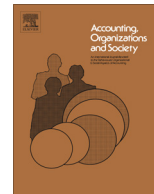




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Conservatism and Staff Accounting Bulletin No. 108 ☆

Thomas G. Canace^a, Richard C. Hatfield^{b,*}, Scott B. Jackson^c^a Wake Forest University, United States^b University of Alabama, United States^c University of South Carolina, United States

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ABSTRACT

This study examines whether firms with large conservative allowances for uncollectible accounts on their balance sheets make significant adjustments to increase net assets in response to Staff Accounting Bulletin No. 108 (SAB 108). To the extent adjustments are not made, we examine the qualitative reasons SAB 108 may have had a limited effect on these large conservative accounting estimates. In the year of enactment, SAB 108 required public companies to adjust material accumulations on the balance sheet that may have occurred prior to enactment of SAB 108 after considering all relevant quantitative and qualitative factors. Our archival results find that no firms made a SAB 108 adjustment and while sample firms tend to, at best, make small reductions to the allowance subsequent to SAB 108's effective date, most sample firms continue to have potentially overestimated allowances several years later. To understand the qualitative forces underlying this finding, we interview key individuals involved in the financial reporting process and we survey experienced financial executives employed at our sample firms. The findings reveal that organizational forces favor conservatism because being over-reserved helps firms avoid income-decreasing surprises while being under-reserved appears careless. We conclude that conservatism remains a deeply engrained feature of accounting thought and practice, in contrast to recent emphasis by accounting standard setters on neutrality over conservatism.

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1. Introduction

Prior research suggests that many firms have accumulated large conservative allowances for uncollectible accounts on their balance sheets and that those firms may use conservative balances to manage earnings in future periods (Jackson & Liu, 2010). Staff Accountant Bulletin No. 108 (SAB 108) requires public companies, under the iron-curtain approach, to consider the materiality of potential misstatements that have accumulated on the balance sheet through multiple non-material income statement differences. In the year of enactment, SAB 108 required firms to make adjustments for any material accumulations that may have occurred prior to enactment after considering all relevant quantitative and qualitative factors. The enactment of SAB 108 allows for a

“natural experiment” to determine whether such specific guidance would initiate financial statement adjustments for large conservative allowances. Further, to the extent that adjustments are not made, the enactment of SAB 108 allows us to use qualitative methods to investigate specific reasons why conservative allowances persist on the balance sheet. Thus, we interview and survey the key players (i.e., audit partners, firm managers and regulators) to better understand why SAB 108 had a limited effect on large conservative allowance balances.¹

Evidence in various domains of accounting suggests that companies may be reluctant to increase net assets because doing so (1) runs counter to conservatism (Basu, 1997; Givoly & Hayn, 2000; Hirshleifer & Teoh, 2009; Watts, 2003a; Watts, 2003b) and (2) may reduce their ability to manage earnings in the future (Barton & Simko, 2002; Jackson & Liu, 2010; McNichols & Wilson, 1988; Penman, 2001). Thus, a better understanding of whether such balances are adjusted under SAB 108 is important because the SEC has indicated that uncorrected misstatements distort the balance sheet and are contrary to the best interests of financial

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* Corresponding author at: Culverhouse School of Accounting, University of Alabama, Tuscaloosa, AL 35487-0220, United States.

E-mail address: rhatfiel@cba.ua.edu (R.C. Hatfield).

¹ In our setting, the practice of conservatism refers to a preference for reporting estimates in the direction of understatement rather than overstatement of net income and net assets (Financial Accounting Standards Board (FASB), 1980).

statement users, especially if “cookie jar” reserves facilitate earnings management in the future (Levitt, 1998; Securities & Exchange Commission (SEC), 2006). Indeed, the SEC identified these among the reasons for issuing SAB 108. Yet, SAB 108 also requires managers and their auditors to consider all relevant quantitative and qualitative information, which raises the importance of examining both factors before making conclusions about necessary adjustments for material accumulations on the balance sheet. Thus, we explore both aspects of this decision because there may be qualitative considerations that help to explain managers’ estimates.

In the first stage of this study, we focus on quantitative data related to the allowance for uncollectible accounts to consider the potential for conservative accumulations on the balance sheet. Prior research shows that this account has grown over time because firms seemingly over-accrue bad debt expense, perhaps causing the allowance to become overly conservative in the long-run (Jackson & Liu, 2010). Using future realizations of the allowance by examining firms’ publicly disclosed write-offs (McNichols & Wilson, 1988), we calculate a quantitative difference (potential overestimation) as a measure of allowance accuracy by subtracting one-year leading write-offs from the allowance for uncollectible accounts. We then consider whether these quantitative differences remain on the balance sheet of our sample firms and if the large conservative differences persist after the promulgation of SAB 108.

In the year immediately preceding the effective date of SAB 108, our archival analyses suggest that 37.50% of the firms we analyze have potential overestimations of their allowance in excess of five percent of net income. The mean allowance for these firms is sufficient to cover five years of leading write-offs. In fact, the 25 largest calculated quantitative differences average almost 60% of net income. Despite the size of the accumulated allowance for uncollectible accounts on the balance sheet, none of the firms we analyze make a SAB 108 adjustment to correct a potential accumulated error in the allowance account. Moreover, while we find that the allowance declined modestly, on average, following SAB 108’s effective date, most sample firms continue to have a potentially overestimated allowance four periods after SAB 108’s effective date. The SEC expressly prohibits improper assets and liabilities from remaining on the balance sheet in perpetuity (SEC, 2006). Thus, the fact that our sample firms opted for no adjustment, or at best, small delayed adjustment, of the allowance suggests that the differences we calculate, though often quite large, are not being perceived as material misstatements worthy of correction.

The second stage of the study employs qualitative methods to better understand why firms, and their auditors, are not applying SAB 108 to this apparent overestimation of the allowance for uncollectible accounts. We conduct open-ended interviews with ten key individuals involved in the financial reporting process, including financial executives, audit partners, and regulators at the SEC and PCAOB to shed light on the archival findings. Experienced financial executives indicate that organizational forces favor conservatism with respect to the allowance and auditors do little to deter it. Indeed, these executives believe that being over-reserved helps the firm to avoid income-decreasing surprises in an uncertain environment, while being under-reserved appears careless. In turn, auditors indicate that there is little risk associated with having a conservative allowance and are unlikely to oppose such a preference. These partners framed the issue not as one involving an over-reserved allowance, but as one involving a conservative balance. The accounting regulators commented (1) that some SEC reviewers of filings may evaluate the allowance in relation to the balance sheet rather than leading write-offs, which might make the overestimation seem less consequential, and (2) that a plausible explanation for overestimated allowances is the desire to be conservative.

To get a better understanding of the specific actions of the firms in our sample, we also survey experienced financial executives employed at our sample firms. Survey findings reveal that many individuals and groups internal to these firms strongly favor conservatism with respect to the allowance and no individuals or groups oppose it. Moreover, the responses suggest that financial executives primarily resist drawing down the allowance because doing so is at odds with maintaining a conservative balance. Thus, a conservative allowance appears to have become a somewhat permanent feature of the balance sheet.

Taken as a whole, it appears that SAB 108 would certainly be applicable to these firms if we simply considered the quantitative materiality of these potential misstatements. The fact that these firms and their auditors do not perceive SAB 108 to apply suggests that they do not perceive these overestimates as material misstatements. That is, if a firm has a large allowance, but has some justification for it, the auditor may just view this as a very conservative balance, but not a misstatement. There appears to be some asymmetry in the judgment of misstatement depending upon whether the amount in question is income/asset increasing or decreasing. It is also interesting that, despite the potential for overestimated allowances to be used as “cookie jar” reserves, they still occur after SAB 108 and firms’ management suggest they keep these reserves for the very reason of having some cushion to avoid hits to earnings.

Our study contributes to the accounting literature by providing the first evidence that conservative accumulations on the balance sheet persist subsequent to specific guidance about eliminating accumulations (i.e., SAB 108). Our archival evidence that firms make small reductions to conservative allowance balances after SAB 108 suggests that the SEC may have modestly attenuated firms’ conservatism in the reporting of these estimates on the balance sheet. However, interview and survey evidence also suggests that managers believe the maintenance of large conservative allowances is appropriate.

Further, discussions with audit partners and regulators reveal that such accumulations are unlikely to cause them to object to conservative balances. So, while regulators create specific guidance about dealing with material accumulations (e.g., SAB 108), our quantitative and qualitative results suggest that conservative balances in the financial statements are still viewed as appropriate by firms and seemingly permissible by auditors/regulators. These findings may be important for future studies examining accounting conservatism for two reasons. First, our evidence highlights the need to consider both quantitative and qualitative factors when making conclusions about firms’ accounting estimates. Second, our evidence should be considered in light of recent changes to the Conceptual Framework (Concepts Statement No. 8, “Conceptual Framework for Financial Reporting” FASB, 2010) which places emphasis on neutrality over conservatism. The revised framework does not include conservatism as a qualitative characteristic because it has become associated with the deliberate understatement of net assets and net income and is in conflict with the quality of neutrality which encompasses freedom from bias.

Moreover, the results have at least two practical implications given recent regulatory concern and research that suggest such conservative balances may increase the likelihood of earnings management. First, the large accumulations that we identify seem to have become part of the status quo and auditors may have become uncritically accustomed to them as interview evidence shows they view them as bearing little inherent risk. Our findings could sensitize auditors to the possibility that accumulations in the allowance account are systematic and excessive when assessed with commonly accepted quantitative benchmarks. Second, these findings could prompt the SEC officials to scrutinize allowance

balances that appear to be “overly conservative” and issue comment letters to firms, which, among other things, opens a dialogue about conservatism.

The remainder of this paper proceeds as follows. The next section provides background, discusses relevant prior research, and develops our hypotheses. Section 3 describes the archival methods and results. Section 4 describes our additional archival analyses. Section 5 reports the results of open-ended interviews with financial executives, auditors, and regulators. Section 6 discusses our survey of experienced financial executives employed at our sample firms. The final section summarizes the results and describes certain limitations.

2. Background, relevant prior research, and hypotheses development

2.1. Summary of Staff Accounting Bulletin No. 108

The SEC issued SAB 108 in 2006 to address two concerns—(1) the diversity in practice with respect to quantifying financial statement misstatements and (2) the potential for improper amounts to accumulate on the balance sheet.² Prior to the issuance of SAB 108, auditors elected to use the “rollover” approach or “iron curtain” approach to quantify misstatements, but auditors generally did not consider both approaches simultaneously. The rollover approach quantifies a misstatement by looking at the amount of the error originating on the income statement in the current year. This method ignores any accumulated balance sheet misstatement originating in prior years. Conversely, the iron curtain approach quantifies a misstatement by looking at the amount of the misstatement on the balance sheet regardless of when the misstatement originated.

To illustrate the differences between the rollover approach and iron curtain approach, consider Fig. 1, which contemplates the following circumstances. A firm records an excessive expense accrual each year for five years. The amount by which the expense accrual exceeds the “correct” accrual is \$10 per year. At the same time, the firm reports income of \$1000 each year. If the *rollover* approach is used to quantify financial statement misstatements then the error is \$10 each year. Expressed as a percent of income, the excessive expense accrual is only one percent of income each year. If the *iron curtain* approach is used to quantify financial statement misstatements then the error is \$10 in year 1, \$20 in year 2, \$30 in year 3, \$40 in year 4, and \$50 in year 5. Expressed as a percent of income, the excess accrual is one, two, three, four, and ultimately five percent of earnings in years 1 through 5, respectively.

The provisions of SAB 108 prohibit exclusive reliance on either the rollover approach or iron curtain approach. Instead, SAB 108 requires use of the “dual” approach, which is the approach initially recommended by Nelson, Smith, and Palmrose (2005). The dual approach requires auditors and their clients to consider the magnitude of a misstatement under both the rollover approach and iron curtain approach and then make an adjustment whenever the misstatement is material under either approach after considering the relevant quantitative and qualitative factors. Thus, in the illustrative example above, the dual approach would seemingly require an adjustment to correct the accumulated misstatement in the allowance account based upon the quantitative materiality of the error under the iron curtain approach.

