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by

Casey Martin Schwab



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# The Determinants and Effects of Voluntary Book-Tax Difference Disclosures: Evidence from Earnings Press Releases

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# The Determinants and Effects of Voluntary Book-Tax Difference Disclosures: Evidence from Earnings Press Releases

by

# Casey Martin Schwab, B.B.A., M.S.A.

# Dissertation

Presented to the Faculty of the Graduate School of The University of Texas at Austin in Partial Fulfillment of the Requirements for the Degree of

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# Dedication

To my parents, Jim and Ruth Schwab



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# The Determinants and Effects of Voluntary Book-Tax Difference Disclosures: Evidence from Earnings Press Releases

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This study investigates the determinants and effects of voluntary book-tax difference (BTD) disclosures in earnings releases. Unlike prior studies, I find no evidence that managers are more likely to voluntarily disclose BTD information when firms have low earnings quality. I also find that managers are more likely to disclose BTD information when firms have large negative but not large positive BTDs. Because BTDs are particularly informative when earnings quality is low and when book income significantly exceeds taxable income (i.e., large positive BTDs), these results suggest that managers selectively disclose BTD information in earnings releases. Interestingly, I also find that managers are more willing to disclose BTD information when tax avoidance activities are high. This result suggests that managers are willing to bear some tax-related disclosure costs to reassure investors that BTDs are not due to aggressive financial reporting.



Prior research provides evidence of a systematic association between BTDs computed using required 10-K tax disclosures and future forecast errors and stock returns. I provide evidence that voluntary BTD disclosures attenuate the association between BTDs and future forecast errors. I also provide limited evidence that voluntary BTD disclosures attenuate the association between BTDs and future stock returns. These results suggest that voluntary BTD disclosures help analysts and investors impound BTD information into earnings forecasts and stock prices.



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#### **Chapter 1: Introduction**

Book-tax differences (BTDs) contain important information about earnings growth and persistence (Lev and Nissim 2004; Hanlon 2005), earnings management (Phillips, Pincus, and Rego 2003), effects of accounting method changes (Seidman 2008), and tax planning (Mills 1998; Desai and Dharmapala 2006a; Wilson 2008). Although BTDs can be computed using required Form 10-K tax disclosures, investors and analysts do not appear to use BTDs in their pricing and forecasting decisions (Lev and Nissim 2004; Hanlon 2005; Weber 2009).<sup>1</sup> In this study, I examine voluntary disclosure of BTD information in earnings announcements to address the following research questions.<sup>2</sup> First, what are the determinants of voluntary BTD disclosures in earnings announcements? More specifically, do managers voluntarily disclose BTD information when BTDs are most informative to investors? Second, do voluntary BTD disclosures help analysts and investors impound BTD information into earnings forecasts and stock prices?

Existing literature investigating voluntary disclosure of financial statement information in earnings releases provide mixed evidence regarding whether managers provide information when it is most useful to investors. Initial studies by Chen, DeFond, and Park (2002) and Levi (2008) argue that managers disclose basic balance sheet and accruals information in earnings releases when the information is useful to investors. These studies argue that managers disclose this information, even when the disclosures help market participants unwind the discretionary component of reported earnings,

<sup>&</sup>lt;sup>2</sup> Supplemental analyses also investigate the determinants of BTD disclosure in conference calls.



<sup>&</sup>lt;sup>1</sup> Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes* (SFAS 109) requires public companies to disclose detailed tax information in their 10-K on deferred tax liabilities, deferred tax assets, the valuation allowance, current tax expense, deferred tax expense, the benefits of operating loss carryforwards, the tax rate reconciliation, etc. (SFAS 109, paragraphs 43-49). However, firms are not required to disclose any specific tax information in earnings releases.

because there is no credible reason to delay disclosure (Levi 2008). D'Souza, Ramesh, and Shen (2008) also provide evidence that managers disclose additional financial statement line items when earnings are less informative. In contrast to Chen et al. (2002) and Levi (2008), however, D'Souza et al. (2008) provide evidence suggesting that managers who habitually smooth earnings and managers who frequently meet or beat analyst forecasts limit financial statement disclosures to retain greater degrees of freedom for opportunistic reporting. D'Souza et al. (2008) do not, however, provide details about the specific costs that enable managers to credibly avoid financial statement disclosure.

In this study, I examine in detail the voluntary disclosure of a single financial statement account, deferred taxes. By investigating the disclosure of BTD information, I am able to examine two specific reasons that may enable managers to credibly avoid voluntarily disclosing BTD-related information *even when the earnings quality is low or the information may be particularly informative to investors*.<sup>3</sup> First, BTD disclosures may result in increased proprietary, political, and enforcement costs because BTDs contain information about a firm's tax avoidance activities. Second, market participants may be unsure whether managers have reliable BTD information at the earnings announcement date because the tax provision is one of the last items to be finalized (Dhaliwal, Gleason, and Mills 2004). Thus, BTDs present a setting where managers likely have more latitude in their decision to voluntarily disclose financial information compared to settings like basic balance sheet or accruals information. Unlike the prior studies, I investigate whether managers can avoid disclosing additional information when earnings quality is low or the information is particularly relevant to market participants.

<sup>&</sup>lt;sup>3</sup> In this study, I examine the voluntary disclosure of deferred tax information. Deferred tax information can be used to compute (or at least approximate) both total and temporary BTDs. As such, I generally refer to BTDs rather than deferred taxes.



Unlike prior studies, I also use more comprehensive measures of a firm's voluntary disclosure surrounding the earnings release. Specifically, I partition the press release into text and financial statement components. In supplemental analyses, I also evaluate over 3,000 conference call transcripts. I examine whether the determinants of voluntary disclosure vary across these different disclosure types or media.

It is also important to examine the effects of voluntary BTD disclosures. Prior literature provides evidence that market participants process the focused information disclosed in earnings announcements more efficiently than the comprehensive information presented in Securities and Exchange Commission (SEC) filings (Stice 1991; Hollie, Livnat, and Segal 2005; Levi 2008; Louis, Robinson, and Sbaraglia 2008). As such, stock prices and earnings forecasts may more accurately reflect information contained in BTDs for firms that disclose BTD information in earnings releases relative to firms that do not.

