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Does a Manager Respond to a Going-Concern Audit Opinion with an Asymmetry in Gain and Loss?

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Abstract: In this paper, I investigate the relationship between previous going-concern audit opinions and subsequent asymmetric timeliness in accounting. Using the time-series and price-based models and conservatism proxy, I find that firms with going-concern audit opinions subsequently report losses in a more timely manner than firms that did not receive going-concern audit opinions. Furthermore, I also find that firms exiting going-concern audit opinions are more likely to report losses rather than gains in a timely manner, compared to firms non-exiting from going-concern opinions. This study extends the prior research by exploring the association between going-concern opinions and accounting conservatism from the perspective of client firms—that is, how firms behave strategically and conservatively to bypass going-concern opinions, once the firms had received previous going-concern opinions.

Keywords: going-concern audit opinion; accounting conservatism; business sustainability

Citation: Kim, T. Does a Manager Respond to a Going-Concern Audit Opinion with an Asymmetry in Gain and Loss? *Sustainability* **2021**, *13*, 4425. https://doi.org/10.3390/su13084425

Academic Editor: Zabihollah Rezaee

Received: 22 February 2021
Accepted: 9 April 2021
Published: 15 April 2021

1. Introduction

SAS No. 59 states that an auditor is required to assess a client's ability to continue as a going-concern and has the responsibility to modify the audit opinion if the auditor's assessment of the client's going-concern status leads to substantial doubt [1]. In 2011, 228 companies filed a going-concern and proceeded to file a termination of SEC registration. This number represents nearly 9% of the total number of firms with going-concern audit opinions (hereafter, GCOs). An estimated 19% of audit opinions filed with the SEC for 2010 raised some uncertainty with respect to the auditor's going-concern assumption and issued going-concern reports [2]. Although the percentage of GCOs shows a downward trend as of 2008, the 2010 estimate of audit opinions appears to still reflect a high percentage, which implies that a considerable number of firms suffer from a going-concern problem with negative financial trends or conditions.

According to Menon and Williams [3], investors react negatively to auditors' issuance of GCOs, which implies that GCOs are informative to the market. Blay et al. [4] reported that the market interprets GCOs as a communication of risk, which leads to the structural shift in the market valuation for distressed firms. As GCOs work as a signal of firms with financial distress, it is natural that the firms' management tries to avoid receiving GCOs, and such management is often tempted to change the incumbent auditor and shop for clean audit opinions, which involves "the search for an auditor willing to support a proposed accounting treatment designed to help a company achieve its reporting objectives even though that treatment might frustrate reliable reporting" [5].

Prior studies have demonstrated that accounting conservatism reduces agency costs by improving corporate governance and contracting efficiency [6–12]. Accounting conservatism also reduces information asymmetry and has increased demand when agency concerns are high [13,14]. Furthermore, DeFond et al. [15] found that the client firm's conditional conservatism affects the auditor's contracting or opinions. According to this logic, if accounting conservatism is valued by the auditor [15], the client's conservatism

in financial reporting can be less costly than shopping for clean audit opinions, which involves firing the incumbent auditor in order to maintain the integrity of the financial reporting process. Nonetheless, how management responds to the auditor's decision to issue a GCO remains an empirical question.

Thus, I investigate the relationship between the previous issuance of GCOs and the firms' subsequent accounting conservatism. By extending the time-series and price-based regression models employed by Basu [16] and the firm-specific conservatism proxy (C-Score) used by Khan and Watts [17] as accounting conservatism measures over the sample period from 2000 to 2013, I find that the firms with GCOs subsequently report losses in a more timely manner than the firms that did not receive GCOs. Furthermore, firms exiting GCOs are more likely to report losses rather than gains in a timely manner, compared to firms non-exiting from GCOs. Overall, my results suggest that firms respond to GCOs by increasing the degree of accounting conservatism.

This work provides new insights into the strategic perspective of client management. GCOs may prompt management to accelerate recognition of gains to clear away the auditors' substantial doubt on the clients' ability to continue as a going concern. If firms receiving GCOs in earlier fiscal periods subsequently choose to recognize losses rather than gains in a more timely manner to exit from GCOs, auditors' assessments on management's going-concern evaluations may change as auditors value accounting conservatism. This is consistent with the view that management has incentives of conservative accounting for earnings and net assets [18].

This study contributes to the sustainability literature in accounting. The extant literature of sustainability focuses on the importance of corporate sustainability accounting as a set of tools for management decision making. I show that firms' conservative accounting practices help management to improve auditors' assessment on management's going-concern evaluations. Essentially, going-concern is the same concept as sustainability in that there is substantial doubt about the company's ability to continue as a going-concern if the company lacks sustainability. My finding departs from the existing literature by highlighting the effect of accounting conservatism on the auditors' assessment process for firms' managing sustainability.

This study also contributes to GCOs and accounting conservatism literature. To the best of my knowledge, this study is the first to explore how firms respond to auditors' going-concern decisions by exhibiting their conservative behavior in financial reporting. This study is also consistent with the findings of DeFond et al. [15] in that conditional conservatism in accounting alleviates information uncertainty by associating a firm's reporting behavior in accounting with an auditor's discretionary decision on the firm's ability to continue as a going-concern. While prior literature still shows that accounting conservatism hampers earnings quality [19–21], this study extends the work of DeFond et al. [15] by confirming that accounting conservatism contributes to risk reduction, such as litigation risk and engagement risk, rather than poses an impediment to financial reporting quality.

The next section presents background and hypothesis development. Then, the research design and empirical results are provided. Lastly, I conclude the paper in the last section.

2. Background and Hypothesis Development

2.1. Issuance of GCOs

Going-concern is one of the most important assumptions in preparing the financial statement. By that assumption, the company is considered sustainable in-sight future and the auditor is required to evaluate the company's ability to continue the business as a sustained business. SAS No. 59 indicates that the auditor has the responsibility to evaluate whether there is substantial doubt about the entity's ability to continue as a going-concern for a reasonable period of time [1].

According to previous literature, auditors take into consideration litigation risk when issuing going-concern audit reports, and there is a positive association between litigation risk and GCOs [22,23]. Kaplan and Williams [24] also found that auditors' ex ante litigation

risk is positively associated with GCOs, while auditor litigation is negatively associated with GCOs. Carcello et al. [25] argued that the significant costs on a client inflicted by a GCO escalate the auditor's concern over client retention. Heninger [26] found that auditor's litigation risk is positively related with the degree of income-increasing accruals and that the firm's behavior in financial reporting is likely to be associated with a GCO in that auditor's litigation risk, as well as client retention matter, to the auditor's decision on a GCO. Dhaliwal et al. [27] reported that a comparatively higher incidence of receiving GCOs is observed in financially distressed firms depending more on major customers for sales. When auditors have access to private information on major customers' business risks, a higher exposure to litigation risk may drive the auditors to issue GCOs.

Several studies have examined the association between modified audit opinions and financial reporting quality and have demonstrated that a positive association exists between poor quality in financial reporting and modified audit opinions [28,29]. Accordingly, auditors consider firms' reporting quality in issuing modified audit opinions, which include GCOs, while auditors are not required to issue GCOs for firms with poor reporting quality. Furthermore, earlier studies document the audit committee's characteristics and GCOs [30]. Carcello and Neal [31] reported that there was a positive association between GCOs and independent audit committees. Hossain et al. [32] found that the abnormal tone of disclosures in firms' 10-K filings was positively associated with the likelihood of GCO issuance.

