements and an audit report the next year.<sup>6</sup> Consequently, many

<sup>&</sup>lt;sup>5</sup>Auditors are permitted to disclaim their report for severe cases of going concern uncertainty under both SAS No. 34 and SAS No. 59. A disclaimer means that the auditor does not express an opinion.

<sup>&</sup>lt;sup>6</sup> The time period associated with Figure 1 in previous research and the current study is one year. The two going concern Statements on Auditing Standards in effect during the time period of this study are consistent with this time frame. SAS No. 59 indicates that the auditor is responsible for their audit report "for a reasonable period of time not to exceed one year beyond the date of the financial statements being audited " (AICPA)

firms are eliminated due to lack of survival or incomplete data. The bankruptcy status of firms is identified through the bankruptcy database on LEXIS and by examining the <u>Wall Street Journal Index (WSJ Index)</u> under the captions "bankruptcy" and each individual firm name. Firms are also excluded if they did not survive the subsequent year for other reasons such as liquidation, merger or purchase by another company. 64 firms were identified as not surviving and 140 were missing data for a total of 204 firms eliminated for not surviving or missing data.

155 financial services firms, foreign companies and subsidiaries of other companies are eliminated consistent with previous going concern research. Financial service firms do not have the data necessary to compute the measure of financial distress used in this study. Foreign firms are subject to different reporting practices for going concern uncertainties. Subsidiaries of other companies often do not have control over auditor choice or change.

Nine firms audited by Laventhol and Horwath in 1989 were eliminated. This auditing firm went bankrupt in 1989 and therefore all clients of the firm were forced to switch auditors.

These eliminations resulted in 95 sample firms for inclusion in the study. The distribution of these sample firms by SIC code is provided in figure 3.

<sup>1988,</sup> paragraph 2). SAS No. 34 does not indicate a specific time period covered by the auditor's report, but acknowledges that the going concern status of the firm should be evaluated each year (AICPA 1981, paragraph 13).

	Number of	SIC Code Description	
SIC Codes	Sample Firms	-	
1000	1	Metal Mining	
1040	1	Gold & Silver Ore	
1311	2	Crude Petroleum & Natural Gas	
1531	1	Operative Builders	
2253	1	Knit Outerwear Mills	
2452	1	Prefabricated Wood Buildings & Components	
2631	1	Paperboard Mills	
2670	1	Converted Paper, Paperboard, & Boxes	
2741	1	Miscellaneous Publishing	
2834	3	Pharmaceutical Preparations	
2835	1	In Vitro, In Vivo Diagnostics	
2836	1	Biological Diagnostics	
2870	1	Agricultural Chemicals	
2911	1	Petroleum Refining	
3089	1	Plastic Products	
3260	1	Pottery & Related Products	
3330	1	Primary Smelt, Refining Nonferrous Metals	
3341	1	SEC Smelt, Refining Nonferrous Metals	
3350	1 Rolling & Drawing Nonferrous Metals		
3240	1	Cutlery, Hand Tools & General Hardware	
3430	1	Heating Equipment & Plumbing Fixtures	
3448	1	Prefabricated Metal Buildings & Components	
3470	1	Coating, Engraving & Allied Services	
3531	1	Construction Machinery and Equipment	
3550	1	Special Industry Machinery	
3555	1	Printing Trades Machinery & Equipment	
3561	1	Pumps & Pumping Equipment	
3569	2	General Industrial Machinery & Equipment	
3570	1	Computer & Office Equipment	
3571	1	Electronic Computers	
3572	1	Computer Storage Devices	
3576	1	Computer & Communication Equipment	
3577	1	Computer Peripheral Equipment	
3651	1	Household Audio & Video Equipment	
3661	6	Telephone & Telegraph Apparatus	

Figure 3
SIC Code Descriptions for 95 Sample Firms

(Figure 3 continued on next page)

SIC Code	Number of	SIC Code Description	
SIC Code		SIC Code Description	
	Sample Firms		
3674	2	Semiconductors & Related Devices	
3678	1	Electronic Connectors	
3679	4	Electronic Components	
3690	2	Electric Machinery, Equipment & Supplies	
3713	1	Truck & Bus Bodice	
3714	l	Motor Vehicle Parts & Accessories	
3715	1	Truck Trailers	
3760	1	Guided Missiles & Space Vehicles	
3829	1	Measuring & Controlling Devices	
3841	1	Surgical & Medical Instruments & Apparatus	
3842	4	Orthodontic, Prosthetic Surgical Appliances & Supplies	
3843	1	Dental Equipment & Supplies	
3844	1	X-ray & Related Apparatus	
3845	1	Electromedical Apparatus	
3911	1	Jewelry & Precious Metals	
3990	1	Miscellaneous Manufacturing Industries	
4812	1	Radio Telephone Communication	
4813	1	Phone Communication	
4832	1	Radio Broadcasting Stations	
4911	2	Electric Services	
4953	1	refuse Systems	
4955	1	Hazardous Waste Management	
4991	1	Cogeneration Small Power Producers	
5080	1	Machinery & Equipment Wholesale	
5812	2	Eating Places	
5990	2	Retail Stores	
6795	1	Mineral Royalty Traders	
7011	1	Hotels, Motels, & Tourist Courts	
7330	1	Mailing, Reproduction, & Commercial Art Services	
7359	1	Equipment Rental & Leasing	
7372	1	Prepackaged Software	
7373	3	Computer Integrated Systems design	
7389	2	Business services	
7822	1	Motion Pictures & Video Distribution	
8060	2	Hospitals	
8071	1	Medical Laboratories	
	<u>95</u>		
Most Frequent Two-	Number of	Two-Digit SIC Code Description	
Digit SIC Codes	Sample Firms	<b>6</b>	
36	16	Machinery except Electrical	
35	11	Electrical and Electronic Machinery, Equipment and	
	- <del>-</del>	Supplies	
38	9	Measuring, Analyzing and Controlling Instruments;	
		Photographic and Optical Goods; Watches and Clocks	

Figure 3 (continued)

3.2 Control firms. Control firms are selected for comparison purposes. Ideally, the firms in the sample and control groups are similar on all dimensions that affect switching except the issuance of the going concern report. Since this is not entirely possible, control firms are selected using characteristics of primary importance in the audit switching literature. Control firms are surviving firms that did not receive a going concern report (see Quadrant C in Figure 1) because the dependent variables of interest in this study are hypothesized to occur for surviving clients. Further, distressed firms are selected because previous research has shown that auditors will not consider giving a going concern report unless a firm is financially distressed [Kida (1980), Mutchler (1985)]. Also, financially distressed firms switch auditors more frequently than non-distressed firms [Schwartz and Menon (1985)].

Hopwood et al. (1994) argue that results from previous bankruptcy studies are flawed because they fail to recognize the oversampling problem and the important differences between stressed and non-stressed firms. An oversampling problem occurs if firms are sampled in a higher proportion than their occurrence in the population. Even though this study does not include bankrupt firms, these problems could impact the current study because all going concern survivor firms identified are included and going concern firms are highly financially distressed. To address these potential biases, the control firms are selected to be as closely distressed as the sample firms to the extent possible. These control sample selection procedures are intended to address the stressed versus non-stressed problems because all firms selected are stressed. Additionally, stressed firms in both quadrants are oversampled relative to their proportions in the population.

Specifically, control firms are selected as follows:

- 1. All firms on the same annual COMPUSTAT tape of a sample firm in the same four digit SIC code are selected.<sup>7</sup>
- 2. Zmijewski's probit model index is then computed for all sample and potential control firms. Zmijewski's model is a commonly used measure of financial distress in the auditing literature. Bamber, Bamber and Schoderbek (1993) discuss Zmijewski's model at length. This model of financial distress was chosen for this study for reasons similar to the Bamber et al. study. First, it is a continuous model that focuses on the relative financial condition of firms (as opposed to other models that focus on a yes/no prediction of bankruptcy). Also, the model uses only three financial ratios and therefore limits the number of firms that would have to be eliminated for potential data requirements. Additionally, consistent with this study, financial service firms are excluded from the sample calculating the model. The model is computed as follows (Zmijewski 1984, p. 69):

ZFC = -4.336 - 4.513(ROA) + 5.679(FINL) + .004(LIQ)

where:

ZFC = the financial condition index

ROA = return on assets (net income divided by total assets)

FINL = financial leverage (total debt divided by total assets)

LIQ = liquidity (the current ratio: current assets divided by

current liabilities)

The ZFC index obtained from Zmijewski's model is a standard normal variable. The DISTRESS variable used in this study is obtained by transforming the ZFC index into a probability of bankruptcy. The control firm retained for each sample firm is the firm with the closest ZFC score in the same four digit SIC code that did not receive a going concern report in the current or previous two years.

3. If none of the potential control firms identified in step 2 have a DISTRESS score of at least .5 (the cutoff for 'predicted to fail' in the Zmijewski model), step 2 is repeated for the three digit, then two digit SIC code for each sample firm.