In the year SAB 108 became effective, firms are not required to restate prior period financial statements if management properly applied either the rollover approach or iron curtain approach. This transition feature allows firms that have accumulated misstatements

on the balance sheet to avoid restating financial statements in the years that led to the misstatement. However, firms must reflect the cumulative effect of the initial application of SAB 108 in the carrying amounts of assets and liabilities as of the beginning of the first fiscal year after SAB 108 became effective, with an offsetting adjustment to the opening balance of retained earnings. SAB 108 expressly prohibits delayed or partial corrections of misstatements. Errors that existed at the time SAB 108 became effective but were not corrected on a timely basis must be corrected by restating the prior period financial statements in accordance with Statement of Financial Accounting Standards (SFAS) No. 154, *Accounting Changes and Error Corrections* (FASB, 2006; ASC §250).

2.2. Research related to Staff Accounting Bulletin No. 108

Nelson et al. (2005) examine the effect of the two methods of quantifying financial statement misstatements, finding that auditors are more likely to require their clients to book misstatements under the approach that makes the misstatement appear more material. Also, while Nelson et al. (2005) provide participants with the information necessary to evaluate misstatements using either the rollover approach or iron curtain approach, participants’ audit adjustment decisions were strongly influenced by how the information was presented to them (i.e., presented in accordance with the rollover approach or the iron curtain approach). This finding is consistent with the SEC’s concern that the rollover approach may allow improper amounts to accumulate on the balance sheet. Nelson et al. (2005) also consider whether income increasing adjustments would be affected by employing the iron curtain approach. In their cases with income increasing adjustments, auditors are least likely to require the adjustment. They suggest that auditors may waive these adjustments, thereby permitting conservatism, because auditor training and litigation risk encourage detecting income overstatements, not understatements.

Keune and Johnstone (2009) examine SAB 108 disclosures, finding that misstatements disclosed under SAB 108 (1) tend to be income-decreasing, (2) tend to be made by larger firms, (3) are concentrated in regulated industries, (4) are underrepresented in the manufacturing industry, (5) are clustered in current liabilities, leases, revenue recognition, and deferred taxes, and (6) are not overrepresented in reserve accounts. They point out that these findings are consistent with prior evidence that auditors tend to allow conservative reporting (Kinney & Martin, 1994; Wright & Wright, 1997) and are less likely to require adjustments for subjective accounts that require estimation (Braun, 2001; Ng, 2007). Therefore, their results suggest that considering both the direction and account type of the adjustment are critical to a consideration of why firms make SAB 108 adjustments.

Moreover, several studies examine the association between various market-related variables and SAB 108 corrections. Omer, Shelley, and Thompson (2011) find that firms reporting SAB 108 corrections are no more likely to meet or beat analysts’ consensus forecasts than firms not reporting SAB 108 corrections. Keune and Johnstone (2012) find that auditors are more likely to waive qualitatively material misstatements as analyst following increases, but they also find that auditors are less likely to waive misstatements as audit fees increase. Omer, Shelley, and Thompson (2012) find a negative association between factors that are posited to reduce audit quality and investors’ response to SAB 108 corrections, which suggests that investors react more negatively to corrections when auditor independence appears weaker.

To date, prior research has empirically examined *corrected* misstatements that are disclosed in audited financial statements; prior research has not empirically examined whether large and potentially material misstatements go *uncorrected* in audited financial

² SAB 108 was issued on September 13, 2006 and its provisions became effective for the first fiscal year ending after November 15, 2006.

Illustration of Different Methods of Quantifying Financial Statement Misstatements

Year	Excessive expense accrual	Financial statement misstatement amount		Income	Financial statement misstatement amount as a percentage of earnings	
		Rollover	Iron curtain		Rollover	Iron curtain
1	10	10	10	1,000	1%	1%
2	10	10	20	1,000	1%	2%
3	10	10	30	1,000	1%	3%
4	10	10	40	1,000	1%	4%
5	10	10	50	1,000	1%	5%

This figure illustrates the effect on the income statement and balance sheet of recording an excessive expense accrual in five consecutive years. A hypothetical company is assumed to record an expense of \$10 in excess of the needed amount for five consecutive years. Each year the excess expense accumulates on the balance sheet. The misstatement on the balance sheet is \$10 at the end of year 1, \$20 at the end of year 2, and ultimately \$50 at the end of year 5. While the adjustment necessary to correctly state earnings is only \$10 in any given year, the adjustment necessary to correctly state the balance sheet accumulates over time, resulting in a quantitatively material misstatement by the end of year 5.

Fig. 1. Illustration of different methods of quantifying financial statement misstatements.

statements, and, if so, the qualitative reasons adjustments are not made. We specifically identify large accumulations (potential misstatements based on the iron curtain approach) on the balance sheet prior to and after the enactment of SAB 108 to consider whether or not management and auditors perceive that SAB 108 applies.

2.3. Are large conservative accumulations of the allowance adjusted under SAB 108?

We focus on a particular accrual account, the allowance for uncollectible accounts, to evaluate whether or not firms applied SAB 108 to conservative accumulations on the balance sheet. The allowance captures the accumulated effect of small increases due to bad debt expense on the income statement being consistently in excess of write-offs. Jackson and Liu (2010) suggest that over-accruals of bad debt expense have accumulated in the allowance account during the past 25 years. By the final year of their sample (2004), which predates SAB 108, Jackson and Liu (2010) find that most firms could endure write-offs of uncollectible accounts for several years without exhausting the allowance. Like Jackson and Liu (2010), we define a potential overestimate of the allowance by considering the extent to which it exceeds leading write-offs.

Managers of firms that have a large allowance may be reluctant to fully adjust this account in the year that SAB 108 became effective for two main reasons. First, if managers immediately adjusted the allowance then they would be unable to draw it down in subsequent years when earnings thresholds may be in danger of not being met. Regulators and academics contend that understated net assets increase management's ability to manage earnings (American Institute of Certified Public Accountants (AICPA), 1939; Devine, 1963; DeFond, 2002; Levitt, 1998; Penman, 2001), and empirical research provides evidence that managers are more likely to manage earnings when net assets are understated (Barton & Simko, 2002; Jackson & Liu, 2010; McNichols & Wilson, 1988).

Second, managers face strong institutional forces that promote conservative accounting and generally oppose adjusting asset understatements (Givoly & Hayn, 2000; Watts, 2003a; Watts, 2003b). Conservatism has evolved over many decades and it has become one of the most deeply engrained features of accounting thought and practice (Basu, 1997; Watts, 2003a). Hirshleifer and Teoh (2009) argue that managers favor conservative accounting because it reduces the likelihood that they (and others) will be disappointed when the realization of significant estimates becomes known in the future. Thus, preferences for conservative accounting by managers may override preferences for regulatory compliance

(Holthausen, 2009)³ or may alter the perception of whether or not SAB 108 applies.

In addition, auditors may not require their clients to correct an overestimated allowance. The risk-based audit approach directs auditors' attention to the overstatement of net assets, not the understatement of net assets (Arens, Elder, & Beasley, 2003). Consistent with this view, evidence suggests that auditors are more concerned about reducing asset-increasing misstatements than reducing asset-decreasing misstatements (Francis & Krishnan, 1999; Kinney & Martin, 1994; Nelson, Elliott, & Tarpley, 2002; Wright & Wright, 1997). If auditors are comfortable with a conservative balance in the allowance, then it is likely they will accept the amount, given that management will have some plausible rationale for the balance.

This discussion not only suggests that managers may oppose adjusting a potentially overestimated allowance, but it also suggests that auditors may not require an adjustment. Hypothesis 1, stated in alternative form, is as follows:

Hypothesis 1. Large (conservative) accumulations in the allowance for uncollectible accounts will not be fully adjusted under the application of SAB 108 in the year it became effective.

2.4. Does the allowance gradually decline after SAB 108's effective date?

While Hypothesis 1 predicts that these large accumulations in the allowance are not fully adjusted in the year that SAB 108 became effective, we nonetheless expect that the allowance will decline in the years subsequent to SAB 108's effective date. Jackson and Liu (2010) indicate that the allowance is built-up over time by firms over-accruing bad debt expense. In turn, they find that the allowance is subsequently drawn down by firms recording small amounts of bad debt expense when they are in danger of missing analysts' forecasts. However, SAB 108 may make it difficult for managers to continue to build up the allowance because over-

³ Empirical evidence suggests that compliance with regulations does not always occur. For example, Schwartz and Soo (1996) show that noncompliance with disclosures related to auditor terminations is related to various management incentives. Likewise, Robinson, Xue, and Yu (2011) and Scannell and Lublin (2008) find considerable non-compliance with executive compensation disclosures despite the fact that verification of compliance is almost costless. Moreover, articles from the business press point out instances of possible noncompliance with accounting standards affecting financial statement accounts such as recent rules on asset retirement obligations (see www.goodwinprocter.com/Publications/Newsletters/Environmental-and-Energy-Advisory/2007/0424_FIN-47-Poses-Hard-Questions-for-Estimating-Future-Environmental-Liabilities.aspx).

accruing bad debt expense would increase the likelihood that, under the iron curtain approach, this account is seen to be materially misstated. Thus, we expect SAB 108 to create asymmetry in the movement of large allowance accumulations—firms can readily draw down the allowance in the post-SAB 108 years but they may encounter resistance if they wish to replenish the allowance in those years. At the same time, if SAB 108 significantly reduces firms' ability to replenish an overestimated allowance account then bad debt expense should be lower in the years after SAB 108 became effective than in the years before SAB 108 became effective. *Hypotheses 2a and 2b*, stated in alternative form, are as follows:

Hypothesis 2a. The allowance account declines in the years after SAB 108 became effective.

Hypothesis 2b. Bad debt expense declines in the years after SAB 108 became effective.

2.5. Does the allowance continue to be highly conservative?

While we expect that the allowance account will be drawn down in the post-SAB 108 years, it seems unlikely that firms will quickly draw down accumulations in the allowance during that period because that action could attract unwanted scrutiny by auditors, regulators, and investors. We therefore expect the allowance to remain quantitatively large (conservative) several years after SAB 108 became effective even though *Hypotheses 2a and 2b* predict that it will decline during the post-SAB 108 period. *Hypothesis 3*, stated in alternative form, is as follows:

Hypothesis 3. Firms continue to have large (conservative) accumulations in the allowance account several years after SAB 108 became effective.

3. Archival analyses

In the first stage of the study, we employ archival data to test our hypotheses about the potential for conservative accumulations in the allowance for uncollectible accounts to survive subsequent to the effective date of SAB 108.

3.1. Sample selection

We identify the 750 domestic firms on Compustat in 2002 with the largest unscaled balances in net current accounts receivable. Our rationale for selecting such firms is that we wish to identify firms that are likely to have material allowance balances. We eliminate (1) firms in regulated industries (primarily financial institutions and utilities), (2) firms whose receivables are mainly due from consumers (i.e., non-business receivables), and (3) leasing companies.⁴ This eliminates 129 firms. We then attempt to obtain financial data for the remaining 621 firms from two sources—Schedule II of Form 10-K and Compustat. Write-offs, bad debt expense, and recoveries of previously written-off accounts must all be obtained

⁴ With respect to item (1), we eliminate financial institutions because their receivables (primarily loans) are fundamentally different from the receivables of non-financial institutions. Also, eliminating financial institutions removes firms that experienced extreme distress during the financial crisis of 2008. With respect to item (ii), consumer receivables are different from trade (business) receivables in terms of transaction size, incentives for prompt payment, and bankruptcy frequency. Eliminating consumer receivables therefore increases the homogeneity of our sample.

from Schedule II because Compustat does not collect these items.⁵ In some cases we could not locate a Schedule II or an equivalent schedule in the 10-K. In total, we eliminate 132 firms because Schedule II could not be located or because of missing financial data on Compustat.

Our sample period starts in 2002, although we also obtain needed data for 2001 from Schedule II along with Compustat data for that year (there is no incremental sample attrition due to adding 2001). We also require firms to have continuous Schedule II data and Compustat data during the period 2001 through 2006. We impose this requirement to avoid having firms appear in our sample during pre-SAB 108 years but not actually appear in our sample during the year SAB 108 became effective. One hundred sixty-one firms do not have continuous Schedule II data and Compustat data during this period, which results in 328 firms from which we attempt to calculate the quantitative accuracy of the allowance balance (discussed next). In turn, we collect needed data through 2009, thereby leaving four potential reporting periods subsequent to the effective date of SAB 108. Due to data availability and sample attrition, the number of firms analyzed declines from 328 firms in 2006 to 259 firms by 2009.