To address the first research question, I initially examine BTD disclosure in over 10,000 fourth quarter earnings releases from 1989 to 2006. I construct a dictionary of terms and employ textual analysis to identify firm-years that include BTD-related disclosures in earnings releases. Using a logistic model adapted from Chen et al. (2002), I investigate whether BTD disclosures systematically vary with absolute discretionary accruals or cash effective tax rates, my proxies for earnings quality (Ayers, Jiang, and Laplante 2008) and tax avoidance activities (Dyreng, Hanlon, and Maydew 2008), respectively. In general, managers have disincentives to disclose BTDs that can indicate low quality earnings or high tax avoidance activities.

Evidence that managers are less likely to disclose BTDs when earnings quality is low or when firms engage in aggressive tax avoidance activities would be consistent with



selective disclosure of BTD information. Because large positive BTDs are often seen as indicative of aggressive financial reporting (Palepu et al. 2000; Revsine et al. 2005), disclosure of large positive but not large negative BTDs would also be consistent with selective disclosure. When considering the full press release, however, my results are inconsistent with managers selectively disclosing BTD information in earnings releases. Specifically, I find that voluntary BTD disclosure is driven by the magnitude of the BTD and the level of a firm's tax avoidance activities. Moreover, managers are no more or less likely to disclose BTD information when firms have large positive BTDs relative to large negative BTDs. These results suggest that firms are more likely to disclose BTD information when tax avoidance activities are the source of the BTD. Neither of these findings is consistent with selective disclosure of BTD information in press releases.

When the press releases are split into financial statement and text components, the results provide some evidence of selective disclosure. BTD disclosure in the financial statement component of the release is largely driven by the magnitude of the BTD. There is limited evidence suggesting that managers are less likely to provide BTD information when earnings quality is low but no evidence that tax avoidance activities affect BTD disclosure for this component of the release. In the text component of the release, managers are more likely to disclose BTD information when tax avoidance activities are high and when firms have large BTDs. There is no evidence that managers are more or less likely to disclose BTD information in the text component of the release when earnings quality is low. There is evidence, however, that managers are more likely to emphasize large negative than large positive BTDs, even though large positive BTDs are larger in absolute magnitude. Unlike the full press release results, these results provide



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some evidence that managers selectively disclose BTD information in earnings releases. In supplemental analyses, I also examine disclosure of BTD information in conference calls and find similar patterns of disclosure: managers are more likely to disclose BTD information when (1) the firm has large negative rather than large positive BTDs and (2) tax avoidance activities are the likely source of the BTD.

To investigate the market effects of voluntary BTD disclosures, I test whether BTD disclosures attenuate the systematic association between BTDs and future forecast errors and stock returns documented in prior research (Lev and Nissim 2004; Hanlon 2005; Weber 2009). Using the ratio of estimated taxable income to book income as a proxy for BTDs, I find that BTDs are positively associated with future forecast errors only when firms do not voluntarily disclose BTD information. As expected, when firms disclose BTDs in earnings releases, BTDs are no longer associated with future forecast errors. In spite of improved forecasts, however, I find only limited evidence that BTD disclosures attenuate the association between BTDs and future stock returns. Although the association between BTDs and one-year ahead stock returns is not statistically different across the disclosure and non-disclosure samples, BTDs are not significantly associated with future returns for disclosers when evaluating future buy-and-hold returns. Supplemental analyses based on calendar-time portfolios also provide some evidence that BTD disclosures in earnings announcement alleviate BTD mispricing. Collectively, these results suggest that BTD disclosures in earnings releases improve analysts' and investors' abilities to use information contained in BTDs.

My study contributes to two streams of literature. First, I contribute to the literature on voluntary disclosure of accounting information in and around earnings releases. Prior studies provide evidence that managers voluntarily disclose basic



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financial information when it is most informative to market participants in earnings releases, even when the disclosures help market participants unwind the discretionary component of reported earnings (Levi 2008). Evaluating a specific type of accounting information, BTDs, where managers are likely to have more latitude in selectively disclosing information, I provide evidence that managers are less likely to disclose BTD information when the BTDs may indicate aggressive financial reporting. I do find, however, that managers are more willing to emphasize deferred tax information in the text component of press releases when the BTDs are likely due to tax avoidance activities rather than aggressive financial reporting.

Second, I contribute to the literature investigating analysts' and investors' use of BTD information. Prior studies argue that the systematic forecast and pricing errors are due to the complexity of accounting for income taxes (Gleckman et al. 2002; Mintz 1999; McGill and Outslay 2002), but they do not investigate whether more focused information helps market participants use BTDs. Weber (2009) provides evidence that investors rely on analysts to interpret the complex information contained in BTDs but does not identify factors that help analysts use BTDs when setting forecasts. I address these gaps in the literature by investigating whether focused BTD disclosures help market participants use BTDs forecast errors and BTDs provides evidence that focused disclosures of BTD information help analysts fulfill their integral role as information intermediaries. Given that BTD disclosures help analysts incorporate BTD information into earnings forecasts, the weaker evidence regarding whether BTD disclosures help

<sup>&</sup>lt;sup>4</sup> When I discuss whether voluntary BTD disclosures in earnings releases help market participants use or understand "BTDs" (or "BTD information"), I am referring to "BTDs" as computed using 10-K data.



investors price BTD information suggests that mispricing of BTD information may be only partially due to analysts' failure to incorporate BTD information in forecasts.



# Chapter 2: Prior Research and Hypotheses Development – BTD Disclosures 2.1. Explaining Disclosure of BTD Information in Earnings Releases 2.1.1. The Benefits of BTD Disclosures

Theoretical studies by Verrecchia (1983) and Dye (1985) suggest that managers have incentives to voluntarily disclose information useful in assessing firm value in the absence of significant disclosure costs or uncertainty about the existence of such private information. Chen et al. (2002) and Levi (2008) assert that disclosing basic financial information in earnings releases is useful to investors and results in little cost because the information will be disclosed shortly in SEC filings. Consistent with their argument, the authors find that managers disclose balance sheet and accruals information in earnings releases when earnings quality is low, even when such disclosures help market participants unwind the discretionary component of reported earnings.

Similar to balance sheet and accruals disclosures, BTD disclosures are useful to market participants. Financial accounting texts argue that taxable income can be used as a conservative measure of firm performance because managers have less discretion when computing taxable income and fewer incentives to overstate taxable income. As such, BTDs can indicate aggressive financial reporting (Revsine et al. 2005) or manipulation of core expenses (Penman 2001). Palepu et al. (2000) assert that BTDs can act as a "red flag" to market participants.

Recent academic studies confirm that BTDs contain information about the quality of reported earnings. Lev and Nissim (2004) and Hanlon (2005) provide evidence that BTDs are systematically related to future earnings. Phillips, Pincus, and Rego (2003) find that deferred tax expense is incrementally useful beyond total and abnormal accruals in detecting earnings management to avoid an earnings decline and to avoid a loss.