Another stream of research aims at the market's reaction to GCOs. Recent studies yield evidence that the market reacts negatively to GCOs. According to Fleak and Wilson [33], the market responds negatively to unexpected GCOs. Menon and Williams [3] found that investors react negatively to GCOs, which implies that GCOs are informative to the market. Blay et al. [4] found that the market interprets GCOs as a communication of risk, which leads to the structural shift in the market valuation for distressed firms. Chen et al. [34] investigated the relationship between GCOs and insider selling and found that firms are less likely to receive GCOs as the level of insider selling increases, suggesting the managers' intention to avoid GCOs with respect to negative market reactions to GCOs. They also found that the negative relationship between insider selling and GCOs is less pronounced when firms have more independent audit committees and when auditors are more sensitive to litigation exposure and reputation loss.

2.2. Benefits of Accounting Conservatism

Conservatism in financial reporting has been defined as "anticipate no profits but anticipate all losses" [18,35]. Such an asymmetric loss recognition has been one of the notable features of financial accounting. As Basu [16] interpreted conservatism as the difference of verification in recognizing good news and bad news, accounting conservatism indicates that more verification is required to recognize good news in financial reporting, rather than bad news. Accounting conservatism is also considered to be an efficient mechanism to reduce the cost of contracts for shareholders, as well as for debt holders [18]. The contracting explanation suggests that conservatism reduces agency costs by improving the corporate governance and contracting efficiency [6–12,36]. Ahmed et al. [6] argued that conservatism mitigates the conflicts of interest between shareholders and debt holders over dividend policy and plays a role in reducing costs of debt. Zhang [37] documented that conservatism in reporting earnings is beneficial to both lenders and borrowers in debt contracts by signaling a default risk or providing lower interest rates. Black et al. [38] suggested that investors demand accounting conservatism in response to concerns over managerial opportunism.

Consistent with the governance function, the role of accounting conservatism in reducing information asymmetry has evolved. Moerman [14] found evidence that accounting conservatism reduces information asymmetry in the secondary loan market. According to LaFond and Watts [13], information asymmetry is reduced by accounting conservatism, and, therefore, managers are less motivated to manipulate earnings. Prior studies also doc-

ument that accounting conservatism deters managers from earnings management [13,39]. Chen et al. [39] documented conservatism's role in mitigating earnings management under both valuation and stewardship roles of accounting numbers. Hence, contract efficiency can be improved under conservative accounting by diminishing managers' incentives to manipulate earnings. Overall, prior studies suggest that if agency concerns are high, accounting conservatism is in high demand.

In addition to mitigating information asymmetry, accounting conservatism plays a significant role in sweeping away information uncertainty by enhancing bad news accuracy. Furthermore, the probability of shareholder litigation can be influenced by the firm's choice of reporting bad news earlier, and then, firms are more likely to report losses in a timely manner [17,40,41]. Recent studies find the effect of accounting conservatism on firms' investment efficiency. Garcia Lara et al. [42] found that a positive association between accounting conservatism and investment efficiency stimulates low-risk and positive-NPV investments, suggesting that accounting conservatism alleviates underinvestment.

2.3. Hypothesis Development

A GCO denotes an uncertainty about the firm's ability to continue as a going-concern [1]. However, the auditor's effort to clear away uncertainty about the future and assess the firm's future viability may be limited [23]. DeFond et al. [15] examined whether the auditor values the client's accounting conservatism. They found that the auditor responds strategically to the client's conservatism, i.e., the auditor is likely to charge lower audit fees, issue fewer GCOs, and experience fewer resignations if the client's firm reports losses, rather than gains, in a timely manner, because the client's conservatism reduces the engagement risk.

Given that the auditor values accounting conservatism and considers the client's conservatism in the issuance of a GCO, how the client's firm responds to the auditor's decision of issuing a GCO remains an empirical question.

The going-concern uncertainty increases the cost of capital [43]. Furthermore, the client firm may be obsessed by "self-fulfilling prophecies" (i.e., GCOs may itself trigger client failure, because GCOs may not only keep creditors and suppliers from maintaining contract terms but also drive away current or potential investors and customers from the client) [44]. From the client management perspective, it may be burdensome to get a GCO, which signals the increased risk of litigation or financial distressed status. As recent studies find that the market reacts negatively to the issuance of a GCO [3,33], a GCO may affect not only management's compensation but, also, the value of management's holdings in the client firm. For those reasons, it is not surprising that management tries to avoid receiving a GCO and that such management is inclined to change the incumbent auditor or opinion shopping to bypass a GCO [45].

The client firms that had received GCOs previously are more likely to be conservative in accounting rather than shop for clean audit opinions, given that accounting conservatism is valued by auditors in their decisions regarding issuing GCOs [15].

I, thus, can expect that the previous issuance of GCOs, suggesting high agency concerns, is positively associated with firms' subsequent accounting conservatism (H1) and that firms that overcome the past GCOs are more likely to be conservative in accounting compared to firms that fail to do so (H2). This is formally stated in the following hypotheses:

H1: Ceteris paribus, firms with the past issuance of GCOs, are positively associated with the firms' subsequent conservatism in financial reporting.

H2: Ceteris paribus, firms with the past issuance of GCOs that subsequently receive non-GCO in the current fiscal period (i.e., exit from GCOs), exhibit more conservatism in financial reporting than firms with no exit from GCOs.

3. Research Design

3.1. Empirical Models

3.1.1. Time-Series Test of Timeliness in Loss Recognition

The negative change in accounting income (i.e., bad news) is more likely to reverse than the positive change in accounting income (i.e., good news). While bad news is recognized as a transitory shock, good news is recognized as a persistent shock in the earnings process [16,46]. Using the transitory nature of accounting income, I investigate the timeliness in gain and loss recognition in the time-series test. To examine the association between the past issuance of a GCO and the firm's accounting conservatism, I first use the following time-series test:

$$ChgE_{i,t} = \beta_0 + \beta_1 DChgE_{i,t} + \beta_2 LagChgE_{i,t} + \beta_3 DChgE_{i,t}{*}LagChgE_{i,t} + \beta_4 GC_{i,t-1} + \beta_5 DChgE_{i,t}{*}GC_{i,t-1} + \beta_6 LagChgE_{i,t}{*}GC_{i,t-1} + \beta_7 DChgE_{i,t}{*}LagChgE_{i,t}{*}GC_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

where $ChgE_{i,t}$ are the changes in income before extraordinary items for firm i from fiscal year $t-1$ to t, adjusted by firm i's beginning total assets, $DChgE_{i,t}$ is measured as a dummy variable equal to 1 if $ChgE_{i,t}$ is below 0, $LagChgE_{i,t}$ is firm i's $ChgE_{i,t}$ at fiscal year $t-1$, and $GC_{i,t-1(t-2)}$ denotes firm i receiving a GCO from the auditor at fiscal year $t-1$ ($t-2$). The coefficient on the interaction term between $DChgE_{i,t}$ and $LagChgE_{i,t}$ (i.e., β_3) measures the difference in sensitivity of earnings to bad news and good news. The hypothesis that a GCO firm is likely to report losses in a more timely manner than gains in the following fiscal year implies the estimated coefficient (β_7) on $DChgE_{i,t}{*}LagChgE_{i,t}{*}GC_{i,t-1(t-2)}$ is negative.