3.2. Benchmarks

We need a quantitative benchmark for estimating the accuracy of the allowance based on observable write-offs. We use materiality which is typically defined by reference to net income. Evidence indicates that a misstatement above five percent of net income is almost always considered quantitatively material (Chewning, Pany, & Wheeler, 1989; Eilifsen & Messier, 2015; Holstrum & Messier, 1982; Messier, Martinov-Bennie, & Eilifsen, 2005; Pany & Wheeler, 1989). Therefore, our analysis employs five percent of net income for determining whether the allowance is potentially overestimated.

We develop a benchmark for an “accurate” allowance by considering leading write-offs as a reference point for what the allowance would have been to perfectly cover bad debts for the year (Cecchini, Jackson, & Liu, 2012; Fedyk & Singer, 2011; Jackson & Liu, 2010; McNichols & Wilson, 1988). This benchmark matches the allowance with its future realization.⁶ We note, however, that leading write-offs is not a perfect benchmark because it combines write-offs of *prior year* credit sales (this is the portion of write-offs that we would ideally include) with write-offs of *current year* credit sales (this is the portion of write-offs that we would ideally exclude). Because our benchmark for the allowance includes some write-offs that ought to be excluded, it is a benchmark that may bias our tests against concluding that the allowance is potentially overestimated.

Thus, we define a potentially overestimated allowance as one in which the allowance exceeds leading write-offs by an amount in excess of materiality. Using the materiality and allowance benchmark noted above (five percent), *Appendix A* lists the firms that we define to have a potentially overestimated allowance in the year before SAB 108 became effective. Column (a) provides the dif-

⁵ There are several non-routine items on Schedule II—recoveries, reclassifications, reserve adjustments, currency translation adjustments, miscellaneous adjustments, etc. We use recoveries as a catch-all label for all of the non-routine items on Schedule II. In some instances, firms combine write-offs with recoveries (or other non-routine items) and report a negative value for write-offs to the extent that recoveries (or other non-routine items) are oppositely signed and exceed write-offs. Such negative values are uncommon. Only two such instances arose in *Appendix A* (this appendix is discussed in detail later). In these few instances, we set a lower bound of zero on negative write-offs.

⁶ There is a one-year time period assumption inherent in the allowance. The allowance is for current receivables, so it should have a write-off horizon of one year or less. As a result, our use of one year of leading write-offs (rather than, for example, two years of leading write-offs) is appropriate.

ference between the allowance and leading write-offs expressed as a percent of net income. Firms are ranked in descending order by column (a). Formal tests are discussed below, but notice that 123 firms (37.50% of the 328 firms analyzed) have a difference in Column (a) in excess of five percent of net income in the year preceding SAB 108's effective date which suggests their allowance may be overestimated.

We also consider various alternative quantitative measures in Appendix A because it is possible that both managers and their auditors use other potential metrics when determining the amount of the allowance to report in the financial statements. Column (b) is a variant of Column (a), the only difference being that leading write-offs are multiplied by a factor of two, consistent with an alternative benchmark discussed in Riley and Pasewark (2009). Column (c) provides the percentage of accounts receivable that each firm has reserved, and Column (d) provides the industry adjusted percentage of accounts receivable that each firm has reserved. Column (e) provides the allowance as a percentage of total assets. Following Jackson and Liu (2010), Column (f) provides the number of years of future write-offs that each firm has reserved.^{7,8} A value of five would, for example, indicate that the firm could forego recording bad debt expense for five years before write-offs exhaust the allowance. Thus, higher ratios might suggest firms are overestimating the allowance, whereas a value of 1–2 for a typical year may be more appropriate (Riley & Pasewark, 2009). Column (g) provides the standard deviation of Column (f), which is calculated on a firm-by-firm basis using all available observations for each firm during the sample period. The standard deviation, relative to the mean value, helps to give readers a sense of the variable's temporal stability. Column (h) indicates the percentage of the allowance that has not been consumed by leading write-offs. Lower ratios, approaching zero, suggest firms' current allowance provides a better estimate of future write-offs. Column (i) is the ratio of bad debt expense to write-offs. This ratio should be approximately one in the long-run. Column (j) is the standard deviation of the ratio of bad debt expense to write-offs.

Our discussion focuses on the mean and median values in the last two rows of Appendix A because our interest lies in characterizing the sample of firms that appear to have a potentially overestimated allowance, not to characterize particular firms in the sample. The mean (median) value of Column (a) is 20.00 (11.10), which suggests that the overstatement of the allowance is potentially large in relation to reported earnings. The mean (median) value of Column (b) is smaller than Column (a), but nonetheless fairly large. Firms reserve a substantial fraction of their receivables as indicated by the mean (median) value of Column (c) of 4.18 (3.45). These values are large relative to the industry medians, as indicated by the positive mean (median) values in Column (d) of 1.10 (0.50). The mean (median) value of Column (e) is 0.96 (0.68), which reveals that the allowance is moderately significant in relation to total assets. However, we note that SAB 108 requires registrants to consider both the income statement and balance sheet when making materiality judgments.

The mean (median) value of Column (f) is 5.51 (3.93) which indicates that the allowance will not be exhausted any time soon even if no additional reserve is recorded for several years. The mean value of Column (g) of 5.38 suggests that the ratio in Column (f) may be somewhat unstable over time. This is consequential because if the relationship between the allowance and leading write-offs is erratic, it is possible that conservatism in the

allowance is merely intended to create a “cookie jar” reserve that is increased in good years and drawn down in bad years to manipulate earnings. The mean (median) value of Column (h) is 71.23 (74.55) which indicates that about three quarters of the allowance is unused by leading write-offs. The mean (median) value of Column (i) is 1.98 (1.00) which indicates that bad debt expense and write-offs are somewhat similar to one another. The mean (median) value of Column (j) of 2.08 (0.75) suggests that the ratio in Column (i) is fairly stable over time. Overall, the data in Appendix A suggests that these firms have potentially overestimated allowances even after considering various alternative quantitative measures.

3.3. Descriptive information

Table 1 provides the industry profile for the 123 firms that comprise the five percent of net income sample. While the sample consists of a broad cross-section of different industries, there is clustering in SIC codes 28, 35, and 73. Table 2 provides descriptive statistics for the 1079 firm-years (123 individual firms). Panel A provides descriptive statistics for firm size and other variables followed by descriptive statistics for the dependent and independent variables. Panel B provides descriptive statistics for the dependent variables partitioned by SAB 108's effective date.⁹

3.4. Test of whether firms make SAB 108 adjustments

Hypothesis 1 predicts that firms will tend not to make SAB 108 adjustments in the year it became effective. For each of the 123 firms identified above as having a potentially overestimated allowance (see Appendix A), we examined the Form 10-K to determine whether a SAB 108 adjustment related to the allowance was made in the year that SAB 108 became effective. None of the 123 firms made any such adjustment.¹⁰ The absence of any SAB 108 adjustments to the allowance is of interest because the mean calculated potential overestimation of the allowance was approximately 20% of net income and the mean number of years of leading write-offs reserved was approximately six.

Further, many of the firms that we analyze have a potentially overestimated allowance that is far in excess of various commonly used benchmarks. In fact, the 25 largest overestimates are, on average, 58% of net income and the allowance associated with these overestimates covers approximately seven years of leading write-offs. Given the evidence in Appendix A, it appears that, at first blush, a large fraction of the firms we analyze needed to make SAB 108 adjustments related to the allowance. However, none of these firms made such adjustments, but, instead, continue to maintain conservative allowances in the year SAB 108 became effective.¹¹ Hypothesis 1 is therefore supported.

3.5. Tests of whether the allowance declines after the effective date of SAB 108

Hypothesis 2a predicts that the allowance declines in the years after SAB 108 became effective. To test this hypothesis, we

⁹ To mitigate the effect of outliers, continuous regression variables are winsorized at the 99th percentile.

¹⁰ We do, however, find that 22 firms made a SAB 108 adjustment unrelated to the allowance. Also, while none of the firms in our *final sample* made a SAB 108 adjustment related to the allowance, three firms in our *initial sample* made such adjustments. As a percentage of net income, the SAB 108 adjustments related to the allowance were 20.66%, 5.02%, and 1.02%.

¹¹ SAB 99 (SEC, 1999) and Auditing Standard No. 14 (AICPA, 2010) prohibit auditors from offsetting one material misstatement against another material misstatement. As a result, the absence of a SAB 108 adjustment related to the allowance is not the result of concurrent offsetting misstatements.

⁷ When leading write-offs are zero, Column (f) is undefined. The issue that we face is what value to assign to Column (f) when leading write-offs are zero. Given that the mean and median values in Column (f) of Appendix A are approximately 6 and 4, respectively, we selected a value of 5.

⁸ Write-offs exhibit no significant time-trend during our sample period.

Table 1
Industry profile of sample.

SIC code	SIC description	#	%
13	Oil and Gas Extraction	4	3.25
20	Food and Kindred Products Manufacturers	4	3.25
25	Furniture and Fixture Manufacturers	6	4.88
27	Printing and Publishing	5	4.07
28	Chemicals and Allied Products Manufacturers	12	9.76
30	Rubber and Misc. Plastics Manufacturers	3	2.44
35	Industrial and Commercial Machinery Manufacturers	11	8.94
36	Electronic and Electrical Equipment Manufacturers	3	2.44
37	Transportation Equipment Manufacturers	6	4.88
38	Measuring and Analyzing Equipment Manufacturers	7	5.69
50	Wholesale, Durable Goods	7	5.69
51	Wholesale, Non-Durable Goods	7	5.69
73	Business Services	15	12.20
	Other	33	26.83
	Total	123	100.00

The “Other” category captures count data for SIC codes that have fewer than three different firms.

estimate the following pooled, cross-sectional regression using the model from Jackson and Liu (2010):

$$\begin{aligned}
 ALLOW_{it}/SALE_{it} = & \beta_0 + \beta_1 AR_{it}/SALE_{it} + \beta_2 WO_{it}/SALE_{it} \\
 & + \beta_3 WO_{it+1}/SALE_{it} + \beta_4 ARTO_IND_{it} \\
 & + \beta_5 ALT_IND_{it} + \beta_6 SD_SALE_IND_{it} \\
 & + \beta_7 BANKRUPT_{it} + \beta_8 POST_SAB_108_{it} + \varepsilon_{it} \quad (1)
 \end{aligned}$$

where $ALLOW_{it}$ is the allowance for uncollectible accounts; $SALE_{it}$ is net sales; AR_{it} is gross accounts receivable; WO_{it} is write-offs of uncollectible accounts; $ARTO_IND_{it}$ is the median industry accounts receivable turnover ratio (defined as $SALE_{it}$ divided by the average accounts receivable) computed using all firms with available data on Compustat;¹² ALT_IND_{it} is the median industry Altman (1968) Z-score computed using all firms with available data on Compustat; $SD_SALE_IND_{it}$ is the median industry standard deviation of sales computed on a firm-by-firm basis using the four quarters of each year for all firms with available data on Compustat; $BANKRUPT_{it}$ is the total number of business bankruptcies in the U.S. economy scaled by the total number of corporate tax filers;¹³ $POST_SAB_108_{it}$ is a dichotomous variable coded as 1 for the fiscal years after SAB 108 became effective (November 15, 2006), and 0 otherwise; i and t are firm and year subscripts, respectively. Firm fixed effects are included in Eq. (1) but are not shown, and t -statistics are calculated using standard errors clustered by firm. Hypothesis 2a predicts that the coefficient on $POST_SAB_108_{it}$ will be negative, indicating that the allowance is lower in the post-SAB 108 years.¹⁴

To enhance comparability over time and to control for potential survivorship bias, we analyze two samples. The first sample is referred to as the “full sample.” This sample contains all observations during the sample period 2001 through 2009 for firms that have an allowance exceeding our quantitative benchmark in the year that SAB 108 became effective. The second sample is referred to as the “constant sample.” This sample is similar to the full sample except that it only contains observations for firms that have complete data for the entire nine-year sample period.

¹² Industry is defined at the two-digit SIC code level. When there are fewer than ten total firms in a two-digit SIC code, we compute ALT_IND_{it} , $ARTO_IND_{it}$, and $SD_SALE_IND_{it}$, at the one-digit SIC code level.

¹³ We obtained the number of bankruptcies from the American Bankruptcy Institute at www.abiworld.org under the heading “U.S. Bankruptcy Filings 1980–2009 (Business, non-Business, Total).”