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Finally, Ayers et al. (2008) provide evidence that taxable income is an increasingly informative firm performance measure as earnings quality declines.

BTDs also contain information about tax avoidance activities. Mills (1998) finds that proposed IRS audit adjustments are positively related to large positive BTDs. Desai and Dharmapala (2006a) argue that BTDs contain information about tax sheltering activities. Wilson (2008) provides evidence that BTDs are positively associated with actual cases of tax sheltering. Information about a firm's tax avoidance activities is important to market participants because tax avoidance activities directly and indirectly affect firm value. Directly, tax avoidance activities increase cash flow.<sup>5</sup> Given the substantial effect of taxes on a firm's bottom line, effectively managing taxes can increase firm value. However, Desai and Dharmapala (2006a, 2006b) argue that tax avoidance activities often result in complex and obscure transactions that can be used to mask rent extraction that decreases firm value. Consistent with tax avoidance having a negative effect on firm value, Hanlon and Slemrod (2008) find a negative market reaction to news that a firm is engaging in tax sheltering.

Finally, BTDs contain information about earnings effects of accounting method changes (Seidman 2008) and economic fundamentals (Dhaliwal et al. 2008). Collectively, prior research suggests that BTDs provide information that is useful to market participants in assessing firm value, especially when earnings quality is low or tax avoidance activities are high. As such, managers have incentives to disclose BTD information to meet investor demand (Dye 1985).

<sup>&</sup>lt;sup>5</sup> Firms presumably optimize after-tax cash flows, but BTDs will only capture explicit tax avoidance, ignoring the effects of implicit taxes.



#### 2.1.2. Availability of BTD Information and Potential Costs of BTD Disclosures

Unlike the voluntary disclosures evaluated in prior studies, market participants may believe that disclosing BTD information in earnings releases results in significant disclosure costs. Market participants may also be unsure whether managers have reliable BTD information at the earnings announcement date. I argue that, as a result of the uncertainty and disclosure costs, managers can strategically disclose BTD information in earnings releases.

Uncertainty arises because the tax provision is one of the last items to be finalized (Dhaliwal, Gleason, and Mills 2004). Even though SFAS 109 requires a balance sheet approach to measuring tax expense, firms may wish to wait until the 10-K release to commit to the portion of total tax expense that is current versus deferred and to the balance sheet classification. Thus, managers may be able to credibly argue that delaying disclosure of BTD information until the SEC filing date is necessary to ensure reliable reported numbers.

Voluntary disclosure of BTD information in earnings releases may also result in increased enforcement, political, and/or proprietary costs to the firm.<sup>6</sup> Theoretical and empirical evidence suggests that investors and analysts process the focused information in earnings releases more thoroughly than information released later in financial statements (Hirshleifer and Teoh 2003; Stice 1991; Hollie, Livnat, and Segal 2005). Voluntary BTD disclosures are also likely to be more salient than 10-K disclosures to the media, the IRS, regulatory groups, and competitors. For example, Earnings Digest and

<sup>&</sup>lt;sup>6</sup> McGuire (2008) investigates voluntary disclosure of ETR changes using a sample of 1,611 hand-collected earnings releases. McGuire also considers tax-related disclosure costs and provides evidence of strategic disclosure of information pertaining to ETR changes in the text of the earnings release. By using a large sample of over 10,000 earnings releases and focusing on data contained in both the text and financial statements, my paper contributes broad evidence that can be compared to other earnings release disclosures



Business Brief articles in *The Wall Street Journal* often discuss BTD-related information when changes in deferred tax accounts have a significant impact on quarterly earnings.<sup>7</sup> The IRS already frequently considers large BTDs to signal abusive tax transactions (IR-2004-92). Additional media attention regarding firms' BTDs can direct IRS scrutiny toward specific firms, potentially increasing the probability of audit.

More focused BTD information may also increase political costs. For example, the tax advocacy group Citizens for Tax Justice publishes reports outlining aggressive taxpayer strategies and identifying companies known to participate in these strategies.<sup>8</sup> Their 1985 report comparing firms' effective tax rates to economy-wide and industrywide benchmarks influenced base-broadening in the Tax Reform Act of 1986. When Enron and Worldcom collapsed, the media highlighted the fact that both companies reported substantial profits to its shareholders and paid little to no U.S. tax (Murray 2002). More recently, defense contractors that create shell companies in tax haven countries to avoid paying payroll taxes on their employees have faced increased scrutiny (Stockman 2008).<sup>9</sup> This increased attention essentially labels firms as bad "corporate citizens" which comes with innate political costs. In a heightened political environment, releasing focused information about a firm's tax avoidance activities, such as BTD information in press releases, can increase a firm's political costs.

Finally, disclosing BTD information in earnings releases may also result in increased proprietary costs. Managers face pressure to keep their firms' ETRs low and in

<sup>&</sup>lt;sup>8</sup> Other speeches, articles, and reports published by Citizens for Tax Justice include "Surge in Corporate Tax Welfare Drives Corporate Tax Payments Down to Near Record Low" (Citizens for Tax Justice 2002), "Tax Cheats & Their Enablers" (McIntyre 2005), and a speech by Robert McIntyre before the Senate Budget Committee in 2007 discussing the nature of the tax gap.



such as basic balance sheet and accruals information. This study also provides a broader view of a firm's disclosure decisions by considering disclosures made via conference calls in supplemental analyses. <sup>7</sup> See Appendix C for excerpts from Business Brief and Earnings Digest articles.

line with competitor benchmarks (Treasury 1999; Novack 1998). Moreover, managers are likely to examine financial reports of competitors to determine their relative tax positions (Treasury 1999). Thus, salient disclosure of BTD information in earnings releases may provide competitors with proprietary information about a firm's tax avoidance activities.

#### 2.1.3. Determinants of Voluntary BTD-related Disclosures in Earnings Releases

In the previous section, I established that managers (1) have basic incentives to disclose BTDs because they contain information useful in assessing firm value, yet (2) may be able to strategically disclose BTD information as a result of information uncertainty and potential firm disclosure costs. In this section, I discuss settings where managers may have personal incentives to strategically avoid BTD disclosure in earnings releases.