Following previous studies, I include control variables, market-to-book ratio ($MB_{i,t}$), leverage ($LEV_{i,t}$), firm size ($SIZE_{i,t}$), litigation risk ($LIT_{i,t}$), and their interactions, respectively, with $DChgE_{i,t}$, and $LagChgE_{i,t}$. $MB_{i,t}$ is measured as the ratio of market value of equity to book value of equity at the beginning of year t and is expected to be negatively related with accounting conservatism [47]. Leverage ($LEV_{i,t}$) is included to control debt holders' demand for accounting conservatism and is computed as the sum of long-term and short-term debt deflated by the market value of equity at the beginning of year t, which is expected to be positively associated with accounting conservatism. [6,7,13,37,47]. Firm size ($SIZE_{i,t}$) is measured as the natural logarithm of the market value of equity of firm i at the beginning of year t, and accounting conservatism is expected to be negatively associated with the firm size [13]. Litigation risk ($LIT_{i,t}$) is an indicator variable equal to 1 when a firm i is in a litigious industry (i.e., industry with SIC codes 2833–2836, 3570–3577, 3600–3674, 5200–5961, and 7370–7374) [8]. $LIT_{i,t}$ captures a high litigation risk, which has been expected to be positively related with accounting conservatism in prior literature [16,18]. The detailed measurements of the variables are presented in the Appendix A, Table A1.

To test H1, I expanded Basu's model in Equation (1) by including control variables as follows:

$$\begin{aligned} ChgE_{i,t} = {} & \beta_0 + \beta_1 DChgE_{i,t} + \beta_2 LagChgE_{i,t} + \beta_3 DchgE_{i,t}{*}LagChgE_{i,t} + \beta_4 GC_{i,t-1(t-2)} \\ & + \beta_5 DchgE_{i,t}{*}GC_{i,t-1(t-2)} + \beta_6 LagChgE_{i,t}{*}GC_{i,t-1(t-2)} + \beta_7 DchgE_{i,t}{*}LagChgE_{i,t}{*}GC_{i,t-1(t-2)} + \beta_8 MB_{i,t} \\ & + \beta_9 DchgE_{i,t}{*}MB_{i,t} + \beta_{10} LagChgE_{i,t}{*}MB_{i,t} + \beta_{11} DchgE_{i,t}{*}LagChgE_{i,t}{*}MB_{i,t} + \beta_{12} LEV_{i,t} \\ & + \beta_{13} DchgE_{i,t}{*}LEV_{i,t} + \beta_{14} LagChgE_{i,t}{*}LEV_{i,t} + \beta_{15} DchgE_{i,t}{*}LagChgE_{i,t}{*}LEV_{i,t} + \beta_{16} SIZE_{i,t} \\ & + \beta_{17} DchgE_{i,t}{*}SIZE_{i,t} + \beta_{18} LagChgE_{i,t}{*}SIZE_{i,t} + \beta_{19} DchgE_{i,t}{*}LagChgE_{i,t}{*}SIZE_{i,t} + \beta_{20} LIT_{i,t} \\ & + \beta_{21} DchgE_{i,t}{*}LIT_{i,t} + \beta_{22} LagChgE_{i,t}{*}LIT_{i,t} + \beta_{23} DchgE_{i,t}{*}LagChgE_{i,t}{*}LIT_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (2)$$

To test the association between the GCO firm that receives non-GCO subsequently and the firm's accounting conservatism (H2), I replaced $GC_{i,t-1}$ *by* $EXIT_{i,t}$, which denotes firm i receiving non-GCO, since the firm received a GCO in the past.

Gow et al. [48] suggested that two-way clustered standard errors work more effectively in eliminating cross-sectional and time-series dependences in accounting conservatism

models. According to their suggestion, I used the clustered standard errors in two dimensions (i.e., firm and year) in ascertaining the significance of each explanatory variable to address concerns about cross-sectional and time-series correlations. Industry and year fixed effects that are controlled for in the models account for unobserved industrial and macroeconomic factors.

3.1.2. Price-Based Regression of Accounting Conservatism

Alternatively, Basu [16] introduced a price-based piecewise linear regression to measure the timeliness in gain and loss recognition. Since good news tends to require a higher degree of verification to be reflected in accounting income than bad news, according to Basu [16], firms with a higher sensitivity of earnings to bad news than to good news indicate conservative firms in accounting. Therefore, I used Basu's [16] price-based regression to measure the accounting conservatism:

$$EARN_{i,t} = \beta_0 + \beta_1 DRET_{i,t} + \beta_2 RET_{i,t} + \beta_3 DRET_{i,t}{*}RET_{i,t} \quad (3)$$

In Equation (3), $EARN_{i,t}$ is earnings per share, excluding extraordinary items, for firm i in fiscal year t, adjusted by the price per share at the beginning of the fiscal year t. $RET_{i,t}$ is measured as the monthly returns for firm i over 12 months, beginning 9 months before the fiscal year end and ending 3 months after the fiscal year end. $DRET_{i,t}$ is an indicator variable equal to 1 if $RET_{i,t}$ is negative, and 0 otherwise. Since β_3 is the measurement of an incremental timeliness of earnings with respect to bad news, β_3 captures the extent to which a firm is conditionally conservative in accounting. A firm is considered to be conservative in financial reporting if β_3 is positive.

To test H1, I expanded Basu's model in Equation (3) by including a GCO at fiscal year $t-1$ (GC_{t-1}) and control variables (e.g., $MB_{i,t}$, $LEV_{i,t}$, $SIZE_{i,t}$, and $LIT_{i,t}$) by following prior studies [7,8,13,49] as follows:

$$\begin{aligned} EARN_{i,t} = {} & \beta_0 + \beta_1 DRET_{i,t} + \beta_2 RET_{i,t} + \beta_3 DRET_{i,t}{*}RET_{i,t} + \beta_4 GC_{i,t-1(t-2)} + \beta_5 DRET_{i,t}{*}GC_{i,t-1(t-2)} \\ & + \beta_6 RET_{i,t}{*}GC_{i,t-1(t-2)} + \beta_7 DRET_{i,t}{*}RET_{i,t}{*}GC_{i,t-1(t-2)} + \beta_8 MB_{i,t} + \beta_9 DRET_{i,t}{*}MB_{i,t} \\ & + \beta_{10} RET_{i,t}{*}MB_{i,t} + \beta_{11} DRET_{i,t}{*}RET_{i,t}{*}MB_{i,t} + \beta_{12} LEV_{i,t} + \beta_{13} DRET_{i,t}{*}LEV_{i,t} \\ & + \beta_{14} RET_{i,t}{*}LEV_{i,t} + \beta_{15} DRET_{i,t}{*}RET_{i,t}{*}LEV_{i,t} + \beta_{16} SIZE_{i,t} + \beta_{17} DRET_{i,t}{*}SIZE_{i,t} \\ & + \beta_{18} RET_{i,t}{*}SIZE_{i,t} + \beta_{19} DRET_{i,t}{*}RET_{i,t}{*}SIZE_{i,t} + \beta_{20} LIT_{i,t} + \beta_{21} DRET_{i,t}{*}LIT_{i,t} \\ & + \beta_{22} RET_{i,t}{*}LIT_{i,t} + \beta_{23} DRET_{i,t}{*}RET_{i,t}{*}LIT_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (4)$$

In Equation (4), $GC_{i,t-1}$ denotes firm i receiving a GCO from the auditor at fiscal year $t-1$. The estimated coefficient (β_7) on $DRET_{i,t}{*}RET_{i,t}{*}GC_{i,t-1}$ in the equation captures the degree of accounting conservatism with the previous issuance of a GCO. If a firm reports losses in a more timely manner than gains at fiscal year t once the firm received a GCO in prior fiscal year, I expect β_7 to be positive. As suggested by Gow et al. [48], the price-based regression model in this study is also estimated by using the two-way (i.e., firm and year) cluster-robust method, which works effectively in eliminating cross-sectional and time-series dependences.

