DO PUBLICLY TRADED COMPANIES ENGAGE IN OPINION SHOPPING AFTER RECEIVING A GOING CONCERN AUDIT OPINION? EVIDENCE FROM U.S. FIRMS IN THE POST-SOX ERA

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Abstract

Audit opinion shopping continues to be of significant interest to regulators and is also of interest to investors and the public. This study examines whether in the post-SOX (Sarbanes-Oxley Act) era, publicly traded companies in the U.S. engage in the act of shopping for audit opinions after receiving a going concern opinion (GCO). We further examine whether auditor firm size (Big 4 versus non-Big 4) affects such activities. Using data from Compustat and Audit Analytics we identify financially distressed publicly-held U.S. firms between 2004 and 2015. Adopting the framework developed by Lennox (2000), we examine the difference in the probabilities between auditor switching and no-switching scenarios. We find evidence that public companies in the U.S. who receive GCOs are successful in shopping for clean audit opinions in a subsequent period. We also find that audit opinion shopping activities are more common among public companies who switch to non-Big 4 auditors as opposed to those who switch to Big 4 auditors. Our paper fills the gap in the literature by examining whether, in the post-SOX era, publicly-held firms in the U.S. engage in the act of shopping for audit opinions, after receiving a GCO.

Keywords: Going Concern Opinion, Audit Opinion Shopping, Big 4, Non-Big 4

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1. INTRODUCTION

Eickemeyer and Love (2016) note that "a basic concept in financial reporting is the assumption that an entity will continue in existence long enough to use its existing assets and discharge its liabilities in the normal course of doing business (i.e., the going concern assumption)" (p. 6). Since the issuance of Statement on Auditing Standards (SAS) 59 in 1988 (American Institute of Certified Public Accountants [AICPA], 1988), auditors have had an affirmative responsibility to assess their clients' financial health and whether there is substantial doubt about their ability to continue as a going concern. When the auditor concludes such doubts exist and management's plans to address the problem seem insufficient, professional standards require auditors to report going concern doubts through an emphasis

of a matter paragraph in their reports on financial statements (AU-C 570.24 and AS 3101.18.a). Although the general assumption of business continuation is conceptually straightforward, "…it is often extremely difficult to determine *when* [emphasis added] an entity's continuing existence is in such doubt that management needs to disclose that possibility in a note to its financial statements, and its auditors need to modify their report to acknowledge that risk" (Eickemeyer & Love, 2016, p. 6). That determination is subject to professional judgment, thus at-risk publicly traded companies may seek auditors who will not express a modified going-concern opinion.

The Financial Accounting Standards Board (FASB), as per the 2014 update, requires management to assess going concern and disclose plans if there is substantial doubt (ASC 205.40.50), and auditors are required to disclose going concern doubts in their audit reports by both the Public Company Accounting Oversight Board (PCAOB) (AS 3101.18) and the AICPA (AU-C 570.24). The purpose of this paper is to examine whether firms that receive going concern opinions (GCOs) from their current auditors shop for audit opinions by switching auditors in the following year.

We posit that the relevance of our study stems from the continued interest of regulators, practitioners, and gaps remaining in academic research in the area of GCOs and auditor switches. Audit reporting for going-concern uncertainties remains to be of significant interest to regulators (PCAOB, 2008, 2011a, 2011b, n.d.; Baumann, 2010; Geiger et al., 2019; Vasquez, 2021), and PCAOB (2011b) has been increasingly concerned about audit opinion shopping. Going concern opinions are also noted to be heavily used as a measure of audit quality in the stream of non-audit services archival literature (Quick et al., 2023). In a 20-year review of GCOs from the Audit Analytics U.S. Securities and Exchange Commission (SEC) audit opinions database, Pupecki et al. (2023) find that out of the opinion issued, the percentage of filers receiving GCOs range from 18.5% to 28.3%, annually, thus pointing to a sizable population of public firms. Early research on GCOs found no evidence of audit opinion shopping (Chow & Rice, 1982; Krishnan & Stephens, 1995). Most recent research that found evidence of audit opinion shopping focused on markets outside of the U.S., and, therefore, is not generalizable to the U.S. (Defond & Zhang, 2014). U.S.-based research on GCO switches remains limited (Geiger et al., 2019). Hence our study fills this void and attempts to bridge the gap between the theoretical literature about audit opinion shopping and its implications for the profession.

Furthermore, the environment of auditing has changed in recent years, particularly following the auditing and governance changes brought about by the passage of the Sarbanes-Oxley Act (SOX) of 2002, which resulted in a substantial restructuring of the audit market, thus highlighting the need for post-SOX timeframe research. Therefore, the purpose of this paper is to examine audit opinion shopping in the year following the receipt of GCOs by U.S. public companies after the passage of SOX. Newton et al. (2016) argued that high litigation costs associated with Type II audit opinion "errors"[1] in the U.S. might effectively prevent distressed clients from shopping for favorable audit opinions. However, Carcello and Neal (2003) found that companies with a higher percentage of affiliated directors on the audit committee are more successful in opinion shopping. This leads us to our first research question:

RQ1: Are public companies that received a GCO but remained subsequently viable more likely to engage in subsequent audit opinion shopping?