¹⁴ Studies often include both firm and year fixed effects in pooled, cross-sectional regressions. Because the test variable in the regressions reported in this study have a time dimension, year fixed effects are excluded.

Table 2
Descriptive statistics.

Panel A: Descriptive statistics			
	(n = 1079)		
	Mean	Median	Std. dev.
Firm size and other variables			
TA _{it} (\$mil.)	6225.23	1859.08	12620.11
SALE _{it} (\$mil.)	7279.60	2347.00	14121.54
MVE _{it} (\$mil.)	5422.32	1641.22	15434.56
AR _{it} /TA _{it} (%)	24.32	20.72	13.14
AR _{it} /CA _{it} (%)	50.71	48.24	16.29
ALLOW _{it} /AR _{it} (%)	4.46	3.52	3.41
BDE _{it} /NI _{it} (%)	4.70	3.24	32.84
WO _{it} /NI _{it} (%)	4.38	3.31	46.91
BDE _{it} /SHO _{it} (\$ per share)	0.15	0.08	0.19
Dependent variables from regressions			
ALLOW _{it} /SALE _{it} (×100)	0.81	0.59	0.76
BDE _{it} /SALE _{it} (×100)	0.32	0.19	0.51
Independent variables from regressions			
AR _{it} /SALE _{it} (×100)	18.43	16.90	8.38
WO _{it} /SALE _{it} (×100)	0.35	0.18	0.57
WO _{it+1} /SALE _{it} (×100)	0.34	0.18	0.55
ARTO_IND _{it}	6.64	6.06	1.98
ALT_IND _{it}	4.27	4.27	1.45
SD_SALE_IND _{it}	7.54	5.22	8.09
BANKRUPT _t (×100)	0.66	0.69	0.18
ALLOW _{it-1} /SALE _{it} (×100)	0.79	0.58	0.78
TOP_DEC _{it} (%)	10.00	0.00	30.15
BOT_DEC _{it} (%)	10.00	0.00	30.15
RECOV _{it} /SALE _{it} (×100)	0.02	0.00	0.11
Panel B: Descriptive statistics for dependent variables partitioned by the effective date of SAB 108*			
	Pre-SAB 108 years (n = 643)		
	Mean	Median	Std. dev.
ALLOW _{it} /SALE _{it} (×100)	0.88	0.66	0.75
BDE _{it} /SALE _{it} (×100)	0.36	0.21	0.51
	Post-SAB 108 years (n = 436)		
	Mean	Median	Std. dev.
ALLOW _{it} /SALE _{it} (×100)	0.70	0.49	0.75
BDE _{it} /SALE _{it} (×100)	0.27	0.14	0.50

Variables are defined as follows: TA_{it} is total assets; SALE_{it} is net sales; MVE_{it} is market value of equity; AR_{it} is gross accounts receivable; CA_{it} is current assets; ALLOW_{it} is the allowance for uncollectible accounts; BDE_{it} is bad debt expense; NI_{it} is net income; SHO_{it} is common shares outstanding; WO_{it} is write-offs of uncollectible accounts; ARTO_IND_{it} is the median industry accounts receivable turnover ratio (defined as SALE_{it} divided by the average accounts receivable) computed using all firms with available data on Compustat; ALT_IND_{it} is the median industry Altman (1968) Z-score computed using all firms with available data on Compustat; SD_SALE_IND_{it} is the median industry standard deviation of sales computed on a firm-by-firm basis using the four quarters of each year for all firms with available data on Compustat; BANKRUPT_{it} is the total number of business bankruptcies in the U.S. economy scaled by the total number of corporate tax filers; TOP_DEC_{it} is a dichotomous variable coded as 1 for firms in the sample top decile of net income divided by total assets, and 0 otherwise; BOT_DEC_{it} is a dichotomous variable coded as 1 for firms in the sample bottom decile of net income divided by total assets, and 0 otherwise; RECOV_{it} is recoveries of previously written-off accounts receivable; i and t are firm and year subscripts, respectively. Continuous regression variables are winsorized at the 99th percentile.

* Means and medians are significantly different between the pre- and post-SAB 108 years (p -values < 0.01).

Table 3 reports regression results for Eq. (1) using the full and constant samples. The coefficient on each of the economic determinants is positive and significant (p -values ≤ 0.020) using both the full and constant samples. The coefficients on three of the controls for temporal changes in the riskiness of receivables ($ARTO_IND_{it}$, ALT_IND_{it} , and $SD_SALE_IND_{it}$) are insignificant (p -values > 0.10), while the coefficient on one of the controls ($BANKRUPT_{it}$) is significant in the predicted direction (p -values ≤ 0.002).¹⁵

¹⁵ When we specify the industry adjusted controls for temporal changes in the riskiness of receivables in their non-industry adjusted form, the variables remain insignificant in all regressions and none of our inferences or conclusions change.

Table 3
Regressions of the allowance for uncollectible accounts on economic determinants, controls for temporal changes in the riskiness of receivables, and the test variable. $ALLOW_{it}/SALE_{it} = \beta_0 + \beta_1 AR_{it}/SALE_{it} + \beta_2 WO_{it}/SALE_{it} + \beta_3 WO_{it+1}/SALE_{it} + \beta_4 ARTO_IND_{it} + \beta_5 ALT_IND_{it} + \beta_6 SD_SALE_IND_{it} + \beta_7 BANKRUPT_{it} + \beta_8 POST_SAB_108_{it} + \varepsilon_{it}$.

Variable	Pred. Sign	Full sample (n = 1079)			Constant sample (n = 873)		
		Coeff.	t-stat.	p-value	Coeff.	t-stat.	p-value
<i>Economic determinants</i>							
Intercept	?	−0.0040	−1.87	0.062	−0.0048	−1.85	0.064
$AR_{it}/SALE_{it}$	+	0.0341	9.21	<0.001	0.0326	6.74	<0.001
$WO_{it}/SALE_{it}$	+	0.1926	2.33	0.020	0.2570	2.49	0.013
$WO_{it+1}/SALE_{it}$	+	0.6106	7.53	<0.001	0.6764	7.67	<0.001
<i>Controls for temporal changes in the riskiness of receivables</i>							
$ARTO_IND_{it}$	−	0.0001	0.27	0.787	0.0002	0.81	0.419
ALT_IND_{it}	−	0.0002	1.58	0.115	0.0002	1.50	0.134
$SD_SALE_IND_{it}$	+	0.0000	−1.45	0.146	0.0000	−1.34	0.182
$BANKRUPT_{it}$	+	0.2050	3.54	<0.001	0.2008	3.07	0.002
<i>Test variable for Hypothesis 2a</i>							
$POST_SAB_108_{it}$	−	−0.0006	−1.68	0.094	−0.0005	−1.42	0.156
Adjusted R^2 (%)				86.72			87.39
Model F-statistic				54.72			59.11
Model p-value				<0.001			<0.001

Variables are defined as follows: $ALLOW_{it}$ is the allowance for uncollectible accounts; $SALE_{it}$ is net sales; AR_{it} is gross accounts receivable; WO_{it} is write-offs of uncollectible accounts; $ARTO_IND_{it}$ is the median industry accounts receivable turnover ratio (defined as $SALE_{it}$ divided by the average accounts receivable) computed using all firms with available data on Compustat; ALT_IND_{it} is the median industry Altman (1968) Z-score computed using all firms with available data on Compustat; $SD_SALE_IND_{it}$ is the median industry standard deviation of sales computed on a firm-by-firm basis using the four quarters of each year for all firms with available data on Compustat; $BANKRUPT_{it}$ is the total number of business bankruptcies in the U.S. economy scaled by the total number of corporate tax filers; $POST_SAB_108_{it}$ is a dichotomous variable coded as 1 for the fiscal years after SAB 108 became effective (November 15, 2006), and 0 otherwise; i and t are firm and year subscripts, respectively. Continuous regression variables are winsorized at the 99th percentile. Firm fixed effects are included in the regressions but are not shown. The t -statistics are calculated using standard errors clustered by firm and p -values are two-tailed.

In Table 3, the coefficient on the test variable, $POST_SAB_108_{it}$, is negative in both the full sample (coefficient = −0.0006, t -statistic = −1.68, p -value = 0.094) and constant sample (coefficient = −0.0005, t -statistic = −1.42, p -value = 0.156). The coefficients on $POST_SAB_108_{it}$ are negative but, at best, marginally significant, indicating limited support for Hypothesis 2a. Moreover, the economic significance of the decline is modest. Notice that the coefficient on $POST_SAB_108_{it}$ for the full sample is only −0.0006, which implies that the mean allowance has declined by approximately 0.06% of sales. Thus, although firms may not have felt the need to make a SAB 108 adjustment immediately after its enactment, SAB 108 does appear to have caused the allowance to decline modestly, perhaps because managers of firms now find it more difficult to replenish an already large allowance balance by over-accruing bad debt expense. We consider this possibility next.

3.6. Tests of whether bad debt expense declines after the effective date of SAB 108

Hypothesis 2b predicts that bad debt expense declines in the years after SAB 108 became effective. To test this hypothesis, we estimate the following pooled, cross-sectional regression using the model from Jackson and Liu (2010) and McNichols and Wilson (1988):

$$\begin{aligned}
 BDE_{it}/SALE_{it} = & \beta_0 + \beta_1 ALLOW_{it-1}/SALE_{it} + \beta_2 WO_{it}/SALE_{it} \\
 & + \beta_3 WO_{it+1}/SALE_{it} + \beta_4 TOP_DEC_{it} \\
 & + \beta_5 BOT_DEC_{it} + \beta_6 RECOV_{it}/SALE_{it} \\
 & + \beta_7 ARTO_IND_{it} + \beta_8 ALT_IND_{it} \\
 & + \beta_9 SD_SALE_IND_{it} + \beta_{10} BANKRUPT_{it} \\
 & + \beta_{11} POST_SAB_108_{it} + \varepsilon_{it} \quad (2)
 \end{aligned}$$

where $SALE_{it}$, $ALLOW_{it}$, WO_{it} , $ARTO_IND_{it}$, ALT_IND_{it} , $SD_SALE_IND_{it}$, $BANKRUPT_{it}$, and $POST_SAB_108_{it}$ are defined above; BDE_{it} is bad debt expense; TOP_DEC_{it} is a dichotomous variable coded as 1 for firms in the sample top decile of net income

divided by total assets, and 0 otherwise; BOT_DEC_{it} is a dichotomous variable coded as 1 for firms in the sample bottom decile of net income divided by total assets, and 0 otherwise; $RECOV_{it}$ is recoveries of previously written-off accounts receivable (as noted in Section 3, this is a catch-all label for non-routine items on Schedule II). Firm fixed effects are included in Eq. (2) but are not shown, and t -statistics are calculated using standard errors clustered by firm. The first six variables in Eq. (2) are economic determinants from McNichols and Wilson (1988), while the next four variables are controls for temporal changes in the riskiness of receivables from Jackson and Liu (2010). Hypothesis 2b predicts that the coefficient on $POST_SAB_108_{it}$ will be negative.

Table 4 reports regression results for Eq. (2) using the full and constant samples. The coefficient on each of the economic determinants is significant (p -values < 0.10) in the predicted direction using the full and constant samples, except for the coefficient on TOP_DEC_{it} which is insignificant in both samples (p -values > 0.10) and the coefficients on $ALLOW_{it-1}/SALE_{it}$, $WO_{it}/SALE_{it}$, and BOT_DEC_{it} which are insignificant (p -values > 0.10) in the constant sample. The coefficients on controls for temporal changes in the riskiness of receivables ($ARTO_IND_{it}$, ALT_IND_{it} , and $SD_SALE_IND_{it}$) are insignificant (p -values > 0.10), while the coefficient on one of the controls ($BANKRUPT_{it}$) is significant in the predicted direction (p -values < 0.01).

In Table 4, the coefficient on the test variable, $POST_SAB_108_{it}$, is negative but, at best, marginally significant in both the full sample (coefficient = −0.0005, t -statistic = −1.43, p -value = 0.154) and constant sample (coefficient = −0.0005, t -statistic = −1.40, p -value = 0.162). These results provide very limited support for Hypothesis 2b. Thus, not only do firms not make SAB 108 adjustments, but they do not reduce their annual bad debt expense to gradually reduce the allowance balance.¹⁶

¹⁶ Eq. (2) is specified similar to Eq. (6) in Jackson and Liu (2010). The main difference is that we exclude analyst forecast variables from Eq. (2) to avoid sample attrition. If we include the analyst forecast variables from Jackson and Liu (2010) in Eq. (2), our inferences and conclusions do not change.