I replaced $GC_{i,t-1}$ by $EXIT_{i,t}$ in Equation (4) to test H2, the association between the GCO firm that receives non-GCO subsequently and the firm's accounting conservatism.

3.1.3. Ordinary Least Squares (OLS) Regression of Accounting Conservatism on GCOs

To test H1, whether a firm's accounting conservatism is influenced by the previous issuance of a GCO by an auditor, I analyzed the relationship between the firm receiving a GCO and the firm's degree of accounting conservatism (*CSV*) (Due to the limitations that the Basu [16] measure contains [49], I used the firm-specific conservatism measure by following Khan and Watts [17].). Khan and Watts [17] introduced the firm-specific measure

of accounting conservatism (C-Score), which is derived from Basu's [16] model. Based on Basu's [16] price-based regression (i.e., Equation (3)), the conservatism measure (*CSV*) is used to address time-series as well as cross-sectional variations in firms' accounting conservatisms after the consideration of firms' specific characteristics, such as market-to-book ratio, firm leverage, and firm size. Following Ahmed and Duellman [50] and Goh and Li [10], I estimated the OLS regression of accounting conservatism (*CSV*) on GCOs as follows and expected β_1 to be positive if a firm reports losses in a more timely manner than gains at fiscal year *t*:

$$\begin{aligned} CSV_{i,t} = {} & \beta_0 + \beta_1 GC_{i,t-1(t-2)} + \beta_2 MB_{i,t} + \beta_3 LEV_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 LIT_{i,t} + \beta_6 GRSALE_{i,t} \\ & + \beta_7 RDA_{i,t} + \beta_8 CFO_{i,t} + \beta_9 REVSTD5_{i,t} + \beta_{10} AGE_{i,t} + \beta_{11} RETVOL_{i,t} \\ & + \beta_{12} CYCLE_{i,t} + \beta_{13} SPREAD_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (5)$$

where $MB_{i,t}$ is market-to-book ratio that is measured as the ratio of market value of equity to book value of equity at the beginning of year *t*, $LEV_{i,t}$ is leverage that is computed as the sum of long-term and short-term debts deflated by the market value of equity at the beginning of year *t*, firm size ($SIZE_{i,t}$) is measured as the natural logarithm of the market value of equity of firm *i* at the beginning of year *t*, $LIT_{i,t}$ is an indicator variable equal to 1 when a firm *i* is in a litigious industry, $GRSALE_{i,t}$ is the percentage of annual growth in total sales, $RDA_{i,t}$ is the total research and development expense plus advertising expense deflated by total sales, $CFO_{i,t}$ is the cash flow from operations divided by the total assets of fiscal year *t*, $REVSTD5_{i,t}$ is the standard deviation of the natural logarithm of revenues measured from fiscal year $t-5$ to $t-1$, $AGE_{i,t}$ is the natural logarithm of the number of years of data for the client firm since the coverage in Compustat, $RETVOL_{i,t}$ is the standard deviation of monthly stock returns over fiscal year *t*, $CYCLE_{i,t}$ is the depreciation expenses deflated by the beginning-of-year total assets, which is a decreasing measure of the length of the investment cycle, and $SPREAD_{i,t}$ is bid-ask spread scaled by the midpoint of the spread.

In Equation (5), I replaced $GC_{i,t-1}$ by $EXIT_{i,t}$ to test H2, the association between the GCO firm that receives non-GCO subsequently and the firm's accounting conservatism.

3.2. Sample Selection

I obtained financial and market data from Compustat and CRSP, and GCOs from Audit Analytics, all for the period of 2000–2013. In the sample for Basu's [16] two models, and OLS regression using Khan and Watts' [17] C-Score, I required non-missing firm-year observations for all variables (see the Appendix A, Table A1 for variable definitions). Finally, I winsorized the upper and lower 1% of observations of each continuous variable to control for outliers. The above process generates a conservatism sample of 23,454 (Basu's time-series test), 15,784 (Basu's price-based regression), and 2113 (OLS regression using C-Score) firm-year observations, each.

Using this sample, I examined the relationship between the previous issuance of GCOs and subsequent asymmetric timeliness in accounting. Panel A of Table 1 presents the yearly distribution of sample firms used in Basu's time-series test. The results presented in Panel B of Table 1, in which I formed 13 industry groupings following Ashbaugh et al. [51], indicate that the firms used in Basu's time-series test are spread across a variety of industries, with the greatest concentration of firms in Durable Manufactures (4481 firms or 19.11%) and Computers (4304 firms or 18.35%), respectively.

Table 1. Distribution of sample firms by year and industry.

Panel A: Distribution by Year		
Year	Number of Firms	
	n	%
2000	263	1.12
2001	2293	9.78
2002	2220	9.47
2003	2047	8.73
2004	1818	7.75
2005	1753	7.47
2006	1722	7.34
2007	1794	7.65
2008	2138	9.12
2009	2076	8.85
2010	1663	7.09
2011	1544	6.58
2012	1563	6.66
2013	560	2.39
Total	23,454	100
Panel B: Distribution by Industry		
Industry (SIC Code)	Number of Firms	
	n	%
Agriculture (0100–0999)	85	0.36
Mining & Construction (1000–1999, excluding 1300–1399)	1438	6.13
Food (2000–2111)	231	0.98
Textiles and Printing / Publising (2200–2799)	535	2.28
Chemicals (2800–2824, 2840–2899)	461	1.97
Pharmaceuticals (2830–2836)	2790	11.9
Extractive (1300–1399, 2900–2999)	1002	4.27
Durable Manufactures (3000–3999, excluding 3570–3579 & 3670–3679)	4481	19.11
Transportation (4000–4899)	1075	4.58
Utilities (4900–4999)	380	1.62
Retail (5000–5999)	1084	4.62
Services (7000–8999, excluding 7370–7379)	1733	7.39
Computers (3570–3579, 3670–3679, 7370–7379)	4304	18.35
Others	3855	16.44
Total	23,454	100

4. Results

4.1. Descriptive Statistics and Correlations

Table 2 reports the descriptive statistics for my sample. The mean *LagGC* and *Lag2GC* are both 0.100. This implies 10% of my sample receives GCOs. While the mean (median) *ChgE* value in my sample is −0.045 (−0.022), the mean (median) *EARN* value in my sample is −0.154 (−0.073). The average market-to-book ratio, leverage, and size are 5.625, 1.054, and 4.391, respectively. The mean value of the annual returns, *RET*, is 0.030, and 59.5% of my sample reports negative returns. Consistent with the prior conservatism studies [17], the mean *CSV* is 0.084, while the median *CSV* is 0.075, which indicates that the average firms are conservative in accounting.

Table 3 presents the Pearson correlation for my sample. Panel A of Table 3 presents the correlation among variables used in Basu's [16] regressions, and Panel B of Table 3 presents the correlation of variables used in the regression model using Khan and Watts' [17] C-Score. In Panel A of Table 3, consistent with the prior conservatism literature, *EARN* is positively associated with *RET* (0.017) and negatively associated with *DRET* (−0.085). In Panel B of Table 3, *CSV* is positively correlated with firms that received GCOs in previous years, which is consistent with my expectation.