I first consider the settings where firms have large BTDs. It is likely that *ceteris paribus* managers are more likely to disclose BTD information when firms have large BTDs given the increased materiality of large BTDs. However, managers' incentives to disclose BTD information may differ depending on whether the large BTD is positive or negative. Since large positive BTDs may indicate aggressive financial reporting (Revsine et al. 2005), lower earnings growth (Lev and Nissim 2004), less persistent earnings (Hanlon 2005), and/or earnings management activities (Phillips et al. 2003), managers may be less likely to disclose information relating to large positive BTDs.<sup>10</sup> To determine whether managers are more

<sup>&</sup>lt;sup>10</sup> Although Hanlon (2005) provides evidence that firms with large positive or negative BTDs have less persistent earnings, financial statement analysis textbooks and prior studies generally focus on large positive BTDs (i.e., book income > taxable income) as a signal of aggressive financial reporting.



<sup>&</sup>lt;sup>9</sup> The Heroes Earnings Assistance and Relief Tax Act closed the loophole allowing defense contractors to shelter payroll taxes. The loophole was closed several months after being written about by the Associated Press.

likely to disclose (1) large BTDs relative to small BTDs and (2) large negative BTDs relative to large positive BTDs, I test the following hypotheses (stated in the alternative form):

- **H1a:** Firms with large (positive or negative) BTDs are more likely to disclose BTD information in their earnings press releases than firms with small BTDs.
- **H1b:** Firms with large positive BTDs are less likely to disclose BTD information in their earnings press releases than firms with large negative BTDs.

Next I consider firms with low earnings quality, a setting where market participants are most likely to use alternative signals to assess firm performance. Managers have a disincentive in this setting to disclose BTD information that may be interpreted by market participants as confirmation of low earnings quality and/or managed earnings. Managers are likely to avoid disclosing BTD information if they can credibly delay disclosure due to disclosure costs or information uncertainty. To determine the relation between earnings quality and BTD disclosure, I test the following hypothesis (stated in the alternative form):

**H2a:** Firms with lower quality earnings are less likely to disclose BTD information in their earnings press releases than firms with higher quality earnings.

The third setting I consider is when firms have both large BTDs and low earnings quality. Market participants are likely to be increasingly interested in large differences between book earnings and taxable income as earnings quality declines. Managerial incentives may also vary depending on the size and sign of BTDs. Because large positive BTDs signal low earnings quality and potential earnings management, managers have incentives to withhold BTD information when they have large positive BTDs as earnings quality declines. Managers, however, may have an incentive to disclose large negative BTDs because these differences are generally inconsistent with managers manipulating reported earnings. To determine whether managers are less likely to disclose BTD



information when they have low earnings quality and large positive BTDs, I test the following hypothesis (stated in the alternative form):

**H2b:** Firms with low earnings quality and large positive BTDs are less likely to disclose BTD information than firms with low earnings quality and either large negative or small BTDs.

The final setting I consider is where firms engage in significant tax avoidance activities. Tax avoidance activities can mask rent extraction, such as earnings management, related-party transactions, and other perquisite consumption behavior (Desai and Dharmapala 2006a, 2006b). Because market participants can use BTDs to assess how aggressively a firm is managing its tax liability, managers have a disincentive to disclose BTDs that suggest a firm is engaging in significant tax avoidance activities. Tax avoidance activities also decrease the informativeness of BTDs as earnings signals. Specifically, taxable income is a less relevant performance measure when tax avoidance activities are high (Ayers et al. 2008). As such, managers have less incentive to disclose BTDs when tax avoidance activities are high. To determine the relation between tax avoidance activities and BTD disclosure, I test the following hypothesis (stated in the alternative form):

**H3:** Firms with higher levels of tax avoidance activities are less likely to disclose BTD information in their earnings press releases than firms with lower levels of tax avoidance activities.

As stated above, managers may have incentives to avoid disclosing BTD information in earnings releases when tax avoidance activities are high because such disclosures (1) may result is increased proprietary, political, and enforcement costs to the firm and (2) are less informative about earnings. Avoiding BTD disclosures for these two reasons is evidence of selective disclosure by managers but does not indicate that managers strategically avoid disclosure due to personal incentives (i.e., to hide rent



extraction). Because it is difficult to determine the exact source of non-disclosure when tax avoidance is high, I cannot definitively conclude that support for H3 indicates *strategic* disclosure by managers.

# 2.1.3. Potential Trade-offs Among Disclosure Costs

The previous section argues that disclosure of BTDs could result in increased proprietary, political, and enforcement costs. It is possible that managers may be willing to trade-off potential tax-related costs to disclose BTD information suggesting that the BTD is due to tax avoidance activities rather than aggressive financial reporting.<sup>11</sup> Given that investors focus largely on book earnings, managers may be willing to absorb the potential tax-related costs associated with disclosing BTDs due to low taxable income in order to reassure investors that BTDs are not due to aggressive financial reporting. If managers trade off these costs, I may not find support for H3 or may even find that managers are more likely to disclose BTD information when tax avoidance activities are high.



<sup>&</sup>lt;sup>11</sup> There is a substantial literature investigating tax and non-tax tradeoffs. See Shackelford and Shevlin (2001) for a review of the tax and non-tax tradeoff literature.

# Chapter 3: Prior Research and Hypotheses Development – Market Effects 3.1. Market Effects of Voluntary Disclosure of BTD Information

Existing studies provide evidence that BTDs are systematically related to earnings growth, earnings persistence, and future returns and forecast errors. Lev and Nissim (2004) measure BTDs as the ratio of taxable income to book earnings, where taxable income is estimated by grossing up current tax expense. They examine whether BTDs predict future earnings growth beyond the information contained in cash flows, accruals, and deferred taxes. They find that the ratio predicts future earnings growth, with a general increase over time in the predictive ability of the metric. Lev and Nissim also find that investors do not completely impound BTD information into stock prices, although the market becomes more efficient over time. Using the same BTD measure, Weber (2009) provides evidence that BTDs are also systematically related to future forecast errors.

Hanlon (2005) investigates the role of *temporary* BTDs in: (1) indicating the persistence of earnings, accruals, and cash flows and (2) influencing investors' assessments of the persistence of earnings and earnings components. She finds that firms with large BTDs have less persistent earnings. For firms with large positive BTDs, investors price the accruals component of earnings in a manner consistent with its lower persistence. Interestingly, investors underestimate the persistence of the cash flow component of earnings for firms with large positive BTDs. Investors still overestimate the persistence of accruals for firms with small or large negative temporary BTDs. Collectively, these studies suggest that investors and analysts fail to impound *BTD information contained in 10-K filings* into stock prices and earnings forecasts.