As a result of steps 1-3, 56 control firms were selected based on four digit SIC code, 20 on three digit SIC code and 19 on two digit SIC code. Sample quadrant D firms

<sup>&</sup>lt;sup>7</sup> Selecting sample and control firms from the same tape ensures that NYSE and AMEX sample firms have NYSE or AMEX control firms and NASDAQ sample firms have NASDAQ control firms. Williams (1988) notes that NASDAQ firms switch auditors more frequently than NYSE and AMEX firms.

and control quadrant C firms are in similar industries, have similar levels of financial distress and are traded on a similar exchange. This sample selection process controls for some of the most important variables in the auditor switching literature. Other important variables such as size, change in financial distress and type of auditor are controlled during statistical testing.

Table 1 provides descriptive statistics for the 95 sample Quadrant D and 95 control Quadrant C firms selected for the study. The going concern survivors switch auditors significantly more frequently than the non-going concern survivors using both the one year and two year switch rates. The going concern survivors are also more distressed and have a greater change in distress from the prior year than their non-going concern survivor counterparts. The mean and median switch rates for both the sample and control groups far exceed Zmijewski's predicted to fail cutoff of .5. Therefore, both groups are extremely distressed. On average, control firms are larger than sample firms. The median size, however, is not significantly different. The proportion of firms audited by the Big Six is almost identical between sample and control groups.

The sample and control firms are very similar on many characteristics of interest that have been shown to impact auditor switching in previous research, which raises the question of why the sample firms received going concern reports and the control firms did not receive going concern reports. The decision to issue a going concern report involves several characteristics of a firm other than financial distress. These include the debt structure of a firm, future management plans or other mitigating factors which may be part

Table 1
Descriptive Statistics for Sample and Control Firms

i	mean <median> (standard deviation)</median>			
Variable	Variable Name	Sample Firms Quadrant D N = 95	Control Firms Quadrant C N = 95	
Percentage of firms that switched auditors in the following year	SWITCH1	.1684 <0> (.3762)	.0108 <0>*** (.1037)	
Percentage of firms that switched auditors within two years	SWITCH2	.2632 <0> (.4427)	.0105 <0>*** (.1026)	
Bankruptcy prediction score from Zmijewski's model	DISTRESS	.7527 <.9049> (.3076)	.6869 <.7995> <b>*</b> (.3193)	
Change in bankruptcy prediction score from the previous year	CDISTRESS	.1947 <.1387> (.3402)	.1108 <.0190>** (.3378)	
Total assets in the current year (in millions)	ASSETS	130.5151 <23.314> (342.3585)	494.2957 <22.2890> (1509.515)	
Dummy variable that takes the value of 1 if audited by a Big Six firm; 0 otherwise	BIGSIX	.8737 <1> (.3340)	.8842 <1> (.3217)	

- \* Significantly different across firm type at less than the .1 level based on a Wilcoxon rank sum test.
- \*\* Significantly different across firm type at less than the .05 level based on a Wilcoxon rank sum test.
- \*\*\* Significantly different across firm type at less than the .01 level based on a Wilcoxon rank sum test.

Note: Results from two sample t-tests produce significance levels consistent with all median tests reported above except the ASSETS variable as discussed above in section 3.2.

of the difference. As discussed in Chapter 6, this question is left for future research.

This study may show that the two categories of firms in financial distress, those that receive going concern reports and those that do not receive going concern reports, exhibit different auditor switching behavior. Previous research has shown that firms in financial distress switch auditors more frequently than healthy firms. This study tests whether firms in financial distress that receive going concern reports switch auditors more frequently than firms in financial distress that receive standard unqualified reports do not switch auditors.

3.3 Alternative Control Firms. Alternative control firms are selected for one year, 1989, to see if an alternative selection procedure significantly alters the composition of control firms. The alternative control firm selection procedure is discussed in footnote 10 of the proposal of this dissertation. If this alternative control sample is significantly different from the original control sample on several variables of interest, a determination concerning which sample to use for the overall study will be made.

The alternative control selection process is to randomly select a sample of control firms from all quadrant C firms above a certain distress level. The difference between this alternative control sample and the control sample described in section 3.2 (the original control sample) includes the following: 1) randomization of distress scores between .5 and 1 instead of distress scores as close to sample firms as possible and 2) greater industry variation. The original control method was chosen to provide sample and control firms with similar financial distress levels because auditors do not consider giving going concern reports unless firms meet an unknown threshold distress level. Also, selecting firms in the same industry is desirable for market share comparisons in

hypothesis 4. An alternative control sample of thirty firms with distress scores above .5 was selected for 1989. Descriptive statistics for the sample and the original control and alternative control groups for 1989 are provided in Table 2.

Table 2 compares the 1989 sample firms to both the original and alternative control groups. The table also compares the two control samples with each other. When comparing each control group to the sample group, the only difference is that the one year switch rate is marginally significant for the original control sample but not for the alternative sample. When comparing the two control groups to each other, the only variable with a significant difference is the level of distress. The alternative control sample level of distress is higher than the sample firm level of distress for 1989. This may be due to the random selection of firms over a Z score of .5 for this alternative control sample. None of the other variables are significantly different across control sample type. Therefore, use of the original control sample does not appear to bias the control sample selection.

Table 2

Descriptive Statistics for Sample, Control and Alternative Control Firms

	mean <median> (standard deviation)</median>			
Variable	Variable Name	Sample Firms N = 27	Original Control Firms N = 27	Alternative Control firms N = 30
Percentage of firms that switched auditors in the following year	SWITCHI	.1111 <0> (.3203)	0 <0> * (0)	.0333 <0> (.1825)
Percentage of firms that switched auditors within two years	SWITCH2	.2592 <0> (.4466)	0 <0> *** (0)	.0667 <0> ** (.2537)
Bankruptcy prediction score from Zmijewski's model	DISTRESS	.7364 <.9082> (.36)	.6239 <.8051> (.3456)	.8013 <.8389> + (.1841)
Change in bankruptcy prediction score from the previous year	CDISTRESS	.2343 <.1959> (.3482)	.1577 <.0768> (.4057)	.1963 <.0356> (.3632)
Total assets in the current year (in millions)	ASSETS	25.871 <6.242> (38.983)	794.102 <18.049> ** (1922.46)	391.092 <185.019> ** (660.819)
Dummy variable that takes the value of 1 if audited by a Big Six firm; 0 otherwise	BIGSIX	.8889 <1> (.3203)	.7778 <1> (.4237)	.8000 <1> (.4068)

- \* Significantly different between sample and control firm types at less than the .1 level based on a Wilcoxon rank sum test.
- \*\* Significantly different between sample and control firm types at less than the .05 level based on a Wilcoxon rank sum test.
- \*\*\* Significantly different between sample and control firm types at less than the .01 level based on a Wilcoxon rank sum test.
- + Significantly different between the original control group and the alternative control group at less than the .05 level based on a Wilcoxon rank sum test.

Note: Results from two sample t-tests produce significance levels consistent with all median tests reported above.

#### CHAPTER 4 - RESEARCH DESIGN AND STATISTICAL METHODOLOGY

This chapter plans the statistical methodology used in the study. Each of the four hypotheses are discussed in sections 4.1 through 4.4 respectively. The dependent variables in the study are first compared using univariate analysis.<sup>8</sup> Then, regression analysis is added to control for variables that have been shown to impact the dependent variable in previous research. Logistic regression analysis is employed for hypotheses 1, 2 and 3. Reasoning behind use of the logistic model is discussed in section 4.1. Hypothesis 4 is tested using OLS regression.

4.1 Hypothesis 1. One and two year switch variables are measured for sample and control groups in Hypothesis 1. This hypothesis predicts that initial going concern survivors (quadrant D) switch auditors more frequently than financially distressed nongoing concern survivors (quadrant C). A one year switch means that an auditor switch occurs before the audit report subsequent to the initial going concern report is issued. A two year switch means that an auditor switch occurs before the second audit report subsequent to the initial going concern report is issued.

Most previous auditor switching studies use a one year switch rate. The one year switch rate in the current study measures whether firms switch auditors before the subsequent audit report is issued. Thus, for 1991 report years, a switch is deemed to have occurred within one year if the 1992 report is issued by another auditor.

<sup>&</sup>lt;sup>a</sup> Non-parametric tests are included because the firms are not randomly selected.

<sup>&</sup>lt;sup>9</sup> These studies focus either on explaining auditor switching in general [Williams (1988)] or examine switching after a certain event has occurred [DeAngelo (1982)].

The two year switch rate is the primary measure used in this study because of the time frame involved with a going concern survivor report. A client firm does not technically become a survivor until they remain viable for a year after the initial going concern reporting year end. Therefore, they may not switch auditors until the second year following the receipt of the initial going concern report.

The following example examines why a two year switch rate is used in the current study. The example assumes a December 31, 1991 year end firm. The initial going concern audit report for 1991 would be received in early 1992. The firm becomes a survivor after not filing for bankruptcy by December 31, 1992. Thus, a switch could occur after the 1991 report was issued in 1992 if the firm is confident of survival and thinks the auditor issued the wrong report. Other firms, however, may not switch until 1993 after they become survivors. Thus, a new auditor hired before the 1993 audit report is issued is considered a switch for this two year rate.