Newton et al. (2016) investigated whether companies shop for opinions on internal control over financial reporting (ICFR) in the U.S. market. It has been documented that companies reporting internal control weaknesses tend to be more risky and less profitable (Ashbaugh-Skaife et al., 2007) and, therefore, more likely to be audited by non-Big 4 audit firms (Ettredge et al., 2011). Furthermore, Desai et al. (2022) find that the effect of litigation costs on GCO reporting is different between Big 4 and non-Big 4 firms as their expected costs and benefits are different. However, specifically in the post-SOX era, limiting an audit opinion shopping study to simply Big 4 audit firms, as Newton et al. (2016) did, may likely leave out a sizable portion of opinion shopping activity that is conducted by companies who have non-Big 4 auditors. Therefore, our study includes all U.S. public companies, irrespective of the size of their audit firm so that we can consider our second research question:

RQ2: Is audit opinion shopping more likely among companies that switch to non-Big 4 audit firms as opposed to companies that switch to Big 4 audit firms after they receive a GCO?

Unlike prior researchers, who assumed all auditor switches after a GCO were the result of opinion shopping and implied non-switching companies had not shopped, Lennox (2000) argued that clients who engage in opinion shopping, whether or not they received a GCO, might conclude that the likelihood of receiving a GCO from the new auditor would be at least as high as from the old, thus the result of shopping was staying put. We follow the "what if" research framework of Lennox (2000), applying it to U.S. companies after SOX went into effect, to determine whether companies successfully engage in audit opinion shopping following the receipt of GCOs.

In addition, we also explore whether audit opinion shopping is more likely among public companies that switch to non-Big 4 audit firms versus Big 4 audit firms for their annual audits. DeAngelo (1981) has argued that large auditors have more incentive to issue accurate reports because they have more valuable reputations. It has also been documented that investors view Big 4 issued GCOs more adversely than GCOs issued by non-Big 4 audit firms (Menon & Williams, 2010). As such, Big 4 audit clients may have more incentive to shop for clean opinions than non-Big 4 clients do, and they might be more likely to switch to non-Big 4 audit firms following a GCO.

Our paper attempts to bridge the gap between the theoretical literature about audit opinion

[1] A Type II audit opinion error occurs when the auditor's opinion does not express going concern uncertainties and the client subsequently files for bankruptcy. A Type I error, by contrast, is when an unwarranted GCO is issued.

shopping and its implications for the profession. A finding that opinion shopping appears to be successful at times may prove useful to the PCAOB as it evaluates audit deficiencies and their implications, particularly if it is more common when switches are made to non-Big 4 firms rather than to Big 4 firms.

The next Section 2 discusses the background and literature for going concern audit opinions and audit opinion shopping. Section 3 provides a description of the research design and the sample. Finally, Section 4 provides the results and discussion, and Section 5 is reserved for the conclusion.

2. LITERATURE REVIEW

2.1. Going concern opinions

Many legislative hearings over the years have taken auditors to task for not providing sufficient early warning of impending client failures through a warning in the annual audit reports (U.S. House of Representatives, 1985, 1990, 2002). Such criticism by legislators and the media arises from the failures of large public companies within a short timeframe of receiving "clean opinions" from their auditors (Weil, 2001; Bryan-Low, 2002; Breeden, 2002; McTague, 2011). Empirical evidence from prior research also shows that only about half of U.S. public companies entering bankruptcy had received a GCO on the last set of financial statements released to the public prior to bankruptcy (Geiger et al., 2005; Feldmann & Read, 2010). Feldmann and Read (2013) find that GCOs are material to investors, as they result in lowered credit ratings for companies before they subsequently file for bankruptcy. Legislative concern about audit reporting for distressed firms is evident in the auditor responsibilities, codified through the Private Securities Litigation Reform Act of 1995, in the presence of going-concern uncertainties, despite those responsibilities having already been incorporated into SAS No. 59 (AICPA, 1988).

Prior studies related to GCOs routinely assume that there are costly consequences associated with each of the two types of reporting errors (Kida, 1980; Carcello & Neal, 2003). In the case of a Type I error, clients respond negatively to audit reports modified for going concern, especially if they view the report as unwarranted. Clients may respond by switching to a different auditor, seeking a clean opinion from the incoming auditor (Carcello & Neal, 2003). However, in the case of a Type II error, auditors may incur costs due to litigation and loss of reputation. Incoming auditors may not be willing to risk litigation and loss of reputation by issuing a clean opinion to a company that has received a GCO from the previous auditor (Bell et al., 2001).