Early analytical research on financial reporting generally assumes that the form of disclosure does not affect investors' abilities to incorporate publicly available information into market prices. However, empirical studies find that disclosure form matters. Using



a sample of firms that issue earnings releases after filing with the SEC, Stice (1991) finds no significant reaction until the subsequent earnings announcement. Using a similar sample in later years, Chung, Jacob, and Tang (2003) find a significant market response to both SEC filings and press releases.<sup>12</sup> Regardless of whether there is an insignificant or incomplete price reaction to the SEC filings, the continued price reaction to the subsequent earnings releases suggests that the SEC filings fail to fully communicate earnings information to some investors.

Hirshleifer and Teoh (2003) reconcile prior theoretical and empirical findings by assuming that investors have limited attention and processing power. Their model demonstrates that investors more easily absorb information presented in a salient, easily processed form. Consistent with Hirshleifer and Teoh's (2003) predictions, Louis et al. (2008) and Levi (2008) find that additional disclosure of accruals-related information in earnings press releases helps investors differentiate between discretionary and nondiscretionary components of accruals. Specifically, Levi (2008) investigates the association between accruals and future returns using a size-adjusted buy-and-hold returns approach and a calendar-time hedge portfolio approach. Forming portfolios six days after the 10-Q filing date, Levi finds that accruals are related to future returns for firms that only provide accruals information in their 10-Q but are not related to future returns for firms that disclose detailed accruals information earlier in their earnings announcement. Louis et al. (2008) investigate the pricing of discretionary and nondiscretionary accruals around earnings announcement and SEC filing dates. Louis et al. find that investors differentially (do not differentially) price discretionary and nondiscretionary accruals around earnings announcements for firms that disclose (do not

<sup>&</sup>lt;sup>12</sup> Investors' perception of financial information also differs depending on whether an item is disclosed or recognized (Aboody 1996; Davis-Friday, Folami, Liu, and Mittelstaedt 1999).



disclose) detailed accruals information in their earnings release. Louis et al. also find that accrual mispricing for firms that do not disclose accruals-related information in press releases is only partially corrected around the filing date. These results suggest that disclosing additional accruals information in earnings releases helps investors properly price accruals information.

Collectively, prior research suggests that (1) market participants absorb information more easily when the information is presented in an easily processed form and (2) earnings releases are a source of easily processed financial information. Thus, I predict that analysts and investors impound information contained in BTDs into earnings forecasts and stock prices more completely when firms disclose BTD information in press releases. This leads to my final two hypotheses (stated in the alternative form):

- **H4a:** The relation between current BTDs and future analyst forecasts errors is weaker when firms disclose BTD information in press releases than when firms do not disclose BTD information in press releases.
- **H4b:** The relation between current BTDs and future returns is weaker when firms disclose BTD information in press releases than when firms do not disclose BTD information in press releases.

I may fail to find evidence supporting H4a and H4b for two reasons. First, unraveling the information in BTDs is difficult. Because BTDs contain complex information about a host of firm and economic factors, disclosure of BTDs in earnings releases may not be sufficient to improve market participants' understanding of BTDs. Consistent with this possibility, Plumlee (2003) provides evidence that analysts struggle to incorporate complex tax information into earnings forecasts. Moreover, Weber (2009) provides evidence that investors generally rely on analysts to communicate the information contained in BTDs via earnings forecasts or analyst reports. Thus, if



additional BTD disclosures do not help analysts use BTD information, that failure may also result in failure of investors to impound BTD information into share prices.

Second, as discussed in Chapter 2, managers have incentives to avoid disclosing information that may indicate low earnings quality or earnings management. As such, managers may only disclose BTDs when they are less informative about future earnings. If managers strategically disclose BTDs, these disclosures may not help market participants understand BTDs.



# Chapter 4: Research Design – Disclosure Tests4.1. Determinants of Voluntary BTD-related Disclosures in Earnings Releases

To identify the determinants of BTD disclosures in earnings releases, I adapt the

methodology used in Chen et al. (2002) and Levi (2008) and estimate the following

logistic regression:

$BtdDisc_{k,i,t} = \begin{cases} \alpha_{ind} + \\ \beta_4Cas_t \\ + \beta_7N \\ + \beta_{12}F \\ \beta_{17}Ret \end{cases}$	$\alpha_{year} + \beta_{1}LrgPosDTE_{i,t} + \beta_{2}LrgNegDTE_{i,t} + \beta_{3}AbsDA_{i,t} + hETR_{i,t} + \beta_{5}AbsDA_{i,t}*LrgPosDTE_{i,t} + \beta_{6}AbsDA_{i,t}*LrgNegDTE_{i,t} \\ OL_{i,t} + \beta_{8}ForOps_{i,t} + \beta_{9}DiscOps_{i,t} + \beta_{10}M\&A_{i,t} + \beta_{11}HighTech_{i,t}  (1) \\ PyLoss_{i,t} + \beta_{13}Age_{i,t} + \beta_{14}MB_{i,t} + \beta_{15}MV_{i,t} + \beta_{16}AFol_{i,t} + eVol_{i,t} + \beta_{18}AbsFErr_{i,t} + \beta_{19}EarnAnnLag_{i,t} + \varepsilon_{i,t}, $
where $BtdDisc_{k,i,t} =$	one if firm <i>i</i> 's fourth quarter earnings announcement component $k$ at the end of year <i>t</i> includes BTD-related information and zero otherwise. <i>k</i> equals <i>Full</i> , <i>Fin</i> , or <i>Text</i> when the full earnings release, the financial statement component, or the text component
	of the release, respectively, is the basis of the dependent variable.
$\alpha_{ind} =$	industry-specific fixed effect based on 2-digit SIC code.
$\alpha_{year} =$	year-specific fixed effect.
$DTE_{i,t} =$	firm <i>i</i> 's deferred tax expense in the year <i>t</i> grossed up by the
	statutory tax rate; DTE is scaled by average total assets.
$LrgPosDIE_{i,t} =$	one if firm $i$ s DTE is in the highest quintile of firm DTEs in year $i$
LrgNegDTE: +=	one if firm <i>i</i> 's DTE is in the lowest quintile of firm DTEs in year t
	and zero otherwise.
$AbsDA_{i,t} =$	one of two earnings quality measures. The first (AbsDA) is the
$CashETR_{i,t} =$	absolute value of firm <i>i</i> 's discretionary accruals at the end of year <i>t</i> , estimated using a modified Jones' model (DeFond and Subramayan 1998). The second ( <i>HighAbsDA</i> ) equals one if firm <i>i</i> 's <i>AbsDA</i> is in the highest quintile of all firm <i>AbsDA</i> in year <i>t</i> and zero otherwise. one of two cash ETR measures. The first ( <i>CashETR</i> ) is firm <i>i</i> 's ratio of cash taxes paid to pretax income at the end of year <i>t</i> . The second ( <i>LowCashETR</i> ) equals one if firm <i>i</i> 's cash ETR is in the lowest quintile of all firm cash ETRs in year <i>t</i> and zero otherwise.
$NOL_{it} =$	one if firm <i>i</i> reports a net operating loss carryforward at the end of
<i>t</i> , <i>t</i>	year <i>t</i> and zero otherwise.
$ForOps_{i,t} =$	one if firm <i>i</i> reports non-zero foreign pretax income in year <i>t</i> and zero otherwise.
$DiscOps_{i,t} =$	one if firm <i>i</i> reports discontinued operations in year <i>t</i> and zero otherwise
$M\&A_{i,t} =$	one if firm <i>i</i> reports merger and acquisition activity during the current year and zero otherwise
$HighTech_{i,t} =$	one if firm <i>i</i> 's SIC code in year <i>t</i> is in 2833-2836 (drugs), 8731- 8734 (R&D services), 7371-7379 (programming), 3570-3577