To test hypothesis one, the average switch rates are first compared between quadrants C and D. Next, a logistic regression model is estimated to control for other variables that have been shown to impact auditor switching in prior research.

Logistic regression is used for the first three hypotheses instead of OLS regression for several reasons. First, the dependents are dichotomous and non-linear. OLS regression requires the assumption of linearity. Second, the sample is choice based. Previous researchers have noted that statistical classification models can produce biased coefficients for choice-based samples [Dopuch, Holthausen and Leftwich (1987)]. However, Maddala (1991) shows that logistic coefficients are consistent and unbiased. He notes that only the constant term in the logistic model is affected by disproportionate

sampling effects. Third, Stone and Rasp (1991) note that logistic regression is preferred to OLS regression for dichotomous dependent variables when the sample size exceeds 100. Results for logistic regressions for hypotheses 1-3 are compared to OLS regression results in Chapter 5.

SWITCH1or2<sub>i</sub> = 
$$\beta_0 + \beta_1$$
 GCONCERN<sub>i</sub> +  $\beta_2$  DISTRESS<sub>i</sub> +  $\beta_3$  CDISTRESS<sub>i</sub> +  $\beta_4$  ASSETS<sub>i</sub> +  $\beta_5$  BIGSIX<sub>i</sub> +  $\epsilon_i$  where:

i represents firm 1 through i.

 $\beta_0$  represents the constant term.

ε represents the residual.

The dependent and independent variables used in hypotheses 1 through 3 are listed in Figure 4 and described more fully in sections 4.1 through 4.3.

Control variables. The impact of distress on switching is controlled in the study. The variable DISTRESS used in the study represents the firm's probability of failure based on the Zmijewski's ZFC index transformed from a Z-score into a probability. Firms in quadrants C and D have similar levels of distress because of the sample selection procedures. The most distressed firms usually receive going concern reports, however, so firms in quadrant C are not expected to be as distressed as firms in quadrant D. Schwartz and Menon (1985) show that failing firms switch auditors more frequently than non-failing firms implying a positive relationship between DISTRESS and switching. Krishnan (1994) finds that firms treated more conservatively by their auditor are more likely to switch auditors. This finding implies a negative relationship between

Variables	Related Hypotheses	Definitions
Dependent		
Variables:		
SWITCH1or2	H1	A dummy variable with a value of 1 when a firm switched auditors within 1 or 2 years; a value of 0 otherwise.
DISMISS	H2	A dummy variable with a value of 1 if the auditor was dismissed and a value of 0 if the auditor resigned.
DISAGREE	H2	A dummy variable with a value of 1 if the firm or auditor note disagreement relating to the switch and a value of 0 if no disagreement is noted.
NEXTREPT	Н3	A dummy variable with a value of 1 if the subsequent audit report is going concern and a value of 0 otherwise.
Independent Variable of Interest:		
GCONCERN	H1 and H2	A dummy variable with a value of 1 for quadrant D firms (sample firms) and a value of 0 for quadrant C firms (control firms).
SWITCH1or2	Н3	A dummy variable with a value of 1 when a firm switched auditors within 1 or 2 years; a value of 0 otherwise.
Control Variables:		
DISTRESS	All Three Hypotheses	A firm's probability of bankruptcy from Zmijewski's ZFC index score.
CDISTRESS	All Three Hypotheses	A firm's change in ZFC score from the prior year.
ASSETS	H1 and H2	The natural logarithm of total firm assets.
BIGSIX	H1 and H2	A dummy variable with the value of 1 if a firm is audited by the big six and a value of 0 otherwise.

Figure 4
Summary of Variables Used in Hypotheses 1 through 3

DISTRESS and switching. No prediction is made for the DISTRESS variable because previous research finds inconsistent results.

The impact of the change in distress from the previous year is also controlled in the study. The variable CDISTRESS is the change in distress score for each firm from the prior year to the current year. In relation to the calculation, if the DISTRESS score for a firm was .5 in the year prior to receiving a going concern report and .75 in the year of the first going concern report, the CDISTRESS variable is .25. A distress variable representing the percentage change in distress between the two years was also computed. The regression results were not significantly different using either the change or percentage change in distress for hypotheses 1 - 3. This variable is included as a control because it may be the change, not the level of financial distress that causes firms to switch auditors. Firms with little change in distress from the prior year may be more likely to switch auditors than firms with a large positive changes in financial distress because they may believe that the going concern audit reports were not deserved (Krishnan 1994). The coefficient on this variable, therefore, is expected to be negative.

Prior auditor switching studies have controlled for a change in the financial ratios that make up the CDISTRESS variable [Williams (1988), Johnson and Lys (1990), DeFond (1992)], but not the variable itself. Some of the ratios that make up the DISTRESS variable are positively related to switching in previous research and some are negatively related to switching in previous research. The DISTRESS variable is a weighted average combination adding some ratios and subtracting others. Therefore, a comparison cannot be made from the current study to the results from previous research.

The variable ASSETS is computed as the natural logarithm of total assets. <sup>10</sup> Several previous auditor switching studies have found a negative relationship between auditor switching and size [Haskins and Williams (1990), Krishnan (1994)]. Smaller firms tend to be younger firms that have changing needs. These firms tend to move to larger auditors as they grow and their needs change. Also, large firms are often geographically disbursed and involved in complex transactions. Fewer auditors exist that can handle larger firms, and switching is thought to be more costly for larger firms [Williams (1988)]. Consistent with prior research, an inverse relationship is expected between ASSETS and switching.

The variable BIGSIX is a dummy variable taking the value of 1 if the firm is audited by a big six auditor and 0 otherwise. <sup>11</sup> Most previous auditor switching studies include an auditor size variable [for examples see Schwartz and Soo (1996), Krishnan (1994)]. Previous studies have not examined the relation between audit firm size and auditor switching for distressed firms. Therefore, no prediction is made for the sign of this variable.

\_

<sup>&</sup>lt;sup>10</sup> Market value of equity is an alternative size measure. For these highly distressed firms, however, market value information was not available on COMPUSTAT or in the Daily Stock Price Record for almost half of the pilot firms in the study. Therefore, total assets is used consistent with other auditor switching studies [ such as Williams (1988), Krishnan (1994)].

<sup>&</sup>quot;The Big Eight became the Big Six in 1989. This dummy variable is coded 1 if the auditor is Big Eight or Big Six. Auditor changes as a result of merger (Ernst and Whinney to Ernst and Young, for example) are not considered switches. Switches from a merging firm to an unaffiliated firm during the merger year will be analyzed separately, if significant, because these firms may be switching because of independence problems or other reasons.

4.2 Hypothesis 2. Hypotheses 2A and 2B predict that sample quadrant D firms face more disagreements and dismissals relating to switches than control quadrant C firms. The initial tests for these two hypotheses compare the average disagreement and dismissal rates between switching quadrant D and quadrant C firms. Sample and control firms identified as switchers in H1 comprise the sample for H2A and H2B. Form 8-K auditor change filings for these auditor switches are obtained and examined. The form 8-K filing is required to disclose whether the switch was initiated by the firm (dismissal) or auditor (resignation). Additionally, the form 8-K is required to disclose whether any major disagreements existed between the auditor and firm prior to the switch.

The same control variables are used for H1 and H2 because H2 is an extension and expansion of H1. Dhaliwal, Schatzberg and Trombley (1993) and DeFond and Jiambalvo (1993) show that firms with poorer performance have more disagreements reported with their auditors. Krishnan and Krishnan (1995) suggest a need to control for financial distress when comparing resignations and dismissals. Therefore, controls for DISTRESS and CDISTRESS are included in the models.

Previous research shows mixed results about the impact of Big Six status on disagreements and dismissals versus resignations. Dhaliwal et. al (1993) show that clients with Big Six auditors are more likely to report disagreements with their auditor. Big Six auditors may impose more conservative treatment on their clients. Schwartz and Soo (1996) find no difference between the proportion of dismissals and resignations for

<sup>&</sup>lt;sup>12</sup> Schwartz and Soo (1995) note some difficulty with failing firms not filing auditor change 8-K's. They note that the penalties for not filing an 8-K include delisting by the SEC and statutory debt covenant violations. Many failing firms are already delisted and face debt covenant violations. Therefore, the distressed firms in the current study may

Big Six status. BIGSIX is included as an additional control variable in the regressions and is expected to be positively related to disagreements. No prediction is made for the relation between Big Six status and dismissals versus resignations.

ASSETS is included as the final control variable in these regressions. Schwartz and Soo (1996) find that resignation firms are smaller than dismissal firms. Prior disagreement studies do not control for size. Therefore, a positive relation between dismissals and size is expected. No prediction is made for the relation between size and disagreements.