All of the above-cited studies, however, use data from the years prior to 2000. The failures of Enron and Andersen, and the subsequent enactment of SOX, have substantially changed the environment of auditing. For example, SOX has multiple sections that seek to strengthen the independence and functioning of auditors, including creating a new external regulatory oversight body (the PCAOB). Such changes make it more likely that auditors would be more willing to issue a GCO, which in turn can affect the likelihood of a dismissal after a GCO. Geiger et al. (2005) find that the proportion of bankrupt firms with a prior GCO was 40% prior to the Enron collapse but increased to 70% afterward, indicating auditor aversion to Type II risk. In addition, SOX shifted the locus of hiring the auditor from management to the audit committee. To the extent audit committees protect the interests of shareholders, the auditors should be less likely to be dismissed if they can explain to the audit committee their basis for a GCO. A manager may be more likely to view the GCO as a personal reflection of managerial skills and hence more likely to seek punishment of the auditor than would the audit committee, which is not directly involved in the operations of a company.

2.2. Audit opinion shopping

DeFond and Zhang (2014) define opinion shopping as when clients seek successor auditors who will be willing to issue an unqualified opinion when their incumbent auditors threaten not to do so. Chow and Rice (1982) found that clients who switched auditors after receiving a qualified opinion were no less likely to get a qualified opinion than those who did not switch. However, Smith (1986) found that opinion shopping after a qualified opinion can be successful.

DeFond and Zhang (2014) in their extensive review of archival auditing literature, find that opinion shopping in the wake of a GCO does not impair auditor independence but find mixed evidence about whether opinion shopping regarding GCOs is effective, i.e., may or may not have the desired outcome for the client. Pupecki et al. (2023) report that, in the sixteen years preceding the COVID-19 pandemic, an average of 8.5% of firms receiving a GCO did not receive one the following year, which they attribute to financial improvement, but they do not report auditor switches or a basis for their conclusions. The research into opinion shopping in the 20th century examined companies that changed auditors, but it failed to study those companies that considered changing but did not, that is to say, they shopped but stayed put. Lennox (2000) was the first to explicitly address this problem empirically. He modeled opinion shopping by contrasting the likelihood that a company would get a clean opinion by switching auditors to the likelihood that a company would get a clean opinion by staying put. He tested those contrasting predictions against what the clients actually did, and from that analysis concluded that opinion shopping was effective, regardless of which decision they made.

The opportunity for public companies to switch auditors for the purpose of getting a more favorable opinion is not new, but it has been of particular interest in the context of proposals for mandatory firm rotation. In a testimony before the United States Senate, concerning investor protections in the wake of Enron and other audit failures, Harvey Pitt, then Chairman of the SEC, expressed concern that mandatory firm rotation would lead to opinion shopping (Pitt, 2002). Similarly, in Release No. 2011-006, the PCAOB notes a concern that mandatory audit firm rotation would encourage audit opinion shopping and might lead accounting firms to reduce audit quality to attract new clients.

The same release quotes the former CEO of Deloitte, who opined that a rotation requirement "would allow companies to disguise opinion shopping by enabling them to portray a voluntary change in auditors as obligatory" (PCAOB, 2011b, p. 13). Although the PCAOB dropped its auditor rotation project, the board remains focused on issues related to auditor independence and, consequently, opinion shopping (Chasan, 2012; Pitt, 2012). Given strong regulatory interest and changes in audit committee independence brought forth by SOX, public companies may find it harder to shop for clean opinions.

2.3. Opinion shopping regarding internal control over financial reporting

Ettredge et al. (2011) considered whether auditor dismissals resulting from adverse auditor opinions on ICFR were a result of opinion shopping. However, they found that auditor switches were more strongly related to improving the quality of financial reporting by switching to a Big 4 or to an industry specialist. Newton et al. (2016) applied the Lennox (2000) model to examine internal control audits in the U.S. and showed that U.S. companies successfully engaged in ICFR opinion shopping. However, they only examined companies audited by Big 4 audit firms. This omission leaves out a significant number of companies that are audited by non-Big 4 audit firms and who are likely to shop for audit opinions as well.

2.4. Opinion shopping and audit firm size

Another hypothesis is that auditors with more wealth at risk from litigation have more incentive to issue accurate reports (Dye, 1991). Big 4 audit firms face a higher risk of litigation in the event of Type II errors (Dye, 1991), and, therefore, should be much less likely to assist their clients in audit opinion shopping. Ettredge et al. (2011) found that a downward auditor-client alignment from Big 4 to non-Big 4 audit firms was associated with corporate governance characteristics. They also found that leniency may be more likely among non-Big 4 auditors. Similarly, Cassell et al. (2012) found that Big N firms reacted to regulatory changes by altering their client portfolios to control for Type II risk. Therefore, in the post-SOX environment, it seems highly unlikely the Big 4 firms would be willing to accept clients that had received a GCO and had dismissed their auditor.

Moreover, Menon and Williams (2010) found that GCOs issued by Big 4 audit firms are likely viewed as more adverse by investors than GCOs issued by non-Big 4 audit firms. Thus, it is likely that companies that receive GCOs from Big 4 audit firms are more motivated to shop for a clean opinion since they are more likely to lose value as opposed to companies that receive GCO from non-Big 4 audit firms.