	(computers), 3600-3674 (electronics), or 3810-3845 (precise
$PvLoss_{it} =$	one if firm <i>i</i> reported a loss in year <i>t</i> -1 and zero otherwise.
$Age_{i,t} =$	the current year minus the first year firm <i>i</i> is publicly traded
	(according to the CRSP database).
$MB_{i,t} =$	firm <i>i</i> 's ratio of market capitalization to book value of equity at the
	end of year <i>t</i> .
$MV_{i,t} =$	the natural log of firm <i>i</i> 's market value at the end of year <i>t</i> .
$AFol_{i,t} =$	the number of unique analysts following firm <i>i</i> (per I/B/E/S) in year
	<i>t</i> .
$RetVol_{i,t} =$	the standard deviation of firm <i>i</i> 's stock returns over the 250 days
	prior to the earnings announcement date (where at least 100 days of stock returns are required for inclusion in the sample).
$AbsFErr_{i,t} =$	an indicator variable coded as one if the absolute value of firm $i$ 's
	forecast error (defined as reported earnings minus the most recent
	consensus mean analysts' forecast from the I/B/E/S database) is
	larger than one cent during the current year and zero otherwise.
EarnAnnLag <sub>i,t =</sub>	The number of days between the fiscal year-end date and the
	earnings announcement.

The primary variables of interest in equation (1) are LrgPosDTE, LrgNegDTE,

*AbsDA*, and *CashETR*. Consistent with H1a, I anticipate that *ceteris paribus* managers are more likely to disclose BTD information when firms have large BTDs. Thus I anticipate a positive  $\beta_1$  and  $\beta_2$ . Since large positive BTDs may indicate earnings management, however, managers may be less likely to disclose information relating to large positive BTDs. Thus, I predict that  $\beta_1$  is less than  $\beta_2$ . Evaluating the coefficients on *LrgPosDTE* and *LrgNegDTE* addresses H1a and H1b.

Ayers et al. (2008) use the absolute value of discretionary accruals as a proxy for low earnings quality and find that taxable income, and thus BTDs, is particularly informative for firms that have high absolute discretionary accruals. I likewise use the absolute value of discretionary accruals to proxy for earnings quality. A positive coefficient on *AbsDA* suggests that managers disclose BTD information when it is most useful to market participants rather than delaying disclosure until the 10-K filing. A negative coefficient suggests that managers delay disclosure as earnings quality declines.



I include two interaction terms, AbsDA\*LrgPosDTE and AbsDA\*LrgNegDTE, to determine whether the association between discretionary accruals and BTD disclosure varies with the size and sign of BTDs. Market participants may be increasingly interested in large differences between book earnings and taxable income as earnings quality declines. Managerial incentives may also vary depending on the size and sign of BTDs. Because large positive BTDs signal low earnings quality and potential earnings management, managers have incentives to withhold BTD information when they have large positive BTDs. Managers, however, may have an incentive to disclose large negative BTDs because these differences are generally inconsistent with managers manipulating reported earnings. A positive and significant coefficient on both of these interactions suggests managers are willing to disclose large BTDs, which become increasingly informative as earnings quality declines. A positive coefficient on AbsDA\*LrgNegDTE and a negative (or insignificant) coefficient on AbsDA\*LrgPosDTE suggests that, managers are only willing to disclose BTD information that does not suggest potential earnings management. Evaluating the coefficients on AbsDA and the related interactions addresses H2a and H2b.

Using a firm's single-year cash ETR as a proxy for tax avoidance activities (Dyreng, Hanlon, and Maydew 2008), the coefficients on the cash ETR measures, *CashETR* and *LowCashETR*, determine whether voluntary BTD disclosure varies with tax avoidance activities. If managers disclose BTDs as a signal about tax avoidance activities because they cannot credibly delay disclosure or because they want to convey to the market that the BTD is not due to aggressive financial reporting, the coefficient on *CashETR* (*LowCashETR*) will be negative (positive). If managers selectively disclose BTDs due to tax avoidance activities because the BTDs are less informative to investors



about earnings quality or because tax avoidance activities can signal potential rent extraction by managers, the coefficient on *CashETR* (*LowCashETR*) will be positive (negative). Evaluating the coefficients on *CashETR* addresses H3.

I also control for several sources of significant BTDs that are likely to be associated with BTD disclosures. Net operating losses often result in large deferred tax assets that are likely to be reported in earnings announcements when firms report detailed balance sheets. Foreign operations can result in large deferred tax liabilities if firms' foreign operations are located in low tax jurisdictions. Firms operating in high technology industries are often eligible for large research and development credits and have greater ability to shift taxable income. Mergers and acquisitions and discontinued operations also often result in significant differences between book and taxable income. To control for these sources of BTDs, I include dummy variables indicating whether a firm has net operating losses (*NOL*), foreign operations (*ForOps*), merger and acquisition activity (*M&A*), discontinued operations (*DiscOps*), or operates in a high tech industry (*HighTech*). I anticipate these variables to be positively associated with BTD disclosures.