The following two logistic regressions will be estimated for dismissals and disagreements, respectively:

DISMISS<sub>i</sub> = 
$$\beta_0 + \beta_1$$
 GCONCERN<sub>i</sub> +  $\beta_2$  DISTRESS<sub>i</sub> +  $\beta_3$  CDISTRESS<sub>i</sub> +  $\beta_4$  ASSETS<sub>i</sub> +  $\beta_5$  BIGSIX<sub>i</sub> +  $\varepsilon_i$ 

DISAGREE<sub>i</sub> = 
$$\beta_0 + \beta_1$$
 GCONCERN<sub>i</sub> +  $\beta_2$  DISTRESS<sub>i</sub> +  $\beta_3$  CDISTRESS<sub>i</sub> +  $\beta_4$  ASSETS<sub>i</sub> +  $\beta_5$  BIGSIX<sub>i</sub> +  $\epsilon_I$ 

The independent and dependent variables for these regressions are described in Figure 4 in section 4.1.

4.3 Hypothesis 3. The third hypothesis predicts that quadrant D firms that switch auditors are not successful at opinion shopping. To test this hypothesis, quadrant D firms are divided into two groups determined by switching status. The first report subsequent to the switch is examined for switchers. The first report after the initial going concern survivor report is examined for non-switchers. These reports are examined to determine if the subsequent report is still going concern or if it is a standard unqualified

report with no mention of going concern. Successful opinion shopping works as follows:

a firm receives an initial going concern audit report, changes auditor and receives a
standard unqualified report from the new auditor.

The first test compares whether switchers or non-switchers received more standard unqualified reports following the issuance of initial going concern survivor reports. If switchers are more likely to receive standard unqualified reports, they may have been successful at opinion shopping. The Chow and Rice (1982) results are inconsistent with opinion shopping. They found firms that switched auditors after receiving all types of qualified reports were less likely to receive subsequent standard unqualified reports then firms that did not switch auditors. These authors note that their results are not consistent with opinion shopping. They add that to test this hypothesis properly, financial distress should have been controlled. In explaining their results, Chow and Rice contend that if a firm knows that the condition for which they received the qualification is only temporary then they have no reason to switch to find another auditor. Thus, firms that are better off financially in the current study may not switch knowing that they should receive a standard unqualified report from their auditors in the subsequent year. This explanation is opposite of the Krishnan (1994) result which suggests that firms that are treated too conservatively (less distressed) are more likely to switch auditors.

The following logistic regression is estimated to control for distress and change in distress. NEXTREPT is defined as the first report received from the new auditor for switchers and the report subsequent to the going concern survivor report for non-switchers.

NEXTREPT<sub>i</sub> =  $\beta_0 + \beta_1$  SWITCH1or2<sub>i</sub> +  $\beta_2$  DISTRESS<sub>i</sub> +  $\beta_3$  CDISTRESS<sub>i</sub> +  $\epsilon_i$ The variables in the above regression are described more fully in Figure 4 in section 4.1.

4.4 Hypothesis 4. The fourth hypothesis predicts that auditors of going concern survivors (quadrant D) face more negative industry reputation effects than auditors of non-going concern survivors (quadrant C). Two market share measures are used to proxy for negative auditor reputation effects. These two measures are based on the proportion of industry assets audited (assets measure) and the proportion of firms in the industry audited (number measure) by auditors of sample and control firms. Elder (1993) notes that there is no theory to suggest whether a number measure or a size measure better captures auditor industry experience. Proportion of total industry audit fees attributable to each auditor is the most direct measure of auditor market share. Audit fee data, however, is not publicly available information. Simunic (1980) finds that total assets are highly correlated with audit fees for firms in his study.

Both measures are computed for all COMPUSTAT firms within the two digit SIC code for each auditor of the big six sample and control firms. This hypothesis is limited to sample firms audited by the big six because only the largest firms are separately identified on COMPUSTAT. This data limitation reduces the sample of interest to 84 firms and the control sample to 83 firms. Therefore, almost 90% of the sample is retained. Danos and Eichenseher (1986) find that three digit SIC codes are most consistent with the classification of audit markets in previous research. Elder (1993) finds that auditor experience measures in his study to be highly significantly correlated between two digit and three digit SIC codes. Two digit SIC code market share measures

were used in this study because more than a third of the three digit markets did not contain more than 25 firms, the minimum number required for a market in Elder (1993). Therefore, the two digit SIC code market shares were used in order to preserve the maximum number of sample firms.

The asset and number measures are calculated as follows. The base year is the fiscal year of the first going concern report (or the sample year). The base year market share proportion for the number measure is defined as the number of firms audited by a specific auditor divided by the total number of firms in the two digit SIC code. Similarly, the base year market share for the asset measure is defined as the total assets of firms audited by a specific auditor divided by total assets in the industry. The asset and number measures used in this study are calculated as the two year change in market share after the base year.

A two year percentage change in market share was also computed for both the number and asset measures. These alternative dependent variables did not significantly impact the results of the regressions for this fourth hypothesis.

Sample and control firms selected for testing in this study (for H1 - H3) are excluded from hypothesis four, the market share hypothesis. The change in market share is a secondary effect and should therefore not include firms from hypothesis one that switched auditors. Firms that switched auditors in hypothesis one were directly affected by the auditor because they received going concern reports. Hypothesis fours tests whether other firms audited by the auditors that gave the going concern reports in hypothesis one switch after the hypothesis one firms received their going concern reports.

The initial test for hypothesis four compares the two year change in market share between sample and control firm auditors. Sample firm auditors are expected to face negative market share effects because other firms in the industry may be concerned that the auditor will also give them a going concern audit report. Control firm auditors are predicted to have no change in market share because they did not issue a going concern report and their firms did not fail. If auditors of both sample and control firms are found to face negative market share effects, then auditing distressed firms, not issuing going concern survivor reports, may be related to negative industry market share effects. The following regressions are used to control for another variable which may impact the change in market share for a particular auditor in a particular industry:

ASSETREP<sub>i</sub> = 
$$\beta_0 + \beta_1$$
 GCONCERN<sub>i</sub> + $\beta_2$  ADISTRESS<sub>i</sub> +  $\varepsilon_i$   
NUMREP<sub>i</sub> =  $\beta_0 + \beta_1$  GCONCERN<sub>i</sub> + $\beta_2$  ADISTRESS<sub>i</sub> +  $\varepsilon_i$ 

The variables in the above regression are described more fully in Figure 5.

The following summarizes the variables used to test hypothesis 4. ASSETREP and NUMREP represent the two year change in the market share measures described above. ADISTRESS is the average industry unstandardized distress score for the two digit SIC code. This distress score is unstandardized and can therefore range from -1 to 1, with -1 being non-distressed and 1 being distressed. The only difference between these distress scores and the DISTRESS control variable used in hypotheses 1-3 is that the ADISTRESS variable was not transformed into a probability. Firms in industries with higher distress are more likely to be concerned about receiving a going concern audit

Variabl <b>es</b>	Definitions
Dependent Variables:	
ASSETREP	The two year change in proportion of assets audited in the two digit SIC code of sample and control firms.
NUMREP	The two year change in proportion of firms audited in the two digit SIC code of sample and control firms.
Independent Variable of Interest:	
GCONCERN	A dummy variable with a value of 1 for quadrant D firms (sample firms) and a value of 0 for quadrant C firms (control firms).
Control Variable:	
ADISTRESS	The average unstandardized distress score for all firms in the two digit SIC code.

Figure 5
Summary of Variables Used in Hypothesis 4

report. Only big six firms are included as sample and control firms, therefore audit firm size is not included as a control variable.

If significant negative industry market share effects are found for quadrant D firms in H4, one additional test will be employed to make sure that the effects are not due to sample firm auditors exiting risky markets. Arthur Andersen is an example of a firm that exited the Savings and Loan industry during the S&L crisis. To perform this additional test, the form 8-K filings for all quadrant D auditor changes causing the market share changes will be reviewed for indication of dismissal or resignation. Resignations indicate an exit from a market or not wanting to accept firms as clients because of excess litigation risk, not reputation effects.

#### **CHAPTER 5 - EMPIRICAL RESULTS**

This chapter contains the empirical results from the four hypotheses explained in Chapter 2 using the research design and sample described in Chapters 3 and 4. Empirical results are presented in the form of univariate statistics and regression analysis. The first three hypotheses are tested using logistic regression because the dependent variables are dichotomous. The fourth hypothesis is tested using OLS regression.

Section 5.1 presents the empirical results from the first hypothesis regarding switching. Section 5.2 summarizes the results from the second hypothesis relating to dismissals and disagreements. Section 5.3 summarizes the findings on the third opinion shopping hypothesis. Section 5.4 summarizes the findings on the reputation hypothesis. Section 5.5 summarizes the findings of this study.

Geiger, Raghunandan and Rama (1996 working paper) mentioned in section 2.1.3 also test for costs to auditors for switching after issuing going concern reports to surviving firms. Their research is different from the current study in the following ways:

(1) they select firms only from 1991 while the current study selects from 1989 – 1992, (2) their sample was selected using Compact Disclosure – SEC while the sample in the current study was selected using NAARS, (3) their control sample selection is different and (4) they test only for switching while the current study tests for switching and reputation effects of issuing going concern survivor reports.