Table 2. Descriptive statistics.

Variable	*n*	Mean	Std. Dev.	Min.	Q1	Median	Q3	Max.
LagGC	23,454	0.100	0.300	0.000	0.000	0.000	0.000	1.000
Lag2GC	23,454	0.100	0.300	0.000	0.000	0.000	0.000	1.000
ChgE	23,454	−0.045	0.468	−2.386	−0.128	−0.022	0.044	2.170
DChgE	23,454	0.571	0.495	0.000	0.000	1.000	1.000	1.000
LagChgE	23,454	−0.010	0.445	−1.876	−0.096	−0.009	0.055	2.103
MB	23,454	5.625	17.461	0.000	0.877	1.650	3.713	166.971
LEV	23,454	1.054	2.814	0.000	0.000	0.116	0.731	19.687
SIZE	23,454	4.391	2.145	−8.805	2.956	4.389	5.780	9.838
LIT	23,454	0.274	0.446	0.000	0.000	0.000	1.000	1.000
EARN	15,784	−0.154	0.281	−1.694	−0.198	−0.073	−0.015	0.226
DRET	15,784	0.595	0.491	0.000	0.000	1.000	1.000	1.000
RET	15,784	0.030	0.742	−0.940	−0.449	−0.126	0.277	3.406
CSV	2113	0.084	0.137	−0.250	0.002	0.075	0.160	0.533
GRSALE	2113	0.232	1.047	0.000	0.000	0.000	0.162	16.565
RDA	2113	0.312	1.014	0.001	0.043	0.129	0.248	12.486
CFO	2113	−0.026	0.118	−0.262	−0.091	−0.007	0.056	0.247
REVSTD5	2113	0.414	0.417	0.012	0.159	0.291	0.504	2.866
AGE	2113	16.337	10.119	6.000	9.000	13.000	20.000	53.000
RETVOL	2113	0.187	0.108	0.041	0.119	0.160	0.223	0.691
CYCLE	2113	0.046	0.037	0.000	0.024	0.038	0.057	0.360
SPREAD	2113	0.062	0.027	0.013	0.042	0.057	0.077	0.156

Table 3. Correlations.

Panel A: Pearson Correlations among Variables used in Basu's [16] regressions

Variable	1	2	3	4	5	6	7	8	9	10	11
1. *LagGC*											
2. *Lag2GC*	0.490 *										
3. *ChgE*	0.052 *	0.023 *									
4. *DChgE*	0.011	−0.074 *	0.136 *								
5. *LagChgE*	−0.053 *	0.082 *	−0.341 *	−0.502 *							
6. *MB*	0.181 *	0.128 *	−0.045 *	−0.025 *	0.004						
7. *LEV*	−0.004	−0.043 *	0.001	0.069 *	−0.006	−0.082 *					
8. *SIZE*	−0.263 *	−0.180 *	0.060 *	−0.030 *	0.034 *	−0.007	−0.095 *				
9. *LIT*	0.003	0.003	−0.011	−0.012	−0.004	0.021 *	−0.153 *	0.024 *			
10. *EARN*	−0.095 *	−0.036 *	0.216 *	−0.130 *	0.110 *	0.046 *	−0.286 *	0.267 *	−0.027 *		
11. *DRET*	0.018 *	0.015	−0.150 *	−0.013	0.012	−0.081 *	0.097 *	−0.203 *	0.028 *	−0.085 *	
12. *RET*	0.002	−0.007	0.197 *	0.024 *	−0.033 *	0.080 *	−0.118 *	0.190 *	0.005	0.017 *	−0.711 *

Panel B: Pearson Correlations among Variables used in Khan and Watts' [17] regression

Variable	1	2	3	4	5	6	7	8	9	10
1. *LagGC*										
2. *Lag2GC*	0.307 *									
3. *CSV*	0.039	0.065 *								
4. *GRSALE*	0.020	0.102 *	0.009							
5. *RDA*	0.083 *	0.068 *	0.011	0.220 *						
6. *CFO*	−0.126 *	−0.121 *	0.022	−0.126 *	−0.319 *					
7. *REVSTD5*	0.066 *	0.118 *	0.006	0.292 *	0.268 *	−0.266 *				
8. *AGE*	−0.033	−0.041	0.035	−0.037	−0.077 *	0.143 *	−0.272 *			
9. *RETVOL*	0.145 *	0.099 *	−0.026	0.092 *	0.055 *	−0.202 *	0.186 *	−0.159 *		
10. *CYCLE*	0.007	0.014	−0.029	0.148 *	0.000	0.055 *	0.104 *	−0.067 *	0.137 *	
11. *SPREAD*	0.155 *	0.179 *	−0.009	0.091 *	0.099 *	−0.302 *	0.261 *	−0.256 *	0.508 *	0.165 *

See the Appendix A–Table A1 for variable definitions. All continuous variables are winsorized at the top and bottom 1%. * indicates statistical significance at the 5% or better level.

4.2. Regression Results

4.2.1. Past Going-Concern Opinions and Subsequent Accounting Conservatism

Table 4 presents the Basu's time-series analysis between past GCOs and subsequent accounting conservatism. The first four columns of Table 4 present the results using *LagChgE* and *LagGC*, change in the adjusted income before extraordinary items and a GCO at time $t-1$. The next four columns of Table 4 present Basu's regression results using *LagChgE* and *Lag2GC* (a GCO at time $t-2$). In the first four columns, the estimated coefficients of *DChgE*LagChgE* are significantly negative (−0.461, $t = -5.74$; −0.350, $t = -2.39$) at 1% and 5% levels (with control variables), which is consistent with the prior literature that states firms report losses in a more timely fashion than gains. I predicted that the coefficients of *DChgE*LagChgE*LagGC* are negative if firms that received GCOs report losses in a more timely manner than gains following fiscal years. Consistent with my prediction, the coefficients are significantly negative at the 5% and 1% levels (−0.202, $t = -2.18$; −0.393, $t = -4.29$) in the first four columns. When *LagGC* is replaced with *Lag2GC*, the implication from the regressions does not change, as the coefficients of *DChgE*LagChgE*LagGC* are statistically significant at the 1% and 5% levels (−0.162, $t = -2.22$; −0.303, $t = -4.56$). This indicates that firms are more likely to report losses in a timely manner than gains after the firms received GCOs in prior fiscal years. When the market-to-book ratio (*MB*) is controlled in the regression, the coefficients of *DChgE*LagChgE*MB* are strongly negative, which is consistent with the prior literature of accounting conservatism. Estimated coefficients in the three-way interaction terms with *SIZE*, *LEV*, and *LIT* are mixed.

Table 4. Going-concern opinions and conditional conservatism in accounting (extended Basu's [16] time-series model).