I also control for firm characteristics that prior literature finds to be significant predictors of voluntary disclosures in earnings releases. Chen et al. (2002) predict that firms with relatively uncertain future earnings disclose balance sheet information in press releases. They find that firms with recent losses (*PyLoss*), more volatile stock returns (*RetVol*), and larger forecast errors (*AbsFErr*) are more likely to disclose balance sheet information in press releases. Younger firms (*Age*), larger firms (*MV*), and firms with lower market-to-book ratios (*MB*) are also more likely to have balance sheet disclosures.

I include year-specific fixed effects to control for time-specific economic or tax law changes that can impact the levels of BTDs and BTD disclosures. I include industry-



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specific fixed effects based on 2-digit SIC codes to control for industry differences in BTDs and BTD disclosure. In equation (1) and the remaining equations, I also compute Huber-White robust standard errors (Rogers 1993) that provide heteroskedasticity-robust *t*-statistics by correcting for dependence within a cluster of observations per firm.



# Chapter 5: Research Design – Market Effects 5.1. One-Year Ahead Forecast Errors

Before investigating whether BTD disclosures help analysts incorporate BTD

information in earnings forecasts, I estimate equation (2) as a benchmark to establish that

the systematic association between the ratio of taxable to book income (TAX) and future

forecast errors documented in prior literature holds in my sample.<sup>13</sup>

$$FErr_{i,t+1} = \frac{\alpha_{ind} + \alpha_{year} + \beta_1 r Tax_{i,t} + \beta_2 M V_{i,t} + \beta_3 M B_{i,t} + \beta_4 \Delta A Fol_{i,t+1} + \beta_5 P y F E_{i,t}}{+ \beta_6 A cc_{i,t} + \varepsilon_{i,t}}$$
(2)

where  $FErr_{i,t+1} =$  firm *i*'s actual *t*+1 earnings minus the median individual forecast made during month 1 (or month 5), scaled by month 1 stock price.  $rTax_{i,t} =$  firm *i*'s decile ranking based on the ratio of taxable income to book

income (*TAX*) in year t, scaled to a [0,1] range.

- $MV_{i,t}$  = the natural log of firm *i*'s market value at the end of year *t*.
- $MB_{i,t}$  = firm *i*'s ratio of market capitalization to book value of equity at the end of year *t*.
- $\Delta AFol_{i,t+1}$  = the change in the number of unique analysts making earnings forecasts for firm *i* from year *t* to year *t*+1, scaled by the number of analysts from year *t*.
  - $PyFE_{i,t}$  = firm *i*'s actual year *t* earnings minus the median individual forecast of those earnings from midyear (month 6) of year *t*, scaled by stock price (Teoh and Wong 2002).
    - $Acc_{i,t}$  = the ratio of firm *i*'s total accruals to total assets at the end of year *t*.

Consistent with Weber (2009), I anticipate that forecast errors are more optimistic

(i.e., more negative) for firms with smaller ratios of taxable income to book income. This

would result in a positive relation between FErr and rTax, suggesting that analysts'

forecasts fail to fully reflect that firms with low TAX ratios tend to have less favorable

future earnings outcomes.

Equation (2) also contains control variables that prior literature finds to be significant predictors of future forecast errors. Larger firms and growth firms tend to have fewer negative earnings surprises (Brown 1997; Brown 2001; Matsumoto 2002).

<sup>&</sup>lt;sup>13</sup> The forecast error tests are based on methodology used in Weber (2009); the stock return tests are based on methodology used in Lev and Nissim (2004) and Weber (2009). See Appendix A for more detailed information about the construction of the variables.



As such, I include MV and MB to control for size and growth. I expect a positive coefficient on both variables. I include the change in analyst following to control for the concern that analysts will drop coverage of low TAX firms in anticipation of weak earnings prospects, resulting in optimistically biased forecast errors (Weber 2009). I include PyFE to control for the positive serial correlation in analysts' forecast errors (Abarbanell and Bernard 1992) and expect a positive coefficient on PyFE. Bradshaw, Richardson, and Sloan (2001) find that analysts' forecasts do not incorporate the predictable future earnings declines associated with high accruals. I include the ratio of total accruals to assets to control for this association and expect a negative relationship between forecast errors and accounting accruals. I include industry and year fixed effects to address potential concerns regarding industry or time factors.

To test H4a, I modify equation (2) to incorporate disclosure of BTD-related information in firms' fourth quarter earnings releases, creating the following empirical model:

$$FErr_{i,t+1} = \frac{\alpha_{ind} + \alpha_{year} + \beta_1 r Tax_{i,t} + \beta_2 BtdDisc_{i,t} + \beta_3 MV_{i,t} + \beta_4 MB_{i,t} + \beta_5 \Delta AFol_{i,t+1} + \beta_6 PyFE_{i,t} + \beta_7 Acc_{i,t} + \beta_8 BtdDisc^* r Tax_{i,t} + \varepsilon_{i,t}}{(3)}$$

where  $BtdDisc_{i,t}$  = one if firm *i*'s fourth quarter earnings announcement at the end of year *t* includes BTD-related information and zero otherwise.

All other variables are as previously defined. The variable of interest in equation (3) is the *BtdDisc\*rTax* interaction. If voluntary disclosures of BTD-related information in press releases help analysts incorporate the earnings implications of BTDs into their forecasts,  $\beta_8$  will be negative and significant. I include *BtdDisc* to control for systematic differences between firms that disclose BTD information and firms that do not. I make no prediction for this variable.



# 5.1. Stock Returns

# 5.1.1. Twelve Month Buy-and-Hold Stock Returns

Before investigating whether BTD disclosures help investors properly price the

implications of BTDs, I estimate equation (4) as a benchmark to establish that the

systematic association between the ratio of taxable to book income and future stock

returns documented in prior literature holds in my sample.

$$SAR_{i,t+1} = \alpha_{ind} + \alpha_{year} + \beta_1 r Tax_{i,t} + \beta_2 M V_{i,t} + \beta_3 M B_{i,t} + \beta_4 Beta_{i,t} + \beta_5 E P_{i,t} + \beta_6 SAR_{i,t} + \beta_7 Acc_{i,t} + \varepsilon_{i,t},$$
(4)

where $SAR_{i.t+1} =$	firm <i>i</i> 's size-adjusted annual buy-hold return starting four months after the end of fiscal year <i>t</i> calculated as the raw annual return
	minus the return on the corresponding size decile portfolio from the
	CRSP database.
$Beta_{i,t} =$	firm <i>i</i> 's measure of systematic risk estimated using monthly stock returns and CRSP value-weighted index returns (including
	distributions) during the five years that end in the fourth month of year $t+1$ (Fama and French 1992).
$EP_{i,t} =$	firm <i>i</i> 's ratio of earnings before extraordinary items to market value of common equity at the end of year <i>t</i> (Basu 1977).
$SAR_{i,t} =$	firm <i>i</i> 's the size-adjusted return from the previous year (Jegadeesh and Titman 1993).