Geiger et al identify 124 first time going concern audit reports. Their first time going concern audit reports are considered first time if the firm did not receive a going concern opinion in the previous year, while the current study considers a going concern audit report to be first time only if a going concern report was not received by the firm in

either of the last two years. They select 200 distressed firms that did not receive going concern reports as their control firms. Thus, their control sample firms could be from quadrant A or C in Figure 1. The larger sample size for only one year in the Geiger et al study results from their use of Compact Disclosure which contains all publicly traded companies instead of NAARS used in the current study which contains only approximately 6000 firms per year, primarily the largest firms.

The switching behavior of firms in the two studies is compared because the studies are similar, but use a different database of test firms. The Geiger et al hypotheses are similar to hypotheses one and three in this paper. Therefore, comparisons are made between the current study results and the results from Geiger et al in sections 5.1 and 5.3. Comparison is not to Geiger et al for hypothesis two because their study eliminates all resignations.

## 5.1 Regression Results for Hypothesis 1 - Switching

This section contains the empirical analysis of the logistic regression model described in section 4.1 of chapter 4 and examines the one year and two year switch rate models for hypothesis one. The univariate analysis of hypothesis one is based on data located in section 3.2 in Table 1. That table shows a one year switch rate of 16.84% and a two year switch rate of 26.32% for sample going concern survivor firms with corresponding rates of approximately 1% for both measures for control firms. These differences are both highly statistically significant. The table also shows that sample going concern survivor firms are more distressed and have a higher change in distress from the prior year than the non-going concern survivor control firms. Assets and big six status between the groups were not significantly different.

Table 3 contains the Pearson correlation coefficients for the variables in the logistic regression analysis for hypothesis one. As seen in the table, multicollinearity does not appear to be an issue with respect to the majority of variables as most correlations are insignificantly different from zero. DISTRESS and CDISTRESS are highly correlated as expected. These variables are both included because it is thought that it may be the change, not the level of distress that differs between sample and control groups. The going concern variable is also marginally correlated with change in distress and correlated with assets. Excluding either of these variables does not significantly impact the regression for hypothesis one.

Table 3
Pearson Correlation Coefficients for Variables
N=190

	SWITCH2	GCONCERN	DISTRESS	CDISTRESS	ASSETS	BIGSIX
SWITCH2	1.000					
GCONCERN	.3675****	1.000				
DISTRESS	0312	.1049	1.000			
CDISTRESS	0769	.1234 *	.3410 ****	1.000		
ASSETS	0899	1648 **	0136	.0244	1.000	
BIGSIX	0400	0161	.0132	.1093	.1029	1.000

- \* Significant at <.10
- \*\* Significant at <.05
- \*\*\* Significant at <.01
- \*\*\*\* Significant at <.001

The logistic regression results for the one year switch rate for hypothesis one are shown in Table 4. The regression results in Table 4 for the one year switch rate are consistent with the univariate results for the one year switch rate in Table 1 located in Chapter 3.

Table 4
Logistic Regression for Hypothesis 1, One Year Switch Rate

Dependent Variable (SWITCH 1) = 1 if firm switched auditors within a year, 0 if no switch

Coefficients	Independent	Estimated	Standard	T-Statistics	
	Variable	Coefficients	Errors		
$oldsymbol{eta_0}$	INTERCEPT	1.2435	.9477	1.3121	
$\beta_1$	GCONCERN	3.0827	1.0577	2.9145 ***	
$\beta_2$	DISTRESS	0762	.9054	0842	
$\beta_3$	CDISTRESS	1.9167	.9470	2.0239 **	
β <sub>4</sub>	ASSETS	.0005	.0010	.4806	
β,	BIGSIX	.1295	.7498	.1727	
Pseudo R <sup>2</sup> .20					
chi-square Test					
of Model's Fit 23.252 (p=.0003) N=190					

<sup>\*\*</sup> Statistically significant at p<.05.

Note: GCONCERN is significant at p<.001 and CDISTRESS is significant at p<.10 using OLS regression analysis. Consistent with the results above, none of the other control variables are significant using OLS regression.

<sup>\*\*\*</sup> Statistically significant at p < .01.

These results are consistent with hypothesis one for the one year switch rate because going concern survivor sample firms switch auditors significantly more frequently than non-going concern survivor control firms. Also, as indicated in the univariate analysis, the sample firms experienced a greater increase in distress from the prior year than did their control firm counterparts. This higher change in distress could have aided in the decisions of the auditors to give these sample firms going concern reports.

The regression results for the two year switch rate model for hypothesis one are given in Table 5. The results are consistent with the one year switch rate, except stronger for the variable of interest, going concern status. In this model, none of the control variables are significantly different across groups.

Two additional variables representing the interaction between the going concern variable and the distress and change in distress variables were independently included in the one and two year switch rate regressions. Neither variable had significant impact on the regressions. Therefore, it is not the interaction between the going concern report and distress or change in distress which is driving firms to change auditors.

Geiger et al find their sample firms have a 21.8% one year switch rate and control firms have an 8.5% one year switch rate. They do not test a two year switch rate. In their logistic regression analysis, the going concern variable was significant at <.01 and none of their control variables (distress, size and Big Six status) were significant.

## 5.2 Results for Hypothesis 2 - Dismissals and Disagreements

This section contains the empirical analysis of the dismissal and disagreement hypotheses described in section 4.2 for hypothesis 2. These two hypotheses are tested for

Table 5
Logistic Regression for Hypothesis 1, Two Year Switch Rate

# Dependent Variable (SWITCH 2) = 1 if firm switched auditors within two years, 0 if no switch

Coefficients	Independent	Estimated	Standard	T-Statistics	
	Variable	Coefficients	Errors		
$\beta_{0}$	INTERCEPT	.5791	.8369	.6919	
$\beta_1$	GCONCERN	3.5896	1.0408	3.4489 ****	
$\beta_2$	DISTRESS	.2109	.7795	.2706	
$\beta_3$	CDISTRESS	1.112	.7759	1.4332	
β <sub>4</sub>	ASSETS	.0013	.0013	1.0152	
β <sub>5</sub>	BIGSIX	0210	.6777	0302	
Pseudo R <sup>2</sup> .24					
chi-square Test					
of Model's Fit 36.37 (p=.0001) N=190					

\*\*\*\* Statistically significant at p<.001.

Note: OLS regression results are consistent with the results above except GCONCERN is significant at p<.0001.

switching firms in the sample and control groups. Therefore, firms that did not switch auditors are excluded from testing for this hypothesis. The two year switching time frame is used in analyzing this hypothesis because it is the primary switch rate used for the study.

To compare the dismissal and disagreement rates between the sample and control firms that switched auditors within two years, the number of firms switching auditors in both groups must first be identified. For the sample firms, 25 of the 95 firms switched auditors within two years. For the control firms, only 1 of the 95 firms switched auditors within two years. Comparing a sample size of 1 to a sample size of 25 precludes using any kind of regression analysis for analyzing hypothesis 2.

Dismissal and Disagreement information is obtained from firm 8 - K filings with the SEC. As noted in section 4.2 in footnote 12, distressed firms do not always file required reports with the SEC because they lack incentives to do so. For the firms that switched auditors in the sample and control groups, 15 of the 25 sample firms and the only control firm filed their 8 - K auditor change report or the information was submitted with the subsequent year's 10 -K report as allowed by the SEC. Therefore, information about the auditor changes is available for 16 of the 26 firms that switched auditors in this study.

Hypothesis 2 predicts that sample firms are more likely to dismiss their auditors and have disagreements with their auditors than control firms because it is anticipated that they will be upset with their auditors. This second hypothesis cannot be analyzed because of the lack of switching control firms. Descriptive statistics, however, can be

presented.

Of the 15 sample firms with available 8 - K filings, 14 dismissed their auditors and 2 had disagreements. This translates into a 93% dismissal rate. Schwartz and Soo (1995) find a dismissal rate of 81% for failing firms. Thus, sample firms in the current study appear to be dissatisfied with their auditors as evidenced by the high dismissal rate. This evidence also runs counter to the argument that auditing firms are refusing to audit risky clients [Business Week March 1, 1993 (p.76)]. The only control firm that switched auditors also dismissed their auditor.

Disagreements between auditors and clients are often difficult to detect because neither party usually has incentive to report them (Dye 1991). Therefore, reported disagreement rates are generally low. Of the 15 sample firms filing 8 - K auditor change filings, 2 reported disagreements with their auditors. This translates into a 13% disagreement rate. Although this percentage is based on a small sample size, it appears to support the idea that these going concern survivor firms are not happy with their auditors. The one control firm that switched auditors did not report a disagreement.

Although regression analysis could not be performed on hypothesis two due to the limited number of switching control firms and firms failing to file their 8 - K reports with the SEC, the results reported support the predicted direction. The going concern survivor firms that switched auditors appear to be dissatisfied with their previous auditor.