Table 4

Regressions of bad debt expense on economic determinants, controls for temporal changes in the riskiness of receivables, and the test variable. $BDE_{it}/SALE_{it} = \beta_0 + \beta_1 ALLOW_{it-1}/SALE_{it} + \beta_2 WO_{it}/SALE_{it} + \beta_3 WO_{it+1}/SALE_{it} + \beta_4 TOP_DEC_{it} + \beta_5 BOT_DEC_{it} + \beta_6 RECOV_{it}/SALE_{it} + \beta_7 ARTO_IND_{it} + \beta_8 ALT_IND_{it} + \beta_9 SD_SALE_IND_{it} + \beta_{10} BANKRUPT_{it} + \beta_{11} POST_SAB_108_{it} + \epsilon_{it}$.

Variable	Pred. Sign	Full sample (n = 1079)			Constant sample (n = 873)		
		Coeff.	t-stat.	p-value	Coeff.	t-stat.	p-value
<i>Economic determinants</i>							
Intercept	?	0.0011	0.61	0.542	0.0001	0.03	0.977
$ALLOW_{it-1}/SALE_{it}$	–	–0.2286	–1.78	0.075	–0.1322	–0.95	0.342
$WO_{it}/SALE_{it}$	+	0.3986	2.77	0.006	0.2447	1.28	0.200
$WO_{it+1}/SALE_{it}$	+	0.5134	5.66	<0.001	0.5087	4.11	<0.001
TOP_DEC_{it}	+	0.0001	0.19	0.847	0.0000	0.04	0.967
BOT_DEC_{it}	+	0.0012	1.97	0.049	0.0012	1.56	0.119
$RECOV_{it}/SALE_{it}$	–	–0.4595	–3.68	<0.001	–0.5450	–4.62	<0.001
<i>Controls for temporal changes in the riskiness of receivables</i>							
$ARTO_IND_{it}$	–	–0.0001	–0.46	0.648	0.0000	0.08	0.936
ALT_IND_{it}	–	–0.0001	–0.56	0.575	–0.0001	–0.66	0.508
$SD_SALE_IND_{it}$	+	0.0000	0.23	0.818	0.0000	0.33	0.744
$BANKRUPT_{it}$	+	0.1467	2.60	0.009	0.1743	2.71	0.007
<i>Test variable for Hypothesis 2b</i>							
$POST_SAB_108_{it}$	–	–0.0005	–1.43	0.154	–0.0005	–1.40	0.162
Adjusted R ² (%)				75.02			70.61
Model F-statistic				25.16			20.58
Model p-value				<0.001			<0.001

Variables are defined as follows: BDE_{it} is bad debt expense; $SALE_{it}$ is net sales; $ALLOW_{it}$ is the allowance for uncollectible accounts; WO_{it} is write-offs of uncollectible accounts; TOP_DEC_{it} is a dichotomous variable coded as 1 for firms in the sample top decile of net income divided by total assets, and 0 otherwise; BOT_DEC_{it} is a dichotomous variable coded as 1 for firms in the sample bottom decile of net income divided by total assets, and 0 otherwise; $RECOV_{it}$ is recoveries of previously written-off accounts receivable; $ARTO_IND_{it}$ is the median industry accounts receivable turnover ratio (defined as $SALE_{it}$ divided by the average accounts receivable) computed using all firms with available data on Compustat; ALT_IND_{it} is the median industry Altman (1968) Z-score computed using all firms with available data on Compustat; $SD_SALE_IND_{it}$ is the median industry standard deviation of sales computed on a firm-by-firm basis using the four quarters of each year for all firms with available data on Compustat; $BANKRUPT_{it}$ is the total number of business bankruptcies in the U.S. economy scaled by the total number of corporate tax filers; $POST_SAB_108_{it}$ is a dichotomous variable coded as 1 for the fiscal years after SAB 108 became effective (November 15, 2006), and 0 otherwise; i and t are firm and year subscripts, respectively. Continuous regression variables are winsorized at the 99th percentile. Firm fixed effects are included in the regressions but are not shown. The t -statistics are calculated using standard errors clustered by firm and p -values are two-tailed.

3.7. Tests of whether the allowance continues to be highly conservative

The SEC indicated that certain registrants proposed that improper assets and liabilities be permitted to remain on the balance sheet in perpetuity (SEC, 2006). While the SEC rejected this approach, there appears to be some reluctance to adjusting the allowance through a SAB 108 adjustment. Hypothesis 3 predicts that firms continue to maintain large (in excess of our quantitative benchmark), conservative accumulations in the allowance account several years after SAB 108 became effective. To test Hypothesis 3, we use the methodology that we used to test Hypothesis 1 (Section 3.4), but we focus on whether the allowance remains potentially overestimated in 2009. To do this, we use a constant sample of 234 firms rather than the full sample of 328 firms to prevent sample attrition from obscuring temporal changes in the allowance.

Table 5 provides tabulations using the five percent benchmark. We find that 97 firms in the five percent sample out of the 234 firms in the constant sample have an allowance that is potentially materially overestimated in the year before SAB 108 became effective (note that the 97 firms from the five percent constant sample are subsets of the 123 firms comprising the five percent full sample in Section 3.4). None of the firms we analyze make a SAB 108 adjustment related to the allowance, but 10 firms gradually draw down the allowance, resulting in a quantitatively immaterial difference in leading write-offs and the allowance by 2009. However, the number of firms that draw down the allowance sufficiently to make this difference quantitatively immaterial is very small compared to the number of firms that do not. Notice in Table 5 that there are 87 firms that continue to carry this potentially material overestimate of the allowance in 2009. The percentage of firms that continue to have this large difference is significantly above zero (p -values < 0.001). Further, the percentage of firms that continue to have a potentially materially overestimated allowance is

Table 5

Tabulations of persistently conservative allowances using constant sample.

	Count	%
Firms that have a potentially materially overestimated allowance in the year before SAB 108 became effective (identified from the constant sample, which consists of 234 firms)	97	100.00
Less: Firms that make a SAB 108 adjustment related to the allowance in the year SAB 108 became effective	0	0.00
Less: Firms that gradually draw down the allowance, resulting in a quantitatively immaterial overestimation of the allowance by 2009	10	10.31
Equals: Firms that have a persistently conservative allowance in 2009	87	89.69

significantly above the percentage of firms that do not continue to have a potential overestimate (p -values < 0.001). Thus, we find support for Hypothesis 3.

4. Additional archival analyses

4.1. Financial crisis

The financial crisis of 2008 was concentrated in the financial sector, but the crisis also influenced other sectors of the economy, including sectors in which some of our sample firms operate. To help address this event in the design of our study, we exclude financial institutions from our sample (see Section 3.1). To assess the extent to which the financial crisis specifically influenced our sample firms, we examine whether write-offs differ between the pre-SAB 108 years and post-SAB 108 years. In each of our sample cuts (i.e., full and constant samples), we find that average write-offs are no higher in the post-SAB 108 years than in the

pre-SAB 108 years (results not tabulated). These findings suggest that the financial crisis had a somewhat limited effect on the allowance of our sample firms.¹⁷

4.2. Determinants of the extent to which the allowance is overestimated

There is considerable cross-sectional variation in the extent to which the allowance is potentially overestimated (conservative). Some of this variation might be explained by factors identified in prior research such as economic dependence, audit quality, firm size, and governance (DeAngelo, 1981; Keune & Johnstone, 2012; Nelson et al., 2002; Wright & Wright, 1997). To explore this issue, we regress the excess allowance, defined as $ALLOW_{it} - WO_{it+1}$ scaled by $SALE_{it}$, on proxies for the above factors in each of the two years adjacent to SAB 108's effective date (results not tabulated). Economic dependence is measured as (1) the natural logarithm of audit fees and (2) the natural logarithm of non-audit fees (both obtained from Audit Analytics). Audit quality is measured as the Big 4/non-Big 4 dichotomy. Firm size is measured as the natural logarithm of total assets. Governance is measured as G_SCORE from Gompers, Ishii, and Metrick (2003). None of these variables are significant in either year adjacent to SAB 108's effective date (p -values > 0.10).

4.3. Additional model specifications

Eqs. (1) and (2) test for a temporal decline in the allowance and bad debt expense, respectively, using an intercept shift approach. Alternatively, the equations could test for a temporal change in the allowance and bad debt expense using intercept shifts coupled with slope shifts. Under this alternative approach, we include interactions between $POST_SAB_{108_{it}}$ and the economic determinants in Eqs. (1) and (2) (results not tabulated). When the slope shifts are included in Eq. (1) using the *full sample*, the marginally significant negative coefficient on $POST_SAB_{108_{it}}$ reported in Table 3 becomes insignificant (but the sign remains negative) and none of the interactions are significant. When the slope shifts are included in Eq. (1) using the *constant sample*, the insignificant negative coefficient on $POST_SAB_{108_{it}}$ reported in Table 3 remains insignificant (and the sign remains negative) and only the interaction between $POST_SAB_{108_{it}}$ and $WO_{it+1}/SALE_{it}$ is significant (p -value < 0.05). Overall, it appears that firms maintain conservative allowances after SAB 108 became effective. Moreover, with just one interaction being significant in both regressions, we conclude that the relationship between the allowance and the economic determinants is largely stable across the pre/post-SAB 108 periods.

When the slope shifts are included in Eq. (2) using the *full sample*, the insignificant negative coefficient on $POST_SAB_{108_{it}}$ reported in Table 4 remains insignificant (and the sign remains negative) and two of the six interactions (specifically, the interaction between $POST_SAB_{108_{it}}$ and TOP_DEC_{it} and the interaction between $POST_SAB_{108_{it}}$ and $RECOV_{it}/SALE_{it}$) are significant (p -values < 0.05). When the slope shifts are included in Eq. (2) using the *constant sample*, the insignificant negative coefficient on $POST_SAB_{108_{it}}$ reported in Table 4 remains insignificant (and the sign remains negative) and two of the six interactions (specifically, the interaction between $POST_SAB_{108_{it}}$ and $WO_{it}/SALE_{it}$ and the interaction between $POST_SAB_{108_{it}}$ and $RECOV_{it}/SALE_{it}$) are significant (p -values < 0.05). Thus, two of the six interactions in each regression using the full and constant samples are significant, indicating some amount of temporal variability across the

pre/post-SAB 108 periods in terms of the relation between bad debt expense and the economic determinants. However, this result does not seem to be of great consequence given that we observe a minimal, at best, temporal decline in the allowance (discussed previously).

5. Open-ended interviews

Our archival analyses using a primary benchmark and various additional measures suggest that firms may have needed to make a SAB 108 adjustment to their allowance accounts. Moreover, the analyses demonstrate that, while these allowances may be modestly reduced after the enactment of SAB 108, most allowances identified as potentially overestimated are still materially greater than leading write-offs. This evidence highlights the question as to why no adjustments were made, and suggests that there may be qualitative considerations that help explain why firms maintain overestimated allowances following the effective date of SAB 108. Therefore, to explain the forces underlying the circumstances we document in our archival analyses, the second stage of the study reports the results of open-ended interviews with (1) experienced financial executives at four different public companies, (2) a high ranking official at the SEC, (3) a high ranking official at the PCAOB, and (4) four audit partners who oversee public company audits. We explain the specific purpose of the interviews in each section below.

5.1. Open-ended interviews with financial executives

We attempted to arrange interviews with seven financial executives at different public companies. Four of the financial executives agreed to participate—two come from our sample firms and two come from non-sample public firms.¹⁸ Three of the financial executives are controllers and one is a CFO. These executives are routinely involved in making accounting estimates and judgments and they frequently interact with external auditors.

We asked three open-ended questions. First, we asked the financial executives whether they are more concerned about being under-reserved, over-reserved, or neither when making accounting estimates. Second, with respect to the allowance for uncollectible accounts, we asked the financial executives whether they are more concerned about being under-reserved, over-reserved, or neither. Third, related to the second question, we asked the financial executives what auditors have to say about being over-reserved.¹⁹

All of the financial executives indicate a desire to avoid income-decreasing surprises in connection with the annual audit, and they believe that being over-reserved (conservative) helps to avoid any such surprises.²⁰ In response to the first question, one financial executive stated the following:

“We are super conservative. We don't want to take a hit, ever. One hundred percent of the time we are over-reserved as opposed to under-reserved. Everybody has their own cushion

¹⁸ The two interviewees from our sample firms provided their business cards with their completed surveys (see Section 6) and offered to answer any follow-up questions that we might have. The other two interviewees were identified using university and professional connections.