Newton et al. (2016) found that audit opinion shopping may be more likely among Big 4 clients who switch to the services of a non-Big 4 firm. They found weaker evidence that audit opinion shopping takes place among clients switching from one Big 4 audit firm to another. This weak finding could be due to the fact that their sample of incumbent auditors included only Big 4 audit firms, and, therefore, may have left out a significant number of companies who are audited by non-Big 4 audit firms in the preceding year and may have switched.

Our determination to investigate audit opinion shopping following the receipt of a GCO is based on the changed audit environment and increased auditor scrutiny in the post-SOX era, as well as the findings that ICFR opinion shopping (only relevant post-SOX) has taken place. We also believe that by applying Lennox's (2000) model, validated in the U.K., to data from the U.S. markets, we may be able to inform current discussions related to auditor reporting decisions and auditor independence more broadly. This study also includes all incumbent audit firms to overcome the limitation of prior studies that have only considered Big 4 clients.

3. METHODOLOGY

3.1. Research design

Considerable GCO research (Chow & Rice, 1982; Smith, 1986) relies on auditor switching as evidence of opinion shopping, but Lennox (2000) argues this is a poor proxy for opinion shopping, as it relies on the assumption that those firms that did not switch auditors after receiving a GCO did not shop, when in fact they may have weighed the option of switching but decided to stay put. Therefore, our empirical tests are based on the audit opinion shopping models of Lennox (2000). Specifically, we use an audit reporting model to determine a company's probability of receiving a GCO with an audit firm switch and again without a switch. The difference in the probabilities between the switch and no-switch scenarios is defined as the opinion shopping variable. If a public company engages in an audit opinion shopping following the receipt of a GCO, we should find that: 1) there is an audit firm switch when the value of the opinion shopping variable is negative, or 2) there is no audit firm switch when the value of the opinion shopping variable is positive. Empirically, a negative correlation between the audit opinion shopping variable and observed audit firm switching suggests that public companies successfully engage in audit opinion shopping following receipt of a GCO (Lennox, 2000). To test for the existence of going concern opinion shopping, we follow a three-step process. First, we estimate a probit model, using all firms in our sample, to generate predictions for the probability that a client company will receive a GCO. Second, we use the coefficients from that model to estimate the probability that a given firm will receive a GCO if they switch auditors or if they stay with the incumbent auditor. Finally, we incorporate the two predictions from this model into a second model that investigates the relationship between going concern opinion shopping and subsequent auditor switch decisions.

The general form of the GCO opinion prediction model, the initial probit model noted above, is as follows:

$$GC_t = \alpha_1 + \alpha_2 SWITCH_t + \alpha_3 GC_{t-1} + \alpha_4 SWITCH_t GC_{t-1} + \alpha_5 X_t + \alpha_6 SWITCH_t X_t + \alpha_7 BIG_t + \alpha_8 SWITCH_t BIG_t + \varepsilon \quad (1)$$

where,

- GC_t = 1 if a company receives a GCO in year t and 0 otherwise;
- $SWITCH_t$ = 1 if a company is audited by a new firm in year t, and 0 otherwise[2];
- GC_{t-1} = 1 if a company receives a GCO in year t - 1 and 0 otherwise;
- $SWITCH_t GC_{t-1}$ is the interaction term;
- X_t is a vector of control variables that could affect auditor reporting decisions including firm size (*SIZE*), probability of bankruptcy (*ZSCORE*), and return on assets (*ROA*), following Geiger and Raghunandan (2001) and Geiger et al. (2006);
- $SWITCH_t X_t$ represents the interaction terms between the *SWITCH* dummy and the control variables following their inclusion in Lennox's (2000) model;
- BIG_t = 1 if a company is audited by a Big 4 firm in year t and 0 otherwise;
- $SWITCH_t BIG_t$ is the interaction term.

In the above probit model, we control for industry and year-fixed effects by including industry (one-digit Standard Industrial Classification (SIC) code) and year dummies. Details regarding all of these measures are presented in Appendix.

Following Lennox (2000), we then use the coefficients derived through probit to solve Eq. (1) twice: once for all sample firms setting *SWITCH* to 1, where the incumbent auditor was switched in year t, and again for all sample firms setting *SWITCH* to 0, where the incumbent auditor was retained in year t. To clarify, Eq. (1) was run to predict GC_t (the probability of a GCO in year t) as if each firm switched auditors and again assuming each firm stayed put, to generate two values of GC_t for each firm in the sample. We then use the two predicted values of GC_t for each company in the sample in the probit auditor switch Eq. (2). The difference between these two predicted values is used to calculate our audit opinion shopping variable (*OPSHOP*), which we use in the following probit auditor switch model[3]:

$$SWITCH_t = \alpha_1 + \alpha_2 OPSHOP_t + \alpha_3 Z_t + \alpha_4 BIG_t + \varepsilon \quad (2)$$

where,

- $SWITCH_t$ = 1 if a company is audited by a new firm in year t, and 0 otherwise;
- $OPSHOP_t$ is our opinion shopping variable, calculated as described above;
- Z_t is a vector of control variables (*LEV*, *SIZE*, *ZSCORE*, *ROA*, *CASHFLOW*) commonly included in studies investigating auditor changes (Lennox, 2000; Ettredge et al., 2011); and
- BIG_t = 1 if a company is audited by a Big 4 firm in year t, and 0 otherwise.