	Dependent Variable = ChgE							
	GC = LagGC				***GC = Lag2GC***			
Variable	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**
Intercept	−0.142 [a]	(−7.01)	−0.129 [a]	(−4.72)	−0.148 [a]	(−6.71)	−0.133 [a]	(−4.65)
DChgE	−0.039 [a]	(−6.39)	−0.063 [a]	(−3.06)	−0.042 [a]	(−7.47)	−0.068 [a]	(−3.33)
LagChgE	−0.181 [a]	(−4.22)	−0.285 [a]	(−3.58)	−0.182 [a]	(−4.18)	−0.284 [a]	(−3.86)
*DChgE*LagChgE*	−0.461 [a]	(−5.74)	−0.350 [b]	(−2.39)	−0.449 [a]	(−5.94)	−0.373 [b]	(−2.55)
GC	−0.062 [b]	(−2.25)	−0.041 [c]	(−1.69)	−0.018	(−1.23)	−0.002	(−0.19)
*DChgE*GC*	−0.041	(−1.18)	−0.035	(−1.17)	−0.004	(−0.14)	0.003	(0.10)
*LagChgE*GC*	0.110 [c]	(1.75)	0.193 [a]	(3.59)	0.069	(1.47)	0.127 [a]	(4.18)
*DChgE*LagChgE*GC*	−0.202 [b]	(−2.18)	−0.393 [a]	(−4.29)	−0.162 [b]	(−2.22)	−0.303 [a]	(−4.56)
MB			−0.041 [c]	(−1.67)			−0.048 [c]	(−1.76)
*DChgE*MB*			−0.032	(−1.59)			−0.035	(−1.61)
*LagChgE*MB*			−0.166	(−1.58)			−0.139	(−1.26)
*DChgE*LagChgE*MB*			0.405 [a]	(3.30)			0.366 [a]	(2.88)
LEV			0.008	(0.48)			0.007	(0.40)
*DChgE*LEV*			0.057 [b]	(2.47)			0.056 [a]	(2.60)
*LagChgE*LEV*			0.168	(1.56)			0.171	(1.52)
*DChgE*LagChgE*LEV*			−0.164	(−0.85)			−0.171	(−0.84)
SIZE			0.100 [a]	(4.77)			0.111 [a]	(4.81)
*DChgE*SIZE*			0.024	(0.95)			0.032	(1.08)
*LagChgE*SIZE*			0.581 [a]	(3.92)			0.535 [a]	(3.66)
*DChgE*LagChgE*SIZE*			−1.287 [a]	(−6.86)			−1.194 [a]	(−6.31)
LIT			−0.001	(−0.07)			0.002	(0.11)
*DChgE*LIT*			−0.023	(−1.20)			−0.026	(−1.39)
*LagChgE*LIT*			−0.043	(−0.69)			−0.061	(−0.99)
*DChgE*LagChgE*LIT*			0.083	(0.98)			0.100	(1.21)
2-WAY cluster	Yes		Yes		Yes		Yes	
Industry & Year	Yes		Yes		Yes		Yes	
Adj. R^2	0.178		0.203		0.176		0.202	
n	23,454		23,454		23,454		23,454	

[c], [b] and [a] indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels. (two-tailed), respectively. MB, LEV, and SIZE are ranked variables.

In Table 5, I estimated the Basu's [16] price-based model using the two-way cluster-robust regression to test the association between past GCOs and subsequent accounting conservatism. The first two columns in Table 5 present the results from the baseline Basu model without control variables, and the last two columns present the results after controlling *MB*, *LEV*, and *SIZE* when *GC* is the going-concern opinions at time $t-1$ (i.e., *LagGC*). As expected from prior studies [16], the coefficients on *DRET*RET* are positive (0.306 and 0.299, respectively), and both coefficients are statistically significant at the 1% level, implying that firms report losses in a timely manner, on average. The estimated coefficient on *DRET*RET*GC*, the coefficient of my interest, captures whether the degree of a firm being conservative in accounting is associated with the probability of firms receiving GCOs. In the baseline Basu model, the coefficient estimate of *DRET*RET*GC* is 0.045 but insignificant (t = 0.62), which fails to reject the null hypothesis that conditional accounting conservatism is not associated with past GCOs. However, when *LagGC* is replaced with *Lag2GC*, in the rightmost four columns, the estimated coefficients of *DRET*RET* are positive and statistically significant (0.308, t = 7.71; 0.299, t = 4.02), consistent with the prior literature. Consistent with my prediction, the estimated coefficients of *DRET*RET*GC* are positive and statistically significant (0.128, t = 1.70; 0.195, t = 2.87). This indicates that firms that received GCOs in past periods were more likely to report current losses in a timely manner than gains. The coefficients of three-way interaction terms with respect to the control variables except *LIT* (e.g., *MB, LEV,* and *SIZE*) exhibit the expected signs in Basu's [16] price-based regression. Consistent with prior studies [8,13,16,52], the estimated coefficients on *DRET*RET*MB* and *DRET*RET*SIZE* are statistically significant and negative, and the coefficients on *DRET*RET*LEV* show significantly positive throughout all specifications, while the coefficients on *DRET*RET*LIT* are negative and significant.

Next, I tested whether firms are likely to be more conservative in financial reporting, once the firms received GCOs in past fiscal periods. Table 6 reports the test results using OLS regression analyses. Each column presents the regression analysis when my key variable of interest (i.e., *GC*) is past the GCOs at time $t-1$ and $t-2$, respectively. Consistent with my expectations, the estimated coefficients on GC_{t-1} and GC_{t-2} are positive and statistically significant (0.048, t = 2.37; 0.035, t = 2.12) at the 5% level. This indicates that firms' tendencies of financial reporting are more conservative in the following periods after auditors issued GCOs, supporting the argument that accounting conservatism plays an important role in alleviating information uncertainty. Coefficients on *LEV* and *SIZE* are positively and negatively associated with accounting conservatism consistent with the prior literature, while other control variables show mixed estimates.

Table 5. Going-concern opinions and conditional conservatism in accounting (extended Basu's [16] price-based model).

	Dependent Variable = EARN							
	GC = LagGC				***GC = Lag2GC***			
Variable	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**
Intercept	−0.145 [a]	(−3.58)	−0.147 [a]	(−2.88)	−0.146 [a]	(−3.63)	−0.147 [a]	(−2.85)
DRET	−0.013	(−1.45)	−0.033	(−1.42)	−0.014	(−1.51)	−0.034	(−1.43)
RET	−0.055 [a]	(−5.74)	−0.072 [b]	(−2.21)	−0.054 [a]	(−5.29)	−0.070 [b]	(−2.19)
*DRET*RET*	0.306 [a]	(8.34)	0.299 [a]	(3.99)	0.308 [a]	(7.71)	0.299 [a]	(4.02)
GC	−0.142 [a]	(−4.73)	−0.093 [a]	(−2.82)	−0.009	(−0.46)	0.003	(0.10)
*DRET*GC*	0.018	(0.48)	0.009	(0.25)	0.012	(0.44)	0.030	(1.02)
*RET*GC*	−0.023	(−0.81)	−0.037	(−1.20)	−0.066 [c]	(−1.95)	−0.075 [b]	(−2.00)
*DRET*RET*GC*	0.045	(0.62)	0.065	(0.83)	0.128 [c]	(1.70)	0.195 [a]	(2.87)
MB			−0.043	(−1.63)			−0.048 [b]	(−1.98)
*DRET*MB*			0.054 [b]	(2.29)			0.053 [b]	(2.34)
*RET*MB*			0.077 [a]	(2.98)			0.078 [a]	(3.43)
*DRET*RET*MB*			−0.163 [a]	(−3.35)			−0.165 [a]	(−3.62)