### 5.3 Regression Results for Hypothesis 3 - Opinion Shopping

This section contains the empirical analysis of the logistic regression model described in section 4.3 concerning opinion shopping. Hypothesis 3 is included to address whether sample firms that switch auditors are more likely to receive a subsequent

standard unqualified audit report than sample firms that do not switch auditors. The hypothesis is limited to sample firms because only these firms have received going concern reports. If sample firms can switch auditors and receive standard unqualified reports then it may be the hope of getting a standard unqualified report which drives the auditor switching behavior. Also, the SEC and other regulatory bodies have a great interest in opinion shopping. If switching sample firms receive subsequent standard unqualified reports more often than non-switching sample firms, opinion shopping could be taking place which would be of interest to the SEC. The hypothesis predicts the opposite, however, because auditors are encouraged to set inherent risk higher and are believed to be more conservative for new clients because of unfamiliarity with the business and operations. Therefore, hypothesis three predicts that firms that switch auditors will more often receive going concern reports in the subsequent years than firms that do not switch auditors.

Descriptive statistics for hypothesis 3 are consistent with the prediction that switching sample firms are more likely to receive a going concern report in the year subsequent to the switch than non-switching sample firms. Of the 25 switching sample firms, 21 or 84% received a going concern report from their new auditors. Of the 70 non-switching sample firms, 42 or 60% received going concern reports in the subsequent year.

These results are supported by the logistic regression analysis in Table 6. Switching sample firms are significantly more likely to receive going concern reports from their new auditors than non-switching sample firms. This difference did not appear to be driven by level of financial distress or change in financial distress.

Table 6
Logistic Regression for Hypothesis 3

Dependent Variable (NREPORT) = 1 if firm received a subsequent going concern report, 0 if unqualified report without going concern modification received subsequently

Coefficients	Independent	Estimated	Standard	T-Statistics
	Variable	Coefficients	Errors	
$\beta_0$	INTERCEPT	.0583	.6203	.0940
$\beta_1$	SWITCH2	1.214	.6131	1.9775 **
$\beta_2$	DISTRESS	.8235	.7974	1.0327
$\beta_3$	CDISTRESS	.6876	.7400	9292
Pseudo R <sup>2</sup> .05				
chi-square Test				
of Model's Fit 6.62 (p=.085) N=95				

<sup>\*\*</sup> Statistically significant at p<.05

Note: OLS regression results are consistent with the results above.

Geiger et al find that switching sample firms received a subsequent going concern report from their new auditors 74% of the time. Non-switching sample firms received a subsequent going concern report from the same auditor 65% of the time. The difference between these rates was not significantly significant in their logistic regression analysis.

## 5.4 Regression Results for Hypothesis 4 - Auditor Reputation

This section contains the empirical results for the fourth hypothesis concerning auditor reputation. Two measures of auditor reputation are used for all sample and control firms audited by the big six. These are an asset measure and a number measure. Both measures are computed as the two year change in market share for auditors of sample and control firms. Auditors of sample firms are expected to lose market share because they issued a going concern audit report to a firm that survived, thus they may be viewed by the market as being too conservative. Control firm auditors are not expected to have any change in market share.

Table 7 provides descriptive statistics for variables in hypothesis 4. The means for the two reputation measures are in the predicted direction for sample and control firms. However, they do not appear to be of great enough magnitude to be significantly different. The mean sample measures indicate that sample auditors lost market share, but, on average, only about one-half of one percent. The average market share for control firm auditors has not changed. The negative average distress scores indicate that the average firm in these two digit SIC code markets is not distressed.

Table 8 presents the OLS regression results for both the asset and number reputation measures. Consistent with the univariate results, the results for the variable of

Table 7
Descriptive Statistics for Reputation Hypothesis
N=159

	mean <median> (standard deviation)</median>		
Variable	Variable Name	Sample Firms Quadrant D	Control Firms Quadrant C
The two year change in proportion of assets audited in the two digit SIC code	ASSETREP	0055 <0038> (.0236)	.0010 <0027> (.0340)
The two year change in proportion of firms audited in the two digit SIC code	NUMREP	0040 <0051> (.0216)	.0003 <0016> (.0228)
The average unstandardized distress score for all firms in the two digit SIC code	ADISTRESS	5807 <64> (.4469)	5695 <64> (.5007)

Note: None of the variables are significantly different across groups using parametric or non-parametric tests.

# Table 8 OLS Regressions for Hypothesis 4

Panel A: Asset Measure (n=159)

Coefficients	Independent Variable	Estimated Coefficients	Standard Errors	T-Statistics
β <sub>0</sub>	INTERCEPT	.0023	.0044	.526
$\beta_1$	GCONCERN	0065	.0046	-1.407
$\beta_2$	ADISTRESS	.0022	.0049	.454
Adjusted R <sup>2</sup>	.001			

Panel B: Number Measure (n=159)

Coefficients	Independent	Estimated	Standard	T-Statistics
	Variable	Coefficients	Errors	
$\beta_0$	INTERCEPT	.0047	.0033	1.406
$\beta_1$	GCONCERN	0044	.0035	-1.251
$\beta_2$	ADISTRESS	.0075	.0037	2.012 **
Adjusted R <sup>2</sup>	.022			

<sup>\*\*</sup> Statistically significant at p<.05.

interest are in the predicted direction, however the results are not significant. These weak results could arise from a number of factors. First, due to data availability, two digit SIC codes were used instead of three digit SIC codes. Also, the test lacks power because there are many reasons why firms in an industry may switch auditors. An audit firm issuing a going concern report to a surviving firm in an industry is only one reason. Also, on average, these industries are not distressed. Therefore, most firms in the industry may not be concerned about other firms unjustly receiving going concern reports. Finally, only Big Six firms were examined due to COMPUSTAT limitations. Clients of smaller firms may be more concerned about the reputation of the auditor.

# 5.5 Summary of Empirical Results

Figure 6 summarizes the empirical results of the four hypotheses. Detailed discussion of the results, as well as contributions and limitations of the study, is provided in chapter 6.

Results for hypothesis 1 were consistent with the prediction that sample going concern survivor firms switch auditors significantly more than control non-going concern survivor firms. The one year sample switch rate was 16.84% and the two year sample switch rate was 26.32%. The control firm switch rate was approximately 1% for both the one and two year rates. The difference in the switch rates is significant for both one and two year measures.

Results for hypothesis 2 were only descriptive because statistical comparisons between sample and control groups were not possible due to data limitations. Descriptive statistics support a large proportion of dismissals and some disagreements for sample

Hypotheses	Predicted Relationship	Is Data Consistent with Hypothesis?
H1: Auditor Switching using 1 and 2 year switch rates	Quadrant D firms switch more than Quadrant C firms	Yes for both 1 and 2 year switch rates.
H2: Dismissal and Disagreement rates for firms that switched auditors in H1	For switching firms only, Quadrant D firms have more dismissals and disagreements than Quadrant C firms	Descriptive support only due to data limitations
H3: Subsequent audit report test to address opinion shopping	Quadrant D firms that switched auditors have more subsequent going concern reports than Quadrant D firms that did not switch auditors	Yes
H4: Reputation effects using two measures for change in market share	Auditors of Quadrant D firms lose market share after issuing going concern reports to firms that survive	No (Results are in the predicted direction, but are not significant.)

Figure 6
Summary of Empirical Results

switching firms. 93% of sample firms that switched auditors dismissed their auditor while 13% reported disagreements with their auditor. These results support the notion that the clients are dissatisfied with their auditors.

Results for hypothesis 3 were consistent with new auditors treating their clients conservatively. Sample firms that switched auditors were significantly more likely to receive subsequent going concern reports than sample firms that did not switch auditors. Switching sample firms received subsequent going concern reports 84% of the time, while non-switching sample firms received subsequent going concern reports 60% of the time. This difference is significant when controlling for distress and change in distress from the previous year.

Results for hypothesis 4 were in the predicted direction, but were not significant. Auditors of sample firms lost only about .5% market share on average for both the asset and number measures. Change in market share for auditors of control firms was insignificantly different from zero. Therefore, auditors do not appear to suffer reputation effects in terms of losing other clients in the same industry after issuing a going concern survivor report.

## CHAPTER 6 - SUMMARY, LIMITATIONS AND FUTURE RESEARCH

This study investigates auditor costs for issuing going concern reports to surviving firms. Theoretical literature suggests that auditor switching may occur when firms receive going concern reports and survive. Additionally, the literature suggests that firms may lose reputation by issuing such reports. This study empirically examines whether auditors face these costs after issuing initial going concern reports to firms that survive the subsequent year. Empirical results confirm the predicted relation between going concern survivor reports and auditor switching. Results for reputation are in the predicted direction, but are not statistically significant.

This chapter summarizes the research findings and contributions of this study. This chapter also describes the limitations of the study and includes suggestions for future research. Section 6.1 contains a summary of the hypotheses and empirical findings. Section 6.2 highlights how this study contributes to the going concern and auditor switching literatures. Section 6.3 contains a discussion of the limitations of the study. Section 6.4 provides suggestions for future research.

## 6.1 Summary of Research Findings

This study empirically examines whether auditors face costs for issuing initial going concern reports to firms that survive the subsequent year. The first three hypotheses in the study test for auditor switching costs and the fourth hypothesis tests for auditor reputation costs. This study builds upon going concern, auditor switching and auditor reputation literatures to test the four hypotheses.