The controls in Z_t include the following variables: auditor size, client size, probability of bankruptcy, return on assets, and cash holdings. Following Lennox (2000), *OPSHOP* is equal to the predicted probability ($P1$) of receiving GCO when *SWITCH* = 1 minus the predicted probability ($P0$) of receiving a GCO when *SWITCH* = 0. In this framework, a client is determined to be opinion shopping if $P1 < P0$ and the client switches its auditor (*SWITCH* = 1) or if $P1 > P0$ and the client retains its auditor (*SWITCH* = 0). A negative value for the coefficient of α_2 in Eq. (2) would suggest that an audit opinion shopping exists.

Our second research question (*RQ2*) examines whether audit opinion shopping for GCOs is influenced by the audit firm size. To address this question, we first estimate Eq. (2) for only those companies audited by Big 4 firms in year t (i.e., BIG_t = 1). This eliminates all the switches to the non-Big 4 audit firms from the sample. Then we estimate the reduced form model using only companies audited by non-Big 4 firms (i.e., BIG_t = 0). This eliminates all the switches to the Big 4 audit firms from the sample. First, if α_2 is not significant when the model is estimated with BIG_t = 1, it would imply that Big 4 auditors do not facilitate audit opinion shopping. If both the models are significant, a more negative value of α_2 when the model is estimated for BIG_t = 0 than for BIG_t = 1 would suggest that audit opinion shopping is more likely when firm switches are made to non-Big 4 auditors.

3.2. Sample

We obtain data for our U.S. sample from Compustat and Audit Analytics. The fiscal year-ends of the publicly traded companies in our sample span the period from January 1, 2004, to December 31, 2015. We begin with 2004 to avoid the period during which Arthur Andersen was dissolved (prior to 2003), as their clients switched auditors during that period, which would bias our results. Following McKeown et al. (1991) and Hopwood et al. (1994), we retained only financially distressed companies at time t. As Carson et al. (2013) note in their review of GCO literature, researchers have used a wide variety of indicators of financial distress, with low profitability, higher leverage, and low net worth being among the most common. Using the taxonomy of GCO content by Audit Analytics, Desai et al. (2020) found the most commonly cited factors in the audit reports themselves were net operating losses and a working capital deficit. We, therefore, define financially distressed companies as the ones that have negative net income and negative working capital at year t. We then eliminated observations for which any of our variables of interest were missing. Our final sample consists of 3,795 firm years between 2004 and 2015, with industry distribution as shown in Table 1.

Table 1. Sample industry composition

1-digit SIC	*Industry*	*No.*	*%*
0	Agricultural and forestry	10	0.26
1	Mining, oil and gas, and others	560	14.77
2	Food, printing and publishing, chemicals, petroleum and coal, rubber and plastics	542	14.29
3	Metal, machinery and equipment, instruments	591	15.57
4	Transportation	561	14.78
5	Wholesale, retail	306	8.06
6	Financial	122	3.21
7	Business services, auto repair, recreation	846	22.29
8	Health, engineering and management service	184	4.85
9	Others	73	1.92
Total		**3,795**	**100**

[2] We used auditor switches in the model in order to maximize the number of observations. Audit Analytics reports whether switches were dismissals by the audit firm. We conducted a sensitivity analysis using only dismissals and found the same results.

[3] As in Lennox (2000), we also use raw (not normalized) predicted values to define *OPSHOP*.

The industry distribution within the sample as presented in Table 1 is based on the 1-digit SIC codes (0 through 9). The business services, auto repair, and recreation industry SIC represents the highest number of firms, or 22.29% of the sample, while only 0.26% of the sample belongs to the agricultural and forestry industry.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics and Pearson correlation

Table 2 presents descriptive statistics for the variables that are used in our study.

In our sample, 32.4% of the observations received a GCO in year *t*. The table also reveals that, although 43.3% of the sample used a Big 4 audit firm, auditor switching occurs in only 8.3% of our sample. This is not surprising since it has been documented that Big 4 audit firms avoid taking on risky clients in the post-SOX era (Ettredge et al., 2011). Furthermore, among the control variables, the average *ROA* is -6.67% and the average operating cash flow (*CASHFLOW*) is -0.238, similar to the studies (Carcello et al., 1995; Geiger et al., 2006; Arnedo et al., 2008).