¹⁹ An author took notes during the unstructured interviews, but the quotes may not be exact and are sometimes paraphrased.

²⁰ One executive offered an additional possible explanation for over-reserved allowances. The executive pointed out that writing off a customer's account could terminate collection efforts, and that there is some reluctance to give up on collections except for extreme cases. However, the executive emphasized that managers are less fixated on whether to write off an account, being primarily concerned about the sufficiency of the reserve because they never want to get caught with an inadequacy that could adversely impact earnings.

¹⁷ We also note that all of our regressions include a bankruptcy control variable ($BANKRUPT_{it}$), which helps control for any bankruptcy-induced variation in the allowance.

within the company, and there are tiers of cushions at all levels.”

Another financial executive stated the following:

“We expect to fall on the side of being over-reserved. Being over-reserved shows that we are careful which is particularly important in our uncertain environment. Being under-reserved looks careless and we would lose credibility.”

Two financial executives expressed similar sentiments, stating the following:

“The preference is on the side of conservatism. There are just too many risks if you are under-reserved. I would say that if you asked most people in our accounting and finance functions they would say the same thing.”

“You are always concerned about being under-reserved because of the ramifications. This weighs on your management judgment and you over-reserve because you don’t want to take an earnings hit.”

Turning to Questions 2 and 3, there appears to be a preference to have a conservative allowance and there seems to be little concern about being over-reserved. One financial executive stated the following:

“We hedge against uncertainties, so we would rather have the auditor tell us to reduce a reserve than increase a reserve. As long as you are over-reserved consistently, the auditor will leave you alone. We might reverse a little at a time. But if you have a big swing, the auditors will look. So, if you are going to miss your numbers and you dig into reserves to avoid that, you will have to explain to the auditor that you don’t need it anymore.”

This statement suggests that auditor scrutiny of the allowance for uncollectible accounts may be more dependent on variation in the allowance over time than on the absolute magnitude of it. Two financial executives expressed similar sentiments, stating the following:

“Our receivables reserve has undoubtedly grown because recent years have made it tougher to look into the crystal ball. We are not worried about auditors telling us to adjust the allowance. To be honest, receivables don’t get a lot of attention. There are other more technical and seemingly risky hot button issues with auditors.”

“If auditors argue that we are over-reserved, we say it was a management judgment. It is too difficult for them to prove they are right about estimates. But receivables really don’t come up because there are other more contentious accruals.”²¹

A fourth financial executive stated the following:

“I really don’t think about having too much in the allowance. Our auditors don’t give us flack about being over-reserved and they don’t follow-up on the accuracy of the estimate in the next period. I believe the mindset on their part is to reduce income, not increase it.”

²¹ This statement is consistent with an audit partner comment that “making a large one-time SAB 108 adjustment would be difficult as the client will certainly have a reason for the estimate. It may take several years to demonstrate that their judgment is in error.” Another audit partner commented that management knows their customers and accounts better than the auditors do so it is hard to second guess them and to require creating income if management is resisting based upon their knowledge of their customers’ businesses.

While these statements may not reflect the beliefs of all financial executives, they do suggest that conservatism exerts a powerful influence on the accounting judgments and estimates of some financial executives.²²

5.2. Open-ended interview with regulators

We arranged a conference call with a high ranking official in the Office of the Chief Accountant at the SEC. The SEC official previously worked in the Division of Corporate Finance, spending multiple years involved in the SEC’s filing review process. The SEC official provided his/her own personal views in an unofficial capacity. Our conversation addressed two questions. First, is SAB 108 applicable to an over-reserved allowance? Second, if the answer to the first question is yes, why might the SEC not identify such situations in connection with the filing review process?

To begin, we described the general findings in Appendix A and described several of our sample firms in more detail (but not by actual firm name or any other identifying information). The SEC official is quite knowledgeable about SAB 108 and he/she expressed the opinion that SAB 108 is indeed applicable to the situation at hand where a repeated over-accrual of bad debt expense had accumulated on the balance sheet over time. We then inquired about why the SEC might not identify such situations in connection with filing reviews.

The SEC’s filing review process is typically a high level evaluation of financial statement disclosures (and is not comparable in detail to an audit). Whereas auditors focus on a wide array of very specific detailed issues, the SEC tends to focus on disclosure adequacy and typically does not have access to company records that would enable it to engage in audit-related evaluations. As a result, the SEC relies on auditors to assess the reasonableness of accounting estimates. The SEC may nonetheless inquire about certain material accounting estimates when the surrounding facts and circumstances merit such an inquiry. For example, reviewers may inquire about the adequacy of loan loss reserves for some financial institutions because those estimates are deemed high risk and unambiguously material.

To the extent that reviewers at the SEC scrutinize accounting estimates, scrutiny would tend to focus on overstatements of assets rather than understatement of assets. This is not to say that an over-reserved allowance is unimportant to reviewers, but other big picture issues could make reviewer scrutiny of the allowance a comparatively low priority. The SEC official also noted that while the connection between an over-reserved allowance and SAB 108 should ideally be made, the connection is not obvious. Further, because the allowance appears on the balance sheet and is directly associated with accounts receivables, some reviewers may evaluate an apparent over-reserve of the allowance in relation to balance sheet amounts rather than income, which makes the over-reserve of the allowance seem less consequential.

Similarly, we arranged a conference call with a high ranking official at the PCAOB. To begin, we described the general findings in Appendix A and described several of our sample firms in more detail (but not by actual firm name or other identifying information). Our conversation focused on two related questions. First, is SAB 108 applicable to an over-reserved allowance? Second, if the answer to the first question is yes, why might PCAOB inspectors not identify the problem?

The PCAOB official indicated that on the surface SAB 108 should apply, although there might be some extenuating circumstances that justify a seemingly over-reserved allowance in certain

²² In connection with these open-ended interviews, we inquired about whether the financial executives view SABs as mandatory or optional. All of the financial executives view SABs as mandatory.

instances. However, the PCAOB official found it difficult to rationalize the frequency and magnitude of over-reserved allowances for the firms that we document in Appendix A and for the several firms that we described in more detail. The PCAOB official expressed the view that a plausible reason for the frequency and magnitude of over-reserved allowances is the desire to be conservative. Turning to the second question, the PCAOB official indicated that inspectors focus on whether auditors did enough procedurally to support an estimate rather than evaluate whether they thought that the estimate itself was appropriate.

5.3. Open-ended interviews with audit partners

Finally, we conducted open-ended interviews with four audit partners whose client portfolio included some public companies. To begin, we described the general findings in Appendix A and described several of our sample firms in more detail (but not by actual firm name or other identifying information). All of the partners are knowledgeable about SAB 108 and they all indicated that SAB 108 would be applicable to the situation at hand where over-accruals had accumulated on the balance sheet. We then inquired about whether (1) auditors would require clients to make a SAB 108 adjustment related to the allowance and (2) client management would tend to support such a proposed correction.²³

There was a remarkable amount of consistency among the audit partners. They all stated that there is very little audit risk associated with an over-reserved allowance and, in general, they would have little concern about such a situation. While an auditor may nudge a client towards reducing an over-reserved allowance over time, they would likely face opposition if they wanted the client to correct an over-reserved allowance all at once under SAB 108. The partners also indicated that there are many pressing issues having meaningful audit risk implications on almost every public company audit, and an over-reserved allowance is unlikely to be considered a pressing audit issue. The audit partners framed the issue not as one involving an over-reserved allowance, but as one involving a conservative allowance, putting the issue in a more acceptable light. The thrust of the unstructured interviews is that audit partners have limited concern about an over-reserved (conservative) allowance and they would be reluctant to press clients into correcting such a balance in one period (and perhaps not require clients to correct the balance at all).

6. Survey

Our discussions with financial executives, regulators and auditors all seem to suggest that conservatism exerts a powerful influence on the accounting judgments of executives and that auditors have limited concern about conservative (i.e., potentially overestimated) allowances. We also conduct a survey of accounting/finance professionals employed at our sample firms to provide further information about the possible influence of conservatism and other qualitative considerations on managers' estimates of the allowance. The purpose of the survey is twofold. First, we want to learn which individuals/groups internal and external to sample firms support versus oppose conservatism with respect to the allowance for uncollectible accounts. Second, we want to learn whether and why professionals employed at our sample firms may oppose an auditor proposed drawdown of the allowance.

²³ In previous conversations with practicing auditors, we found that they were somewhat reluctant to make statements about a misstatement being material or immaterial without knowing more about the surrounding facts and circumstances. We purposely steered away from the issue of judging materiality by asserting that the amount by which the allowance exceeded leading write-offs was material in relation to earnings.

6.1. Participants

We were able to obtain names and addresses of up to ten financial executives from Hoover's Online for firms in our study.²⁴ This amounted to a total of 1466 financial executives (an average of eight executives per firm). We mailed respondents a cover letter and an anonymous survey. The survey requested no information that would enable us to identify the respondent or their firm. We kept the survey brief (one page with several multi-part questions) to maximize the response rate. Of the 1466 letters mailed, 117 were returned as undeliverable. Of the 1349 letters that presumably reached their intended recipients, 78 were returned complete or partially complete (response rate of 5.78%).

The mean age of respondents is 49.19 years, and the mean amount of work experience in accounting and/or finance is 26.40 years. The professional titles of the respondents are (1) chief financial officer (13 respondents), (2) controller, chief accounting officer, or principal accounting officer (27 respondents), (3) vice president of finance (14 respondents), (4) assistant controller (6 respondents), (5) division controller (5 respondents), (6) director (8 respondents), and (7) other (5 respondents). The age and experience profiles of the respondents suggest that they are well suited to participate in our survey.

6.2. Survey description

The survey briefly introduces the setting to which the questions relate. Specifically, we inform respondents that companies must establish an allowance for uncollectible accounts for receivables that may not be collected from customers. We also state that some companies may establish an allowance that is conservative, while other companies may establish an allowance that is just sufficient. We then ask Questions 1 through 4 as shown in Table 6.²⁵ Question 1 asks respondents to indicate which individuals/groups internal to the company support or oppose a conservative allowance. Question 2 asks respondents to indicate which individuals/groups external to the company support or oppose a conservative allowance.

Question 3 describes a hypothetical circumstance in which a company has an excessive allowance which the auditor proposes that the company drawdown. Respondents are asked to indicate their opposition to or support for the proposed drawdown on a response scale that ranges from -100 (left endpoint which is labeled "Oppose") to +100 (right endpoint which is labeled "Support"). Zero is the midpoint of the response scale, which would indicate indifference. The circumstance in this question mimics the circumstances that SAB 108 created when it became effective. Finally, Question 4 asks the respondents who oppose the draw down (all respondents whose answer to Question 3 has a negative value) to explain why they oppose it. We provided a list of eight reasons and ask respondents to assign values between 0 and 100 to the reasons.

6.3. Results

The survey results are summarized in Table 6. Responses to Question 1 suggest that all of the individuals and groups internal to the company strongly support having a conservative allowance. Support for conservatism is highest among accountants (84.21%)

²⁴ To maximize the number of potential respondents, we attempted to contact appropriate company officials at firms whose potential overestimations of the allowance amounted to at least 2.5% of net income (rather than 5% of net income). This yields a total of 187 firms.

²⁵ Questions 1, 2, and 4 also allow respondents to provide an open ended response. In most cases, this was left blank. In cases where the respondent provided an open ended response, it was generally similar to one of the listed items. On balance, the listed items in Questions 1, 2, and 3 appear to be reasonably comprehensive.

Table 6
Survey results.