Firms are selected in the study from the NAARS database. NAARS contains financial information for approximately 6000 firms annually. 95 going concern survivor

firms are identified from the 1989 – 1992 time period. Selected firms had not received going concern reports for at least two years previous and survived the subsequent year.

95 control firms are also selected. The control firms are distressed but did not receive going concern reports. Control firms are selected by industry.

The empirical results confirm the predicted relation between going concern survivor reports and auditor switching. Additionally, auditors are frequently dismissed and face disagreements with going concern survivor client firms. Firms that switch auditors are not successful at opinion shopping, since most of them receive going concern reports from their new auditors after the switch.

Auditors do not appear to lose a significant amount of market share after issuing going concern survivor reports. Auditors face a small loss of industry market share in the two years following the issuance of going concern survivor reports, however the losses are not statistically significant.

6.1.1 Switching Related Hypotheses. The first three hypotheses test for costs to auditors from switching after issuing initial going concern survivor reports. Hypothesis one tests whether going concern survivor firms switch auditors more frequently than financially distressed non-going concern survivors. The regression results support a significantly higher switch rate for going concern survivors using both one and two year switch rates after controlling for distress, change in distress, size and Big Six status.

The second hypothesis is included as a specification test of the first hypothesis.

Only firms that switched auditors in hypothesis one are included for testing in hypothesis two. An implicit assumption in hypothesis one is that firms switch auditors because they are dissatisfied with the going concern report received. Consequently, switches should

most often be dismissals by the client, not resignations by the auditor and disagreements may occur. Regression analysis could not be performed on the hypothesis because only one control firm switched auditors. Descriptive statistics showed the dismissal rate to be 93% and the disagreement rate to be 13%. These rates are both high compared to distressed firms in previous literature.

The third hypothesis is included as another specification test for hypothesis one to test for successful opinion shopping. The assumption in the first hypothesis is that firms switch auditors after receiving going concern survivor reports because they are dissatisfied with their auditor. The firms, however, may be searching for a standard unqualified report. Hypothesis three is tested on sample firms only. The results show that switching sample firms are more likely to receive going concern opinions from their new auditor than non-switching sample firms are to receive going concern opinions from the same auditor. Therefore, sample firms that switched auditors did not appear to be successful at opinion shopping.

The first three hypothesis support the prediction that going concern survivor firms switch auditors more than control non-going concern survivor firms. The sample firms appear to be dissatisfied with their auditors and do not appear to be successful at opinion shopping when they switch auditors.

6.1.2 Reputation Hypothesis. The fourth hypothesis tests for loss of reputation for auditors who issue going concern survivor reports. Loss of reputation is a secondary cost that is assumed to occur to auditors issuing going concern survivor reports. Previous research has not investigated this secondary cost. In this study, loss of industry market share is used to proxy loss of reputation. Both measures of loss of market share

produce approximately the same results. Auditors who issue going concern survivor reports lose approximately one half of one percent market share after issuing these reports. This shows a decrease in market share, but the decrease is not statistically significant.

## 6.2 Contributions

This study contributes to both the going concern and auditor switching literatures. The study finds costs to auditors for issuing going concern reports to firms that survive. This finding expands the going concern literature because these costs are hypothesized to occur, but have not been empirically tested. Also, these costs are often ignored in going concern research. The auditor switching literature is expanded by showing that not all distressed firms switch auditors with the same frequency. Distressed firms that receive going concern reports switch auditors significantly more frequently than distressed firms that do not receive going concern reports.

6.2.1 Contributions to the Going Concern Literature. The going concern literature is expanded by identifying costs that have either been assumed, but not tested or ignored in previous research. Most previous empirical studies in the going concern area either ignore costs to auditors for issuing going concern survivor reports or assume that auditors report to minimize costs without exploring whether the costs exist. Studies in the auditor decision making literature show that auditors consider costs of going concern survivor reports when making their audit reporting decisions. The empirical tests in this study find that auditors do face switching costs for issuing going concern survivor reports. These switches appear to be motivated by dissatisfaction and not opinion shopping.

6.2.2 Contributions to the Auditor Switching Literature. This study contributes to the auditor switching literature by furthering the understanding of switching behavior of distressed firms. Previous research has shown that distressed firms switch auditors more than non-distressed firms. This study shows that not all distressed firms switch auditors frequently. Going concern survivor firms have a high switch rate and non-going concern survivor firms have a low switch rate in the current study. Only distressed firms that received going concern reports had a high switch rate in the current study.

#### 6.3 Limitations

There are limitation that may reduce the generalizability and validity of the results of this study. The generalizability limitations relate primarily to the sample size and database used to select sample firms. The validity limitation relates to comparing two sets of firms with an inherent difference: receipt of a going concern report or not.

The sample firms were selected for use in the study using NAARS. NAARS is biased towards inclusion of large firms. Therefore, the sample for this study is biased towards large firms. Also, the sample size is small. These two limitations reduce the generalizability of the results of the study.

The validity of the study is limited by comparing groups that did and did not receive going concern reports. The underlying reason that one group received going concern reports and one group did not receive going concern reports may be an omitted variable. It may be this omitted variable, not the receipt of a going concern report, that is driving the difference in the auditor switch rates between sample and control firms. To minimize this risk, control variables that have been found to significantly impact auditor

switching and going concern reports were included as control variables in the regressions in the study.

## 6.4 Future Research

The current study finds a significant rate of auditor switching for sample firms, but not a significant loss of reputation to the auditors. This insignificant result for loss of reputation may be driven by the inclusion of only large firms in the sample. If another database that includes all publicly traded firms, such as Compact Disclosure, is used to identify the sample firms the results for the reputation hypothesis may be enhanced because small firms may be more concerned about conservative treatment by their auditors than large firms.

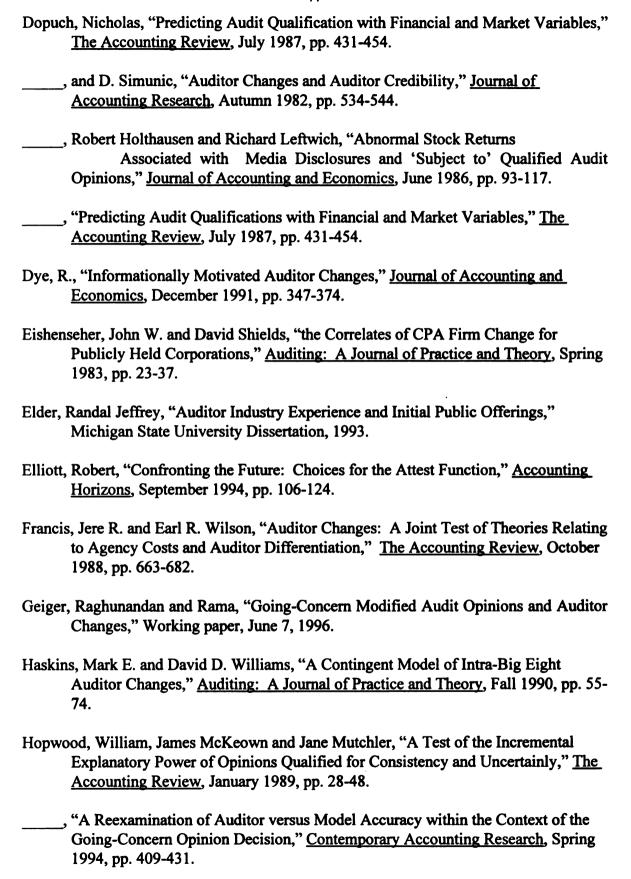
This study compares costs to auditors for issuing going concern survivor and non-going concern survivor reports which provides a unique sample to investigate other going concern questions. The primary question generated by the two sets of firms is how two groups of firms that are approximately the same size and distress level, and in the same industry, have different audit reports for potential going concern. This study would examine why sample firms received going concern reports and control firms received standard unqualified reports. This study could further enhance the understanding of going concern reporting decision making.



#### LIST OF REFERENCES

- Altman, Edward I., "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy," <u>Journal of Finance</u>, September 1968, pp. 589-609.
- Altman, Edward I. and Thomas P. McGough, "Evaluation of a Company as a Going Concern," <u>Journal of Accountancy</u>, December 1974, pp. 50-57.
- American Institute of Certified Public Accountants, "SAS No. 34, The Auditor's Considerations When a Question Arises About an Entity's Continued Existence," Codification of Statements on Auditing Standards, AICPA, New York, 1992.
- \_\_\_\_\_, "SAS No. 59, The Auditor's Consideration of an Entity's Ability to Continue as a Going concern," <u>Codification of Statements on Auditing Standards</u>, AICPA, New York, 1992.
- Arens, Alvin A. and James K. Loebbecke, <u>Auditing: An Integrated Approach</u>, Sixth Edition, Prentice Hall, Englewood Cliffs, New Jersey, 1994.
- Aurthur Andersen & Co., Coopers & Lybrand, Deloitte & Touche, Ernst & Young, KPMG Peat Marwick, and Price Waterhouse, "The Liability Crisis in the United States: Impact on the Accounting Profession," A Statement of Position, August 6, 1992.
- Asare, Stephen K., "The Auditor's Going Concern Decision: A Review and Implications for Future Research," <u>Journal of Accounting Literature</u>, Vol. 9, 1990, pp. 39-64.
- Bamber, E. Michael, Linda Smith Bamber, and Michael P. Schoderbek, "Audit Structure and Other Determinants of Audit Report Lag: An Empirical Analysis," <u>Auditing:</u>
  <u>A Journal of Practice and Theory</u>, Spring 1993, pp. 1-23.
- Bell, Timothy B. and Richard H. Tabor, "Empirical Analysis of Audit Uncertainty Qualifications," <u>Journal of Accounting Research</u>, Autumn 1991, pp. 350-370.
- Business Week, March 1, 1993, pp. 76-77.
- Carcello, Joseph V., Dana R. Hermanson and H. Renwick Huss, "Temporal Changes in Bankruptcy-Related Reporting," <u>Auditing: A Journal of Practice and Theory</u>, Fall 1995, pp. 133-143.