Table 2. Descriptive statistics

Variable	*Mean*	*Std. dev.*	*75%*	*25%*
$SWITCH_t$	0.083	0.276	0	0
GC_{t-1}	0.248	0.432	0	0
GC_t	0.324	0.468	1	0
BIG_t	0.433	0.496	1	0
$SIZE_t$	4.506	2.704	6.500	2.619
$ZSCORE_t$	5.687	17.231	4.399	-0.286
ROA_t	-0.667	1.646	-0.045	-0.555
$OPSHOP_t$	0.142	0.488	0.341	-0.166
LEV_t	1.181	1.631	1.140	0.577
$CASHFLOW_t$	-0.238	0.724	0.063	-0.214

Table 3 presents a Pearson correlation matrix for key variables in the GCO model, Eq. (1). As expected from the review of the literature, GCOs in year t - 1 and auditor switches in year t are significantly correlated ($p < 0.05$). However, as Lennox (2000) noted, the correlation only captures the firms that actually switched, but it fails to capture those that may have determined that switching did not lessen their chance of another GCO and thus stayed put. For this reason, a closer look at the likelihood of a GCO under both options is warranted and as such is presented next.

Table 3. Pearson correlations for select key variables

Variables	$SWITCH_t$	GC_{t-1}	GC_t	BIG_t	$SIZE_t$	$ZSCORE_t$	ROA_t	$OPSHOP_t$	LEV_t	$CASHFLOW_t$
$SWITCH_t$	1									
GC_{t-1}	**0.178****	1								
GC_t	0.117	0.369	1							
BIG_t	-0.179	-0.134	-0.202	1						
$SIZE_t$	-0.126	-0.300	-0.358	0.638	1					
$ZSCORE_t$	0.066	0.133	0.279	-0.184	-0.422	1				
ROA_t	-0.077	-0.172	-0.314	0.207	0.458	-0.901	1			
$OPSHOP_t$	0.051	-0.187	0.222	-0.498	-0.700	0.804	-0.781	1		
LEV_t	0.040	0.097	0.233	-0.152	-0.364	0.923	-0.721	0.717	1	
$CASHFLOW_t$	-0.065	-0.226	-0.315	0.195	0.481	-0.731	0.797	-0.646	-0.607	1

*Note: Variable definitions are given in Appendix. ** Correlation coefficients are significant at the 5% level or greater.*

4.2. GCO prediction model

Table 4 presents the initial GCO prediction model. We estimate this model to generate the predicted values that are used to construct our opinion shopping variable (*OPSHOP*). In Table 4 we can see that the 0.933 coefficient for GC_{t-1} is positive and significant ($p < 0.01$), indicating that GCOs are more likely to be reported in the current period if they were reported in the previous period (GC_{t-1}). The results related to the control variables of the company *SIZE* and *ROA* show that the coefficients for both are negative and significant ($p < 0.01$), suggesting that GCOs are significantly more likely for smaller companies (*SIZE*) and less profitable companies (*ROA*). However, the coefficients of *ZSCORE* and *BIG* are not significant.

Table 4 also provides an initial look at the relationship between auditor switches and GCOs. The significant negative ($p < 0.01$) coefficient for $SWITCH_t GC_{t-1}$ interaction term reveals that if a client company with a previously existing GCO switches its auditor, it is significantly less likely to receive a GCO in the current period. This finding suggests two explanations. Either the financial position of the client company changes favorably such that the new auditor is more likely to issue a clean opinion, or the new auditor's judgment regarding substantial doubt about going concern is more lenient than those of the predecessor auditor. The latter argument appears more likely than the former because the simple act of changing the auditor is unlikely to improve the financial condition of the company. The incumbent auditor presumably judges the client's financial distress, and the client company should be well informed about the basis for that judgment. Thus, a decision to switch the auditor upon receipt of a GCO suggests that the incumbent auditor was an obstacle to receiving a clean opinion — that is, the negative coefficient for $SWITCH_t GC_{t-1}$ interaction term seems to provide evidence generally consistent with the notion of audit opinion shopping. Finally, we note that consistent with Lennox (2000), the coefficients of the interaction terms of *SWITCH* with the control variables are not significant at the conventional levels.

Table 4. GCO prediction model

Variable	*Coefficient*	*Z-statistic*
$SWITCH_t$	0.579**	2.15
GC_{t-1}	0.933***	14.66
$SWITCH_t GC_{t-1}$	-0.495***	-2.88
BIG_t	-0.025	-0.37
$SIZE_t$	-0.118***	-7.27
$ZSCORE_t$	0.005	1.10
ROA_t	-0.134***	-3.01
$SWITCH_t BIG_t$	-0.138	-0.53
$SWITCH_t SIZE_t$	-0.082	-1.58
$SWITCH_t ZSCORE_t$	0.013	0.65
$SWITCH_t ROA_t$	-0.061	-0.39
Industry & year	Yes	
Observations	3795	
Pseudo R^2	0.224	

*Note: Variable definitions are given in Appendix. Standard errors are clustered by company. ***, **, and * indicate two-tailed statistical significance at the 1%, 5%, and 10% respectively.*

4.3. Research question 1: Auditor switch model

Our first research question (*RQ1*) was whether companies that received a GCO but remained viable engaged in opinion shopping and as such we analyzed the $OPSHOP_t$ variable in the auditor switch model. Table 5 presents the probit regression results for the audit firm switching model (Eq. (2)). Column 1 in Table 5, demonstrates a negative and significant ($p < 0.01$) coefficient for $OPSHOP_t$, which suggests that companies do seem to be successful at shopping for GCOs. In other words, companies may successfully switch (retain) audit firms if the new audit firm is more (less) likely to issue a clean opinion. Thus, companies appear to successfully engage in shopping for clean opinions[4].