Question 1: In your opinion, what individuals/groups <i>internal</i> to your company support or oppose a conservative allowance for uncollectible accounts? For each individual/group listed below, circle "S" to indicate support or "O" to indicate oppose.							
Individual/group	% Support	% Oppose	n	Individual/group	% Support	% Oppose	n
CFO	79.49	20.51	78	Credit manager	77.33	22.67	75
Controller	83.12	16.88	77	Internal auditors	80.52	19.48	77
Accountants	84.21	15.79	76	Board of directors	77.46	22.54	71
Senior executives	66.67	33.33	75	Audit committee	80.26	19.74	76

Question 2: In your opinion, what individuals/groups <i>external</i> to your company support or oppose a conservative allowance for uncollectible accounts? For each individual/group listed below, circle "S" to indicate support or "O" to indicate oppose.							
Individual/group	% Support	% Oppose	n	Individual/group	% Support	% Oppose	n
External auditors	65.79	34.21	76	Analysts	53.96	46.04	63
Investors	61.54	38.46	65	SEC	57.35	42.65	68

Question 3: Hypothetically speaking, suppose that your company has an allowance for uncollectible accounts of \$1200 and has had a similar balance for many years. Write-offs of uncollectible accounts have been \$300–400 annually, and the allowance has been replenished by \$300–400 annually. This year, the auditor proposes that the allowance be drawn down by \$800 to make its balance match next year's expected write-offs. The auditor has voiced no opposition to the size of the allowance in the past. Your company's circumstances have not changed this year. The proposed drawdown of the allowance, if recorded, would be conspicuously shown in the financial statements and notes. As a financial officer of this hypothetical company, would you oppose or support the auditor's proposed drawdown of the allowance? Circle ONE number on the scale below to indicate your response.

Response	Mean	% Oppose	% Support	n
Overall	–15.71			77
Oppose	–64.47	61.04		47
Support	60.66		38.96	30

Note: Responses are provided on scale from –100 to +100. The left endpoint is labeled "Oppose" and the right endpoint is labeled "Support." All negative responses are classified as oppose.

Question 4: Continuing from Question 3. If you oppose or tend to oppose the auditor's proposed drawdown of the allowance (a response less than 0 in Question 3 above), what is the reason for the opposition? For each factor below, please assign a score of between 0 and 100. A score of 0 indicates that the factor had no impact on your response to Question 3, while a score of 100 indicates that the factor had a large impact on your response to Question 3.

Reason	Mean
1. The drawdown would be equivalent to admitting past mistakes when none exist	23.94
2. The drawdown is at odds with the company having a conservative (or prudent) allowance	58.62
3. The drawdown could have legal consequences for the company	9.68
4. If a drawdown must occur, it should be done gradually over time rather than all at once	33.51
5. The drawdown may trigger scrutiny and concerns by regulators and/or investors	33.09
6. The auditor should have made their views about the size of the allowance known sooner	40.64
7. The drawdown could cause executives to doubt the competence of managers	11.49
8. The drawdown and related disclosures would be a surprise to various individuals	20.96

and lowest among senior executives (66.67%). Moreover, approximately 81% of CFOs and controllers support conservative allowances. These results are consistent with our discussions with financial executives who point to conservatism as a powerful influence on their judgments. For each individual and group shown in Question 1, the χ^2 test for equality of proportions indicates that the proportion that supports conservatism is significantly greater than the proportion that opposes conservatism (p -values < 0.01).

Responses to Question 2, which focus on external individuals and groups, are much weaker. Support for conservatism is highest among a company's external auditors (65.79%) and lowest among analysts (53.96%). The χ^2 test indicates that the proportion of external auditors perceived to support conservatism is greater than the proportion perceived to oppose conservatism (p -value < 0.01). This aligns with our discussions with audit partners who tended to frame conservative allowances in an acceptable light. However, the χ^2 test related to investors is marginally significant (p -value = 0.06) and the χ^2 test related to both analysts and the SEC is insignificant (p -values > 0.10). This evidence suggests that forces promoting a conservative allowance primarily come from internal individuals and groups, but that auditor support for conservatism may be a factor as well. These findings, as well as those from our interviews, provide direct evidence about continued preferences for conservatism even after the issuance of Concepts Statement No. 8 (FASB, 2010).

For Question 3, our respondents tend to oppose the auditor's proposed drawdown of the allowance. The mean response is

–15.71, and the mean is significantly below the midpoint of the scale (t -statistic = –2.02, p -value = 0.05). Perhaps even more telling is that the median response is –40.00 and that 61.04% of the respondents oppose the drawdown. This finding suggests that many respondents are unwilling to passively accept an adjustment proposed by the external auditor. This is similar to comments made by audit partners we interviewed that they would likely face client opposition to correcting an over-reserved allowance all at once. For those respondents who oppose the drawdown, Question 4 seeks to understand the reason for opposition by having respondents assign scores between 0 and 100 to eight different reasons. The idea that a drawdown is at odds with maintaining a conservative allowance is the primary reason (average score of 58.62). Participants also oppose the drawdown because the auditor should have brought it up sooner (average score of 40.64), the drawdown should occur over time (average score of 33.51), and the drawdown may trigger increased scrutiny (average score of 33.09).

7. Summary and limitations

This study examines whether firms with large reserves for uncollectible accounts make SAB 108 adjustments in the year of enactment. To the extent adjustments are not made, we interview and survey key players to understand why SAB 108 had a limited effect on conservative estimates. A better understanding of how such balances accumulate on the balance sheet is important because the SEC has indicated that uncorrected misstatements

distort the balance sheet and are contrary to the best interests of financial statement users, especially if “cookie jar” reserves facilitate earnings management in the future (Levitt, 1998; SEC, 2006). Indeed, the SEC identified these among the reasons for issuing SAB 108. Yet, SAB 108 also requires managers and their auditors to consider all relevant quantitative and qualitative information, which raises the importance of examining both factors before making conclusions about necessary adjustments for material accumulations on the balance sheet.

In the first stage of the study, we examine archival data related to the allowance for uncollectible accounts to consider the potential for conservative accumulations on the balance sheet. Results indicate that a large fraction of sample firms have potentially material overestimates of the allowance in the year SAB 108 became effective (the 25 largest quantitative differences average almost 60% of net income). While sample firms tend to modestly draw down the allowance subsequent to SAB 108's effective date, the results suggest they continue to maintain potentially material overestimates on the balance sheet several years after SAB 108 became effective. Therefore, our quantitative evidence highlights an important question as to why further adjustments were not made.

To better understand the forces driving this behavior, the second stage of the study employs two qualitative methods: we interview key individuals involved in the financial reporting process and we survey financial executives actually employed at our sample firms. Interviews with financial executives seem to indicate that conservatism may exert a powerful influence on their accounting judgments and estimates, and that maintaining overly conservative allowance balances provides a “cushion against earnings hits.” While the idea of conservatism is generally seen as “a positive” and even “more objective” by these executives, the concerns of regulators regarding the potential for earnings management appear well founded. Moreover, the interviews we conduct with regulators and experienced auditors reveal, among other things, a consensus that while SAB 108 may in fact apply to many of these firms, issues of conservatism and low risk make adjustment unlikely. Both parties suggest that firms would likely have a rationale for these large allowances, and that, at best, it would take time to definitively demonstrate that a lower balance was merited, indicating a slow drawdown of the allowance, if anything. Finally, our survey findings reveal that individuals and groups internal to our sample firms support having a conservative allowance and that no individual or group opposes conservatism. The findings also reveal that executives perceive their external auditors to support conservative allowances as well.

Overall, it appears that SAB 108 would be applicable to our sample firms if we only considered the quantitative materiality of these potential misstatements. The fact that these firms and their auditors do not perceive SAB 108 to apply suggests that they do not perceive these overestimates as material misstatements. Thus, if a firm has some justification for a large allowance, the auditor may just view this as a very conservative balance, but not a misstatement. This suggests some asymmetry in the judgment of misstatement depending upon whether the amount in question is income/asset increasing or decreasing. These findings may be important for evaluating future accounting practices considering recent emphasis by accounting standard setters on neutrality versus conservatism. Moreover, it is interesting that overestimated allowances still occur after SAB 108 despite their potential to be used as “cookie jar” reserves and firms' management suggest they keep these reserves to have a cushion to avoid hits to earnings. Finally, the sheer magnitude of some of the potential overestimations described in our archival analysis suggests that a preference for conservatism may be a rather weak argument supporting the continued existence of overestimated allowances, and that auditors may need to more critically evaluate allowance balances.

This study is subject to certain limitations. First, the firms we analyze are not a random sample of firms, so it would be inappropriate to generalize our results to the population of SEC registrants. Second, we examine a single balance sheet account, and it is possible that errors accumulate in other accounts that we do not examine. Accordingly, the full extent of firms' responses to SAB 108 cannot be discerned from our study. Third, while our results suggest that the allowance may be overestimated for some firms based upon quantitative materiality assessments, we do not claim that our results conclusively demonstrate material misstatements for any particular firm in our sample. Fourth, we calculate potential overestimations of the allowance using a benchmark that is commonly used in the accounting literature (e.g., leading write-offs). However, to the extent managers and their auditors rely on other benchmarks, they may arrive at different conclusions about the reasonableness of the allowance. Finally, our forward looking benchmark for the allowance embodies information that management of firms can only partially observe at the time they estimate the allowance. As a result, our research design ignores some of the uncertainty inherent in this accounting estimate.

Appendix A

Appendix A

Analysis of the allowance in the year before SAB 108 became effective.

Firm No.	Col. (a)	Col. (b)	Col. (c)	Col. (d)	Col. (e)	Col. (f)	Col. (g)	Col. (h)	Col. (i)	Col. (j)
	$(ALLOW_{it-1} - WO_{it-1}) / NI_{it-1} (\%)$	$(ALLOW_{it-1} - 2 * WO_{it-1}) / NI_{it-1} (\%)$	$ALLOW_{it} / AR_{it} (\%)$	$(ALLOW_{it} / AR_{it}) - \text{Ind. med.} (\%)$	$ALLOW_{it} / TA_{it} (\%)$	$ALLOW_{it} / WO_{it+1}$	Std. dev. $(ALLOW_{it} / WO_{it+1})$	$(ALLOW_{it} - WO_{it+1}) / ALLOW_{it} (\%)$	BDE_{it} / WO_{it}	Std. dev. (BDE_{it} / WO_{it})
1	382.26	265.32	4.19	0.46	0.74	4.27	16.09	76.58	1.05	3.63
2	121.52	75.77	1.87	-3.32	0.49	3.66	0.69	72.65	0.29	2.27
3	115.34	93.61	7.20	3.46	1.25	6.31	54.05	84.15	0.88	16.63
4	101.31	82.05	2.93	0.16	0.55	6.26	59.72	84.02	90.00	29.71
5	80.18	57.22	2.31	-1.41	1.57	4.49	3.52	77.74	1.13	0.93
6	46.97	44.19	9.50	6.32	1.90	17.94	11.25	94.42	3.06	1.63
7	44.44	-25.56	13.86	12.78	1.02	1.63	4.55	38.84	0.02	2.38
8	43.64	7.76	7.65	4.96	4.15	2.22	1.01	54.88	0.17	2.07
9	38.22	26.53	2.78	1.03	1.68	4.27	2.91	76.58	0.60	0.85
10	38.16	19.30	3.95	0.97	0.83	3.02	1.30	66.92	0.83	0.48
11	37.42	28.63	2.48	0.29	0.45	5.26	1.26	80.98	0.51	0.77
12	37.05	29.40	3.85	-1.33	0.65	5.84	1.78	82.87	3.30	1.14
13	33.91	33.14	1.81	-0.80	0.74	45.25	15.68	97.79	0.56	6.98

Appendix A (continued)