- Carcello, Joseph V. and Zoe-Vonna Palmrose, "Auditor Litigation and Modified Reporting on Bankrupt Clients," <u>Journal of Accounting Research</u>, Supplement 1994, pp. 1-30.
- Carmichael, D. R. and Kurt Pany, "Reporting on Uncertainties, Including Going Concern," The Expectation gap Standards: Progress, Implementation and Research Opportunities, AICPA, New York, 1993.
- Chen, Kevin C. W. and Bryan K. Church, "Default on Debt Obligations and the Issuance of Going-Concern Opinions," <u>Auditing: A Journal of Practice and Theory</u>, Fall 1992, pp. 30-49.
- Choi, Sung K. and Debra C. Jeter, "The Effects of Qualified Audit Opinions on Earnings Response Coefficients," <u>Journal of Accounting and Economics</u>, June/September 1992, pp. 229-247.
- Chow, Chee W. and Steven J. Rice, "Qualified Audit Opinions and Auditor Switching," The Accounting review, April 1982, PP. 326-335.
- Danos, P. and J. Eichenseher, "Long-Term Trends Toward Seller Concentration in the U.S. Audit Market," <u>The Accounting Review</u>, October 1986, pp. 633-650.
- DeAngelo, Linda E., "Auditor Independence, 'Low Balling', and Disclosure Regulation," <u>Journal of Accounting and Economics</u>, 1981, pp. 113-127.
- \_\_\_\_\_, "Auditor Size and Audit quality," <u>Journal of Accounting and Economics</u>, December 1981, pp. 183-199.
- \_\_\_\_\_, "Mandated Successful Efforts and Auditor Choice," <u>Journal of Accounting and Economics</u>, December 1982, pp. 171-203.
- DeFond, Mark L., "The Association Between Changes in Client Firm Agency Costs and Auditor Switching," <u>Auditing: A Journal of Practice and Theory</u>, Spring 1992, pp. 16-31.
- \_\_\_\_\_, and James Jiambalvo, "Factors Related to Auditor-Client Disagreements over Income-Increasing Accounting Methods," Contemporary Accounting Research, Spring 1993, pp. 415-431.
- Dhaliwal, Dan S., Jeffrey W. Schatzberg and Mark A. Trombley, "An Analysis of the Economic Factors Related to Auditor-Client Disagreements Preceding Auditor Changes," <u>Auditing: A Journal of Practice and Theory</u> Fall 1993, pp. 22-38.



- Johnson, W. Bruce and Thomas Lys, "The Market for Audit Services," <u>Journal of Accounting and Economics</u>, January 1990, pp. 281-308.
- Kida, Thomas, "An Investigation into Auditors' Continuity and Related Judgments,"

  <u>Journal of Accounting Research</u>, Autumn 1980, pp. 506-523.
- Knapp, Michael C. and Fara Elikai, Auditor Changes: A Note on Policy Implications of Recent Analytical and Empirical Research," <u>Journal of Accounting</u>, <u>Auditing and Finance</u>, Winter 1988, pp. 78-86.
- Krishnan, Jagan, "Auditor Switching and Conservatism," <u>The Accounting Review</u>, January 1994, pp. 200-215.
- \_\_\_\_\_, and Jayanthi Krishnan, "Litigation Risk and Auditor Resignations," working paper, 1995.
- Law, David B., "Audit Reporting for Failed Firms: Its Determinants and the Effect of Statement on Auditing Standards No. 59," Working Paper, April 1995.
- Levitan, Alan S. and James A. Knoblett, "Indicators of Exceptions to the Going Concern Assumption," <u>Auditing: A Journal of Practice and Theory</u>, Fall 1985, pp. 26-39.
- Louwers, Timothy J., "The Relationship Between Going Concern Opinions and the Auditor's Loss Function," working paper, October 1994.
- MACPA Newsline, February/March 1996, p.1.
- Maddala, G. S., "A perspective in the Use of Limited-Dependent and Quality Variables in Accounting research," <u>The Accounting Review</u>, October 1991, pp. 788-807.
- McKeown, James C., Jane F. Mutchler and William Hopwood, "Towards an Explanation of Auditor Failure to Modify the Audit Opinions of Bankrupt Companies,"

  <u>Auditing: A Journal of Practice and Theory</u>, Fall 1991, pp. 30-49.
- Mutchler, Jane F., "Auditors' Perceptions of the Going-Concern Decision," <u>Auditing: A Journal of Practice and Theory</u>, Spring 1984, pp. 17-30.
- \_\_\_\_\_, "Multivariate Analysis of the Auditor's Going Concern Opinion Decision," Journal of Accounting Research, Autumn 1985, pp. 668-682.
- \_\_\_\_\_, and David D. Williams, "The Relationship Between Audit Technology, Client Risk Profiles and the Going-Concern Opinion Decision," <u>Auditing: A Journal of Practice and Theory</u>, Fall 1990, pp. 39-54.

- National Commission on Fraudulent Financial Reporting, <u>National Commission on Fraudulent Financial Reporting</u>, October 1987.
- Nogler, George E., "The Resolution of Auditor Going Concern Opinions," <u>Auditing: A Journal of Practice and Theory</u>, Fall 1995, pp. 54-73.
- Schwartz, Kenneth B. and Billy S. Soo, "An Analysis of Form 8-K Disclosures of Auditor Changes by Firms Approaching Bankruptcy," <u>Auditing: A Journal of Practice and Theory</u> Spring 1995, pp. 125-136.
- \_\_\_\_\_, "The Association Between Auditor Changes and Reporting Lags," working paper, 1996.
- Schwartz, Kenneth B. and Krishnagopal Menon, "Auditor Switches by Failing Firms," The Accounting Review, April 1985, pp. 248-261.
- Securities and Exchange Commission, "Accounting Series Release No. 165, Reporting disagreements with Former Accountants Adoption of Amendments of Requirements," <u>SEC Accounting Guide</u>, Commerce Clearing House, Chicago, IL, 1976.
- \_\_\_\_\_, "Financial Reporting Release No. 31, Declare Amendments to Regulation S-K, Form 8-K, and Schedule 14A Regarding Changes in Accountants and Potential Opinion Shopping Situations," <u>SEC Accounting Guide</u>, Commerce Clearing House, Chicago, IL, 1988.
- \_\_\_\_\_, "Financial Reporting Release No. 34, Accelerations of the Timing for Filing
  Forms 8-K Relating to Changes in Accountants and Resignations of
  Directors," <u>SEC Accounting Guide</u>, Commerce Clearing House, Chicago, IL,
  1989.
- Smith, David B., "Auditor 'Subject to' Opinions, Disclaimers and Auditor Changes,"

  <u>Auditing: A Journal of Practice and theory</u>, Fall 1986, pp. 95-108.
- Simunic, D., "The Pricing of Audit Services: Theory and Evidence," <u>Journal of Accounting Research</u>, Spring 1980, pp. 161-190.
- Teoh, Siew Hong," Auditor Independence, Dismissal Threats and the Market Reaction to Auditor Switches," <u>Journal of Accounting Research</u>, Spring 1992, pp. 1-20.
- \_\_\_\_\_, and T. J. Wong, "Perceived Auditor Quality and the Earnings Response Coefficient," The Accounting Review, April 1993, pp. 346-367.
- The Wall Street Journal, December 26, 1995, p.2.

- Wallace, Wanda, <u>The Economic Role of the Audit in Free and Regulated Markets</u>, Touche Ross & Co., 1980.
- Williams, David D., "The Potential Determinants of Auditor Changes," <u>Journal of Business</u>, Finance and Accounting, Summer 1988, pp. 243-261.
- Wilson, Thomas E. Jr. and Richard A. Grimlund, "An Examination of the Importance of An Auditor's reputation," <u>Auditing: A Journal of Practice and Theory</u>, Spring 1990, pp. 43-59.
- Zmijewski, Mark E., "Methodological Issues Related to the Estimation of Financial Distress Prediction Models," <u>Journal of Accounting Research</u>, Supplement 1984, pp. 59-82.