Table 5. Auditor switch model

Variable	*(1)*		*(2)*	
	Coefficient	*Z statistic*	*Coefficient*	*Z statistic*
$OPSHOP_t$	-1.171***	-8.45		
GC_{t-1}			0.580***	8.45
LEV_t	-0.096**	-1.99	-0.096**	-1.99
BIG_t	-1.012***	-9.19	-0.850***	-8.04
$SIZE_t$	-0.051**	-2.44	0.045**	2.17
$ZSCORE_t$	0.029***	3.99	0.013*	1.94
ROA_t	-0.067	-1.27	0.004	0.07
$CASHFLOW_t$	0.056	0.79	0.056	0.79
Industry & year	Yes		Yes	
Observations	3795		3795	
Pseudo R^2	0.126		0.126	

*Note: $OPSHOP_t$ is the opinion shopping variable measured by the difference in the predicted values at t of Eq. (1) with and without the auditor switch. Other variable definitions are given in Appendix. Standard errors are clustered by company. ***, **, and * indicate two-tailed statistical significance at the 1%, 5%, and 10% respectively.*

The control variables presented in column 1 of Table 5 show that the company *SIZE* coefficient is negative and significant ($p < 0.05$), the company bankruptcy probability (*ZSCORE*) coefficient is positive and significant ($p < 0.01$), and the company leverage (*LEV*) coefficient is negative and significant ($p < 0.05$). The interpretation of these results implies that auditor switches are more likely for smaller companies (*SIZE*), companies with greater bankruptcy risk (*ZSCORE*), and companies with solvency issues (*LEV*), respectively. In addition, the coefficient for the indicator variable of the company's auditor being a Big 4 firm (*BIG*) is negative and significant ($p < 0.01$), suggesting that companies audited by Big 4 firms are less likely to switch auditors. We do note that the coefficients of *ROA* and *CASHFLOW* are not significant at the conventional levels.

To further understand the negative coefficient of the opinion shopping variable (*OPSHOP*) in the audit firm switching model (Eq. (2)), we run the multivariate regression of $SWITCH_t$ on GC_{t-1} and other control variables and present them in column 2 of Table 5. The regression results in column 2 further confirm the significant correlation between $SWITCH_t$ and GC_{t-1} previously shown in the Pearson Correlations (Table 3). Specifically, column 2 shows that the coefficient on GC_{t-1} is positive and significant at the 1% level, indicating that companies previously receiving GCOs are significantly more likely to experience an audit firm switch. This result is not surprising given our earlier findings that audit firm switching decreases audit reporting persistence for companies previously receiving GCOs (Table 4), and that companies engage in shopping for GCOs (Table 5, column 1). The remaining variables' significance remained similar to column 1.

4.4. Research question 2: Audit firm size and auditor switch model

Table 6 addresses our second research (*RQ2*) question regarding the relationship between shopping for going concern opinion and auditor firm size, that is, whether opinion shopping was more likely among companies that switched to non-Big 4 firms than vice-versa. Column 1 of Table 6 presents the probit regression results for the audit firm switching model (Eq. (2)) for switches to non-Big 4 auditors only. In column 1, the results demonstrate the negative and significant ($p < 0.01$) coefficient on $OPSHOP_t$, suggesting that companies do seem to be successful at shopping for GCOs when they switch to non-Big 4 audit firms. The control variables presented in column 1 of Table 6 for non-Big 4 auditors show that the company *SIZE* coefficient is marginally negative and significant ($p < 0.1$), the company bankruptcy probability (*ZCORE*) coefficient is positive and significant ($p < 0.01$), and the company leverage (*LEV*) coefficient is negative and significant ($p < 0.05$). Thus, consistent with the auditor switch model (Table 5), auditor switches to non-Big 4 are more likely for small companies, companies with greater bankruptcy risk, and companies with higher leverage, respectively. We do note that the coefficients of *ROA* and *CASHFLOW* are not significant at the conventional levels.

Column 2 of Table 6 presents the probit regression results for the audit firm switching model for switches to Big 4 auditors only. The coefficient for $OPSHOP_t$ is less significant when compared to column 1, only at the 5% level, and outside of company *SIZE* being positive and significant at only 10%, none of the control variables are significant, indicating weaker evidence that companies switching to Big 4 auditors are successful in

[4] As a sensitivity analysis, we also ran the model replacing $OPSHOP_t$ with $OPSHOPPROB_t$, the difference in the conditional probability of receiving a GCO with or without audit firm switches. Our results were similar.

shopping for audit opinions. This finding is consistent with the findings of Newton et al. (2016), which found weak evidence for opinion shopping for switches to Big 4 audit firms as opposed to switches to non-Big 4 audit firms.