Table 5. *Cont.*

	Dependent Variable = EARN							
	GC = LagGC				*GC = Lag2GC*			
Variable	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**
LEV			−0.117 [a]	(−3.97)			−0.119 [a]	(−4.04)
*DRET*LEV*			0.013	(0.42)			0.013	(0.40)
*RET*LEV*			−0.044 [b]	(−1.97)			−0.048 [b]	(−2.00)
*DRET*RET*LEV*			0.197 [b]	(2.36)			0.202 [b]	(2.35)
SIZE			0.252 [a]	(11.54)			0.259 [a]	(12.05)
*DRET*SIZE*			−0.046 [c]	(−1.71)			−0.048 [c]	(−1.80)
*RET*SIZE*			−0.020	(−0.59)			−0.019	(−0.55)
*DRET*RET*SIZE*			−0.181	(−1.60)			−0.192 [c]	(−1.70)
LIT			−0.074 [a]	(−4.64)			−0.075 [a]	(−4.52)
*DRET*LIT*			0.001	(0.12)			0.001	(0.11)
*RET*LIT*			−0.001	(−0.12)			−0.001	(−0.10)
*DRET*RET*LIT*			−0.058 [a]	(−2.72)			−0.059 [a]	(−2.97)
2-WAY cluster	Yes		Yes		Yes		Yes	
Industry & Year	Yes		Yes		Yes		Yes	
Adj. R^2	0.101		0.177		0.095		0.175	
n	15,784		15,784		15,784		15,784	

See the Appendix A—Table A1 for other variable definitions. [c], [b], and [a] indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels (two-tailed), respectively. *MB*, *LEV*, and *SIZE* are ranked variables.

Table 6. Going-concern opinions and conditional conservatism in accounting (Khan and Watts' [17] C-Score).

	Dependent Variable = *CSV*			
	GC = LagGC		*GC = Lag2GC*	
Variable	**Coeff.**	***t*-Stats.**	**Coeff.**	***t*-Stats.**
Intercept	0.223 [a]	(7.28)	0.220 [a]	(7.35)
GC	0.048 [b]	(2.37)	0.035 [b]	(2.12)
MB	0.000	(0.34)	0.000	(0.34)
LEV	0.006 [b]	(2.01)	0.006 [b]	(1.99)
SIZE	−0.005 [c]	(−1.86)	−0.005 [c]	(−1.86)
LIT	0.004	(0.30)	0.004	(0.33)
GRSALE	0.001	(0.33)	0.001	(0.47)
RDA	0.004	(0.96)	0.003	(0.84)
CFO	0.037	(1.12)	0.036	(1.10)
REVSTD5	0.009	(0.81)	0.009	(0.83)
AGE	0.000	(1.23)	0.000	(1.32)
RETVOL	−0.056 [b]	(−2.08)	−0.053 [c]	(−1.90)
CYCLE	−0.104	(−1.00)	−0.117	(−1.09)
SPREAD	−0.168	(−0.82)	−0.129	(−0.69)
2-WAY cluster	Yes		Yes	
Industry & Year	Yes		Yes	
Adj. R^2	0.024		0.022	
n	2113		2113	

See the Appendix A—Table A1 for variable definitions. [c], [b], and [a] indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels (two-tailed), respectively.

In summary, Tables 4–6 present that firms are more likely to report losses in a timely manner, after the firms received GCOs in past periods. This supports the argument that client firms respond to auditors' views on client's accounting conservatism after the auditors issued GCOs.

4.2.2. Exit from Going-Concern Opinions and Accounting Conservatism

Table 7 presents Basu's time-series analysis between firms that exited from past GCOs and accounting conservatism. Consistent with the prior literature, the estimated coefficients

of *DChgE*LagChgE* are significantly negative (−0.956, t = −2.95) at 1%. The estimated coefficient of my key variable of interest, *DChgE*LagChgE*LagGC*, is negative and significant at 1% (−0.605, t = −2.88), supporting the hypothesis that firms exiting from GCOs exhibit more conservatism in accounting differences, compared to firms non-existing from GCOs.

Table 7. Going-concern opinions and exit firms' conservatism in accounting (extended Basu's [16] time-series model).

	Dependent Variable = *ChgE*	
Variable	**Coeff.**	***t*-Stats.**
Intercept	−0.239 [c]	(−1.72)
DChgE	−0.180	(−1.63)
LagChgE	−0.104	(−0.46)
*DChgE*LagChgE*	−0.956 [a]	(−2.95)
EXIT	0.123 [b]	(2.16)
*DChgE*EXIT*	0.024	(0.29)
*LagChgE*EXIT*	0.345 [a]	(3.15)
*DChgE*LagChgE*EXIT*	−0.605 [a]	(−2.88)
MB	−0.246 [a]	(−3.16)
*DChgE*MB*	0.050	(0.54)
*LagChgE*MB*	−0.021	(−0.11)
*DChgE*LagChgE*MB*	0.515	(1.53)
LEV	0.100	(0.84)
*DChgE*LEV*	0.126	(1.23)
*LagChgE*LEV*	0.244	(1.09)
*DChgE*LagChgE*LEV*	−0.265	(−0.68)
SIZE	0.411 [b]	(2.13)
*DChgE*SIZE*	−0.014	(−0.06)
*LagChgE*SIZE*	0.277	(0.59)
*DChgE*LagChgE*SIZE*	−0.964	(−1.21)
LIT	0.031	(0.51)
*DChgE*LIT*	−0.074	(−0.93)
*LagChgE*LIT*	−0.247 [b]	(−2.51)
*DChgE*LagChgE*LIT*	0.308 [c]	(1.78)
2-WAY cluster	Yes	
Industry & Year	Yes	
Adj. R^2	0.240	
n	2345	

See the Appendix A—Table A1 for other variable definitions. [c], [b], and [a] indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels (two-tailed), respectively. *MB*, *LEV*, and *SIZE* are ranked variables.

In Table 8, I estimated Basu's [16] price-based model to test the association between firm exiting GCOs and accounting conservatism. The estimated coefficient on *DRET*RET*GC* is positive and statistically significant (0.801, *t* = 2.33), suggesting that firms exiting GCOs are more likely to report losses in a timely manner than gains, compared to firms non-exiting from GCOs. Table 9 reports the test results using an OLS regression analysis, Equation (5). The estimated coefficients on *GC* are positive but statistically insignificant. This might be due to the small sample size.

In summary, Tables 7–9 present that firms exiting GCOs are more likely to report losses in a timely manner than gains, compared to those non-exiting from GCOs throughout Basu's time-series and price-based regression analyses. Overall, the firms with going-concern opinions in the prior period tend to be more conservative in accounting the following period to lower the engagement risk and alleviate information asymmetry and uncertainty.

Table 8. Going-concern opinions and exit firms' conservatism in accounting (extended Basu's [16] price-based model).

	Dependent Variable = *EARN*	
Variable	**Coeff.**	***t*-Stats.**
Intercept	−0.258	(−1.08)
DRET	−0.322	(−0.92)
RET	0.013	(0.08)
*DRET*RET*	−0.470	(−1.21)
EXIT	0.004	(0.04)
*DRET*EXIT*	0.382 [a]	(2.80)
*RET*EXIT*	0.011	(0.10)
*DRET*RET*EXIT*	0.801 [b]	(2.33)
MB	0.042	(0.21)
*DRET*MB*	0.339	(1.07)
*RET*MB*	−0.033	(−0.19)
*DRET*RET*MB*	0.534	(1.59)
LEV	0.127	(0.84)
*DRET*LEV*	0.068	(0.20)
*RET*LEV*	−0.019	(−0.16)
*DRET*RET*LEV*	0.280	(0.60)
SIZE	0.365 [b]	(2.39)
*DRET*SIZE*	−0.083	(−0.32)
*RET*SIZE*	−0.158	(−1.22)
*DRET*RET*SIZE*	0.288	(0.47)
LIT	0.012	(0.13)
*DRET*LIT*	−0.081	(−1.15)
*RET*LIT*	0.001	(0.02)
*DRET*RET*LIT*	−0.078	(−0.47)
2-WAY cluster	Yes	
Industry & Year	Yes	
Adj. R^2	0.211	
n	461	

See the Appendix A—Table A1 for the other variable definitions. [c], [b], and [a] indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels (two-tailed), respectively. *MB*, *LEV*, and *SIZE* are the ranked variables.