Firm No.	Col. (a)	Col. (b)	Col. (c)	Col. (d)	Col. (e)	Col. (f)	Col. (g)	Col. (h)	Col. (i)	Col. (j)
	(ALLOW _{it} -WO _{it+1})/NI _{it} (%)	(ALLOW _{it} -2*WO _{it+1})/NI _{it} (%)	ALLOW _{it} /AR _{it} (%)	(ALLOW _{it} /AR _{it})-Ind. med. (%)	ALLOW _{it} /TA _{it} (%)	ALLOW _{it} /WO _{it+1}	Std. dev. (ALLOW _{it} /WO _{it+1})	(ALLOW _{it} -WO _{it+1})/ALLOW _{it} (%)	BDE _{it} /WO _{it}	Std. dev. (BDE _{it} /WO _{it})
14	32.67	30.04	4.16	1.27	1.34	13.40	27.68	92.54	1.64	14.47
15	30.09	24.01	8.91	6.14	1.21	5.95	1.41	83.19	0.84	5.59
16	30.03	16.55	3.47	0.86	1.43	3.23	0.96	69.03	0.80	0.67
17	29.23	25.89	5.49	2.41	0.61	9.76	2.48	89.75	0.72	0.73
18	27.97	13.52	2.03	-1.69	1.27	2.94	0.63	65.95	1.18	0.25
19	27.84	22.41	2.63	-1.09	1.55	6.13	1.16	83.70	1.25	0.35
20	25.87	8.01	5.44	-5.65	1.52	2.45	2.01	59.16	1.11	1.05
21	25.53	20.22	1.74	-1.44	1.20	5.81	1.43	82.80	1.10	0.71
22	25.30	20.61	7.84	5.45	1.61	6.39	3.10	84.35	0.76	0.64
23	24.14	15.52	3.38	1.39	0.65	3.80	1.35	73.68	0.33	0.43
24	23.93	-16.59	21.83	18.11	10.33	1.59	0.93	37.13	1.01	0.64
25	23.71	21.33	2.22	0.73	0.66	10.97	13.40	90.88	0.50	4.98
26	21.37	19.04	2.04	-0.16	0.60	10.16	137.67	90.16	1.38	24.05
27	21.25	-7.75	21.44	13.68	3.76	1.73	0.74	42.29	1.05	0.41
28	21.17	12.70	6.28	2.56	1.86	3.50	5.11	71.43	1.27	4.20
29	20.85	15.86	6.14	3.37	1.16	5.18	1.37	80.70	1.76	0.63
30	20.50	12.20	3.33	1.14	1.12	3.47	1.09	71.17	1.68	0.89
31	19.94	-20.73	12.58	1.49	2.21	1.49	0.13	32.90	1.22	0.17
32	19.47	15.36	4.09	0.72	1.33	5.74	1.29	82.58	1.06	0.38
33	18.64	11.18	1.89	-0.71	0.57	3.50	1.32	71.41	0.00	0.67
34	18.29	-8.07	4.09	1.41	1.96	1.69	0.97	40.96	1.26	0.54
35	17.45	17.45	1.70	-2.50	0.39	5.00	3.12	100.00	1.41	1.88
36	17.33	13.39	4.02	1.44	1.58	5.39	3.60	81.46	0.83	1.81
37	17.16	14.71	2.01	0.02	0.39	8.00	14.28	87.50	1.06	1.27
38	16.56	-1.87	4.44	1.83	2.29	1.90	0.75	47.33	1.00	0.22
39	16.02	7.60	1.88	-1.84	1.07	2.90	0.61	65.55	0.99	0.38
40	15.65	14.98	5.11	2.03	0.93	24.63	8.62	95.94	0.94	1.08
41	15.13	2.13	3.87	1.10	1.16	2.16	0.32	53.78	1.83	0.42
42	14.95	1.92	3.68	0.50	1.02	2.15	1.40	53.43	0.79	0.43
43	14.82	14.82	2.45	-0.54	0.28	5.00	1.31	100.00	4.00	2.02
44	14.73	14.73	1.26	-1.42	0.64	5.00	3.28	100.00	6.63	2.27
45	14.48	8.70	4.83	1.75	1.01	3.51	1.70	71.48	1.62	0.78
46	14.28	11.51	5.50	4.42	1.05	6.15	5.86	83.75	9.23	2.56
47	14.28	9.99	1.99	-0.61	0.78	4.33	1.05	76.91	0.33	0.34
48	14.07	-11.88	8.10	4.38	1.31	1.54	1.25	35.16	0.93	0.73
49	13.94	9.11	4.92	1.74	1.19	3.89	1.40	74.26	1.72	1.40
50	13.54	13.03	5.39	0.92	0.90	27.59	7.83	96.38	0.07	1.58
51	13.33	0.54	4.39	0.19	1.01	2.04	0.67	51.03	1.08	0.35
52	13.17	12.36	2.39	-1.33	0.20	17.25	7.14	94.20	0.00	28.89
53	13.06	9.53	4.29	2.09	0.52	4.70	1.77	78.72	1.40	0.50
54	12.99	-5.09	5.22	2.54	1.28	1.72	0.68	41.81	1.04	0.31
55	12.97	-0.07	1.51	-2.21	0.95	1.99	1.32	49.86	0.59	2.39
56	12.20	7.37	4.14	1.25	0.94	3.53	2.45	71.64	0.66	1.34
57	12.12	11.45	6.01	3.24	1.45	19.16	5.33	94.78	1.36	1.85
58	12.09	6.16	3.52	1.13	0.92	3.04	1.32	67.11	0.18	0.60
59	11.88	6.01	4.45	2.23	0.96	3.02	2.41	66.92	1.36	0.41
60	11.50	7.78	2.07	-1.11	0.58	4.09	1.13	75.54	1.00	0.32
61	11.13	0.09	6.30	2.09	0.99	2.01	0.89	50.21	0.43	0.77
62	11.10	9.96	2.50	0.32	0.68	10.75	2.76	90.69	1.12	0.44
63	11.08	9.51	2.17	-0.60	0.42	8.03	7.77	87.55	3.37	1.06
64	11.06	-17.04	1.56	-2.16	0.63	1.39	1.44	28.24	0.67	0.24
65	10.79	7.11	3.95	1.37	2.11	3.93	1.25	74.56	1.91	0.32
66	10.67	-0.44	2.48	-0.13	0.97	1.96	0.94	48.98	1.27	2.14
67	10.39	7.83	5.42	3.24	0.98	5.06	1.44	80.23	1.24	0.64
68	10.33	8.38	14.43	9.92	0.35	6.30	4.22	84.13	5.00	2.07
69	10.26	6.91	2.86	0.68	0.66	4.06	4.69	75.38	0.95	1.04
70	10.08	7.11	2.31	0.11	0.56	4.40	1.20	77.26	0.81	0.45
71	9.76	3.52	2.66	-0.11	0.48	2.56	3.41	61.00	1.79	1.21
72	9.57	4.53	1.37	-2.35	0.42	2.90	0.78	65.52	0.34	0.83
73	9.44	7.94	4.00	1.83	0.44	7.29	2.52	86.28	0.25	1.02
74	9.20	-4.27	4.67	-0.52	0.73	1.68	2.79	40.58	1.44	0.21
75	9.10	4.29	2.68	-0.09	0.62	2.89	0.60	65.44	0.52	0.24
76	9.00	7.65	3.83	0.84	0.76	7.67	4.03	86.96	0.80	0.96
77	8.92	2.85	5.75	0.57	0.36	2.47	1.28	59.50	0.61	0.43
78	8.70	6.15	5.27	0.09	0.44	4.41	2.74	77.34	1.88	0.59
79	8.63	6.61	4.65	2.66	0.46	5.27	7.43	81.02	0.36	3.55
80	8.49	7.55	2.18	-0.02	0.40	10.00	11.45	90.00	1.04	3.74
81	8.17	6.19	6.08	3.00	0.99	5.12	0.94	80.49	1.01	0.20
82	7.83	4.73	3.06	0.86	0.50	3.53	2.36	71.65	0.00	0.75
83	7.75	4.40	2.36	0.20	0.46	3.31	0.80	69.81	0.62	0.39
84	7.66	7.02	4.35	2.86	0.62	13.00	4.02	92.31	1.08	0.97

(continued on next page)

Appendix A (continued)

Firm No.	Col. (a)	Col. (b)	Col. (c)	Col. (d)	Col. (e)	Col. (f)	Col. (g)	Col. (h)	Col. (i)	Col. (j)
	(ALLOW _{it} - WO _{it+1})/ NI _{it} (%)	(ALLOW _{it} - 2*WO _{it+1})/ NI _{it} (%)	ALLOW _{it} /AR _{it} (%)	(ALLOW _{it} /AR _{it})-Ind. med. (%)	ALLOW _{it} / TA _{it} (%)	ALLOW _{it} / WO _{it+1}	Std. dev. (ALLOW _{it} / WO _{it+1})	(ALLOW _{it} -WO _{it+1})/ ALLOW _{it} (%)	BDE _{it} / WO _{it}	Std. dev. (BDE _{it} / WO _{it})
85	7.64	-22.28	6.70	4.52	1.74	1.26	0.19	20.34	0.65	0.17
86	7.63	-16.10	8.67	4.95	0.35	1.32	1.57	24.32	0.58	0.36
87	7.46	4.91	3.62	1.40	0.38	3.93	5.76	74.55	0.56	1.08
88	6.92	3.89	5.02	1.30	1.36	3.28	2.20	69.55	2.40	0.54
89	6.87	5.02	4.12	-0.08	1.05	4.72	1.28	78.80	1.19	1.03
90	6.77	5.25	2.40	-1.81	0.51	5.47	1.24	81.73	1.70	0.78
91	6.70	2.32	3.18	0.41	0.96	2.53	0.51	60.48	0.79	0.30
92	6.54	4.31	2.77	-0.95	0.66	3.93	1.04	74.57	0.07	0.73
93	6.42	5.06	2.17	0.01	0.16	5.71	3.05	82.50	0.82	0.36
94	6.38	-4.44	3.75	1.15	1.12	1.59	0.23	37.10	0.71	0.24
95	6.33	2.70	1.38	-2.34	0.58	2.74	0.70	63.52	0.48	0.56
96	6.24	4.22	2.18	0.19	0.32	4.09	1.03	75.55	1.22	0.50
97	6.16	1.51	3.45	1.45	0.55	2.32	0.36	56.98	1.17	0.27
98	6.14	2.46	2.78	-0.40	0.61	2.67	0.85	62.50	1.09	0.31
99	6.10	-7.32	5.08	1.90	0.83	1.45	2.90	31.25	1.33	1.46
100	6.00	5.52	2.34	-0.18	0.24	13.33	3.31	92.50	0.76	3.45
101	6.00	4.42	3.20	0.43	0.43	4.80	2.98	79.17	0.23	0.89
102	5.91	5.09	2.48	0.32	0.31	8.17	1.99	87.77	0.81	0.58
103	5.89	-0.79	2.84	0.26	1.08	1.88	0.43	46.88	2.79	0.72
104	5.86	0.55	3.24	-0.82	0.49	2.10	1.08	52.45	1.59	0.37
105	5.82	4.18	4.08	1.56	0.69	4.53	1.52	77.94	0.24	7.26
106	5.79	3.41	2.00	-0.77	0.47	3.43	3.21	70.84	0.52	0.77
107	5.67	2.88	4.03	0.95	0.69	3.03	4.66	67.01	2.51	0.73
108	5.64	3.50	1.38	-2.82	0.36	3.64	1.32	72.50	1.76	1.21
109	5.62	1.80	1.53	-1.11	0.39	2.47	3.13	59.50	0.00	1.75
110	5.60	4.95	2.27	-0.25	0.52	9.63	5.90	89.62	8.68	2.68
111	5.58	3.48	3.87	1.67	0.56	3.66	1.61	72.67	0.35	0.54
112	5.54	-2.56	1.96	-0.24	0.38	1.68	0.43	40.63	0.64	0.41
113	5.47	2.04	2.50	1.42	0.30	2.59	4.86	61.44	0.84	0.64
114	5.34	3.93	2.77	0.58	0.44	4.78	1.08	79.07	0.57	0.43
115	5.33	2.52	3.75	0.01	0.54	2.90	12.81	65.48	0.29	1.90
116	5.30	3.09	2.69	0.49	0.41	3.40	0.91	70.57	0.41	0.70
117	5.28	4.07	2.40	0.18	0.34	5.35	0.95	81.33	0.83	0.61
118	5.25	3.25	2.82	-0.26	0.47	3.63	33.80	72.42	0.43	3.36
119	5.24	4.64	1.61	-0.78	0.43	9.83	3.93	89.82	0.67	1.02
120	5.23	3.23	2.18	0.18	0.39	3.61	2.67	72.29	1.57	0.35
121	5.12	4.01	2.59	0.39	0.40	5.63	1.62	82.22	1.47	0.52
122	5.03	4.68	2.74	-0.34	0.43	15.16	8.13	93.40	1.45	1.10
123	5.01	2.43	4.55	3.48	0.84	2.94	4.13	65.97	5.00	2.29
Mean	20.00	11.05	4.18	1.10	0.96	5.51	5.38	71.23	1.98	2.08
Median	11.10	6.01	3.45	0.50	0.68	3.93	1.61	74.55	1.00	0.75

Variables are defined as follows: ALLOW_{it} is the allowance for uncollectible accounts; WO_{it} is write-offs of uncollectible accounts; NI_{it} is net income; AR_{it} is gross accounts receivable; TA_{it} is total assets; BDE_{it} is bad debt expense. The industry median is the median value for ALLOW_{it}/AR_{it}, where industry is defined at the two-digit SIC code level. The standard deviation is calculated on a firm-by-firm basis using all available annual observations for a firm.

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