Table 6. Audit firm size and auditor switch model

Variable	*(1) Non-Big 4*		*(2) Big 4*	
	Coefficient	*Z statistic*	*Coefficient*	*Z statistic*
$OPSHOP_t$	-1.254***	-8.28	-0.750**	-0.22
LEV_t	-0.972**	-1.89	0.072	-0.22
BIG_t	0	omitted	0	omitted
$SIZE_t$	-0.042*	-1.67	0.081*	-1.80
$ZSCORE_t$	0.029***	3.92	0.032	0.55
ROA_t	-0.079	-1.42	-0.498	1.23
$CASHFLOW_t$	0.049	0.66	-0.293	-1.18
Industry & year	Yes		Yes	
Observations	2151		1497	
Pseudo R^2	0.0791		0.056	

*Note: $OPSHOP_t$ is the opinion shopping variable measured by the difference in the predicted values at t of Eq. (1) with and without the auditor switch. Other variable definitions are given in Appendix. Standard errors are clustered by company. ***, **, and * indicate two-tailed statistical significance at the 1%, 5%, and 10% respectively.*

In summary, the results of our analysis for addressing *RQ1* and *RQ2* demonstrate that in the post-SOX era, public companies that received a GCO but remained subsequently viable do engage in subsequent audit opinion shopping, and that audit opinion shopping is more likely among public companies that switch to a non-Big 4 audit firm as opposed to a Big 4. The results also suggest that such switches are more likely for smaller public companies and ones with greater risk of bankruptcy and insolvency.

5. CONCLUSION

In this paper, we examine audit opinion shopping subsequent to the receipt of a GCO by public companies in the United States, in the post-SOX environment. We find that GCOs tend to be sticky and that if a client company with a pre-existing GCO switches its auditor, it is significantly less likely to receive a GCO in the subsequent period. This finding suggests that companies appear to successfully engage in shopping for clean audit opinions. We also find that companies do seem to be especially successful at shopping for GCOs when they switch to non-Big 4 audit firms.

Despite initial research not detecting evidence of audit opinion shopping (Chow & Rice, 1982; Krishnan & Stephens, 1995), more recent research that does identify such practices, is limited to non-U.S. markets (Defond & Zhang, 2014). As such, research concerning GCO switches within the U.S. context and in the post-SOX era has remained underexplored (Geiger et al., 2019). Therefore, our paper contributes to this literature related to audit opinion shopping activities subsequent to the issuance of GCOs in the post-SOX era and based on a sample of U.S. public firms.

Our study has implications for the profession as well. Our conclusion that clients can successfully shop for an opinion without a GCO may inform the PCAOB as it evaluates its audit deficiency assessments. Of particular relevance is our finding that more significant opinion shopping activity appears to exist when switches are made to non-Big 4 firms as opposed to Big 4 firms, suggesting that added scrutiny in this setting may be appropriate to ensure that high audit and accounting information quality is maintained.

Finally, the results of this study should be interpreted with certain limitations in mind, similar to prior research on the topics of audit opinion shipping and GCOs. Given that our sample is limited to publicly traded companies for which data is readily available in Compustat and Audit Analytics, it excludes privately held firms that may also be engaging in audit opinion shopping following a GCO. In addition, Pupecki et al. (2023) find a 43% decrease in GCO improvements (called "clean opinions" issued to public companies in the year following a GCO) in 2022, a downward trend that began in 2020. Future research should, therefore, expand on the methodology to incorporate alternative approaches, such as surveys or hypothetical scenarios, in order to include other types of companies and settings and further explore the reasons for GCO improvement declines.

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APPENDIX

Table A.1. Variable definitions

Variable	*Definition*
$SWITCH_t$	An indicator variable that equals to 1 if an auditor is changed from *t* - 1 to *t* and 0 otherwise.
$OPSHOP_t$	An opinion shopping variable estimated from the going concern opinion model (Eq. (1)), is defined as the difference between the predicted value of receiving a GCO if the company experiences an auditor change and the predicted value of receiving a GCO if the company does not experience an auditor change.
GC_{t-1}	An indicator variable that equals to 1 if a company receives going concern opinion at *t* - 1 and 0 otherwise.
GC_t	An indicator variable that equals to 1 if a company receives going concern opinion at *t* and 0 otherwise.
BIG_t	An indicator variable that equals to 1 if an auditor at *t* is a Big 4 auditor and 0 otherwise.
$SIZE_t$	Natural log of assets at *t*.
$ZSCORE_t$	Bankruptcy probability is estimated using Zmijewski's (1984) model.
ROA_t	Return on assets which is estimated income before tax divided by total assets at *t*.
LEV_t	Leverage is calculated by total liabilities divided by total assets at *t*.
$CASHFLOW_t$	Net cash flow from operating activities at *t* divided by total assets at *t*.