Table 9. Going-concern opinions and exit firms' conservatism in accounting (Khan and Watts [17] C-Score).

	Dependent Variable = *CSV*	
Variable	**Coeff.**	***t*-Stats.**
Intercept	−0.224	(−1.64)
EXIT	0.019	(0.18)
MB	−0.003 [c]	(−1.78)
LEV	−0.018 [c]	(−1.74)
SIZE	−0.011	(−0.44)
LIT	0.108	(1.28)
GRSALE	0.010 [c]	(1.81)
RDA	0.009	(0.94)
CFO	0.007	(0.03)
REVSTD5	0.067	(1.31)
AGE	0.007	(1.34)
RETVOL	0.102	(0.60)
CYCLE	0.096	(0.07)
SPREAD	−1.456	(−0.62)

Table 9. *Cont.*

Variable	Dependent Variable = *CSV*	
	Coeff.	***t*-Stats.**
2-WAY cluster	Yes	
Industry & Year	Yes	
Adj. R^2	0.295	
n	63	

See the Appendix A—Table A1 for other variable definitions. [c], [b], and [a] indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels (two-tailed), respectively.

5. Conclusions

The role of accounting in conservatism reducing information asymmetry and its impact on auditors' GCO decisions has evolved, but how firms respond to auditors' issuance of GCOs with accounting conservatism has not yet been explored. Thus, the primary research question of my study is whether previous going-concern opinions are related to the subsequent accounting conservatism. I posited that the previous issuance of GCOs is positively associated with firms' subsequent accounting conservatism, given that auditors value firms' conservative reporting, which contributes to mitigating auditors' litigation risks [15]. According to the literature on accounting conservatism, e.g., [16,46], bad news is recognized as a transitory shock or takes longer for verification, while good news is recognized as a persistent shock or takes sooner for verification in the earnings process. I addressed the research question of my study using the time-series and price-based models presented by Basu [16] and conservatism proxy (i.e., C-Score) from 2000 to 2013 proposed by Khan and Watts [17].

My empirical results verify that firms are more likely to report losses in a timely manner after the firms received GCOs in earlier periods. In addition, firms exiting GCOs are more likely to report losses, rather than gains, in a timely manner, compared to firms non-exiting from GCOs. Overall, the firms with GCOs in prior periods tend to be more conservative in accounting in subsequent periods to lower the engagement risk and alleviate information asymmetry and uncertainty. Given that going-concern is the same concept as sustainability, my findings also suggest that firms choose the asymmetric timeliness of loss over gain recognition to overcome the challenges of sustainability.

This study contributes new insights into the strategic perspective of client management. In practice, GCOs may prompt such management, who is obsessed with short-term performance to clear away the auditors' substantial doubt on the clients' going-concern, to accelerate the recognition of gains rather than losses. If firms receiving GCOs in earlier fiscal periods subsequently choose to be conservative in accounting to exit from GCOs, auditors who value accounting conservatism change their assessment on management's going-concern evaluation. This finding is consistent with the view that management has incentives of conservative accounting for earnings and net assets [18].

To the best of my knowledge, this study was the first to explore how firms respond to auditors' going-concern decisions by exhibiting their conservative behavior in financial reporting. This study also extended the work of DeFond et al. [15] in that conditional conservatism in accounting alleviates information uncertainty by associating a firm's reporting behavior in accounting with an auditor's discretionary decision on the firm's ability to continue as a going-concern. This study confirmed that accounting conservatism contributes to risk reduction, such as litigation risk and engagement risk, rather than being an impediment to the financial reporting quality.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data are available from the author subsect to licensing agreements.

Conflicts of Interest: The author declares no conflict of interest.

Appendix A

Table A1. Variable definition.

Variable		Definition
GC	=	Indicator variable for a going-concern opinion, which is equal to 1 if the auditor qualified their opinion with a going-concern assumption, and 0 otherwise.
LagGC	=	*GC* at time t−1.
Lag2GC	=	*GC* at time t−2.
ChgE	=	Change in adjusted income before extraordinary items (Compustat "IB"), adjusted by total asset (Compustat "AT").
DChgE	=	Indicator which is equal to 1 if *ChgE* is below 0, and 0 otherwise.
LagChgE	=	*ChgE* at time t−1.
EARN	=	Earnings per share (EPS), excluding extraordinary items for firm *i* in year *t*, adjusted by stock price at the end of the fiscal year (i.e., Compustat "EPSPX" divided by Compustat "PRCC_F").
RET	=	Annual returns compounded from monthly returns beginning from the fourth month after the fiscal year end.
DRET	=	Indicator variable for negative stock return = 1 if *RET* < 0, and 0 otherwise.
CSV	=	Khan and Watts [17] conservatism measure (C-Score). In the Basu's [16] price-based linear regression, C-Score is calculated by using the parameter estimates of the equation in which "$\mu_1 + \mu_2 MB + \mu_3 LEV + \mu_4 SIZE$" is substituted for β_2 and "$\lambda_1 + \lambda_2 MB + \lambda_3 LEV + \lambda_4 SIZE$" is substituted for β_3 for each year. After an annual cross-sectional regression is run to estimate the parameters of firm-specific characteristics (i.e., *MB, LEV*, and *SIZE*), C-Score is calculated for each firm year.
MB	=	Market-to-book ratio at the beginning of the fiscal year ((Compustat "CSHO"*Compustat "PRCC_F")/Compustat "CEQ").
LEV	=	Financial leverage = Leverage, which is equal to total debt (Compustat "DLTT" + Compustat "DLC") divided by total assets (Compustat "AT") at the beginning of the fiscal year.
SIZE	=	Natural logarithm of the market value of equity (Compustat "CSHO" * Compustat "PRCC_F") at the beginning of the fiscal year.
LIT	=	Indicator which is equal to 1 if a firm is in a litigious industry (i.e., industry with SIC codes 2833–2836, 3570–3577, 3600–3674, 5200–5961, or 7370–7374), and 0 otherwise.
GRSALE	=	Percentage of annual growth in total sales.
RDA	=	Total research and development expense plus advertising expense deflated by total sales.
CFO	=	Cash flow from operations (OANCF) divided by average total assets of year *t*.
REVSTD5	=	Standard deviation of the natural log of revenues measured from *t–5* to year *t–1*.
AGE	=	Natural logarithm of the number of years of data for the client firm since the coverage in Compustat.
RETVOL	=	Standard deviation of monthly stock returns over year *t*.
CYCLE	=	Depreciation expenses deflated by the beginning-of-year total assets, which is a decreasing measure of the length of the investment cycle.
SPREAD	=	Bid-ask spread scaled by the midpoint of the spread, obtained from CRSP.
EXIT	=	Indicator variable which is equal to 1 if the client firm receives non-GCO since the firm received the GCO in the past, and 0 otherwise.

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