I convert the control variables to annual decile rankings and scale them to range from zero to one. I can then interpret the estimated coefficients as the return on a zero investment portfolio with a long position in the firm-years in the highest decile and a short position in the firm-years in the lowest decile (Bernard and Thomas 1990). Consistent with prior literature, I anticipate that future returns are positively associated with the decile rankings of the ratio of taxable to book income (rTax), the earnings-price ratio (*EP*), past price momentum (*SAR*), and systematic risk (*Beta*). I expect future returns to be negatively associated with firm size (*MV*), the market-to-book ratio (*MB*), and accruals (*Acc*).

To test H4b, I modify equation (4) to incorporate disclosure of BTD information in earnings releases, creating the following empirical model:


$$SAR_{i,t+1} = \frac{\alpha_{ind} + \alpha_{year} + \beta_1 r Tax_{i,t} + \beta_2 BtdDisc_{i,t} + \beta_3 M V_{i,t} + \beta_4 M B_{i,t} + \beta_5 Beta_{i,t} + \beta_5 Beta_{i,t} + \beta_6 EP_{i,t} + \beta_7 SAR_{i,t} + \beta_8 Acc_{i,t} + \beta_9 BtdDisc^* r Tax_{i,t} + \varepsilon_{i,t},$$
(5)

All variables are as previously defined. The variable of interest in equation (5) is the *BtdDisc\*rTax* interaction. If voluntary disclosures of BTD-related information in press releases help investors impound the earnings implications of BTDs into stock prices,  $\beta_9$  will be negative and significant. I include *BtdDisc* as an additional control variable but make no prediction for this variable.



# Chapter 6: Sample

To identify the determinants and effects of voluntary BTD disclosures, I construct several samples in this study that vary in data restrictions. Less restrictive samples are used to replicate findings in prior studies to use as benchmarks to my findings. More restrictive samples, such as those requiring press release data, are used in my primary analyses. Table 1 outlines the sample construction process. I discuss the construction of the disclosure test sample first, the forecast error test sample second, and the stock return test sample third.

# 6.1. Disclosure Test Sample

The starting point for my disclosure test sample (Table 1, Panel A) is all firms from 1989 to 2006 used in later stock return analyses. The stock return sample is used as the starting point because it is the least restrictive sample used in later analyses. This sample excludes (1) firms that do not have the necessary Compustat and CRSP data required in the returns tests, (2) firms incorporated outside the U.S., (3) firms with negative income before extraordinary items, and (4) financial and utility firms.<sup>14</sup> These data restrictions result in an initial sample of 44,065 firm-year observations. I collect earnings releases based on this initial sample.

The press release dataset consists of earnings releases from 1989 through 2006 available through Factiva.<sup>15</sup> In order to get a high percentage of press releases for firms contained in the initial sample, I merge historical company names into the sample. Using the current company names, I also collect Factiva FDS codes which track a firm on

<sup>&</sup>lt;sup>14</sup> Consistent with Lev and Nissim (2004) and Weber (2009), I delete firms with negative income before extraordinary items because the ratio of taxable income to book income is not meaningful when firms have negative book income. Although my study is only generalizable to profitable firms, the sample includes profitable firms with net operating losses, for whom tax information can be especially useful. <sup>15</sup> To maximize the efficiency of the collection process, I only collect releases for firms with at least five firm-year observations in the stock return test sample between 1989 and 2006.



Factiva through time. I then search the Business Wire and the PR Newswire services for each firm's earnings-related press releases using the current name, historical names, and FDS code. <sup>16</sup> This process yields a total of 220,217 quarterly earnings releases. Most of these releases are for the first, second, or third quarters. To ensure that I retain only fourth quarter earnings press releases, I require a firm's Factiva earnings release date to match its fourth quarter earnings release date reported on I/B/E/S or Compustat. Where I/B/E/S and Compustat earnings release dates differ for a firm-year observation, I retain the earliest earnings release date. This results in a sample of 33,423 fourth quarter earnings releases. Finally, I eliminate firms that do not have the necessary Compustat, I/B/E/S, and CRSP data required in the disclosure tests. This yields a final disclosure test sample of 17,544 firm-year observations.

#### 6.2. Forecast Error Test Sample

The initial forecast error test sample (Table 1, Panel B) includes firm-year observations between 1985 and 2006 that contain all necessary I/B/E/S and Compustat data to estimate equation (2). For this sample, I download annual firm-year earnings forecasts from 1983 to 2006 from the I/B/E/S Detail History file. I use the Detail History file to create consensus forecasts, rather than using consensus forecasts from the I/B/E/S Summary file, to avoid the problem of stale forecasts being included in the consensus (Ramnath et al. 2005). To compute firm-year consensus forecasts, I create rolling 30-day forecasting periods beginning the day after the current fiscal year (year *t*) earnings announcement (EA). For each firm, the consensus forecast for a given 30-day forecasting period equals the median of all forecasts made during the period for the

<sup>&</sup>lt;sup>16</sup> The actual search is: (HLP=(result\$1 or earn\$4 or EPS) or TD=(earnings per share) or TD=(EPS)) and RST=(PRN or BWR) and NS=C15 and (FDS=(Insert company FDS code) or HLP=(Insert company name) or HLP=(Insert company historical names)). "NS=15" requires the releases to be related to corporate



following fiscal year earnings (year t+1).<sup>17</sup> If an analyst issued multiple forecasts for a given firm during a 30-day forecasting period, I retain only the most recent forecast. Forecast errors are computed for each period as the difference between that period's consensus forecast of year t+1 earnings and the actual realization of the t+1 earnings. Price-scaled forecast errors are computed by dividing the forecast errors by month 1 stock price. I focus on forecast errors in the first (EA plus 1 day through EA plus 30 days) and fifth (EA plus 121 days through EA plus 150 days) forecasting periods in my primary analyses. The first forecasting period ('month 1') is the earliest period subsequent to the release of year t earnings and also minimizes analysts' access to year t+1 earnings information (i.e., no year t+1 quarterly earnings announcements). Alternatively, focusing on forecast errors during the fifth forecasting period ('month 5') ensures that analysts have access to all information in the annual report. I eliminate firms incorporated outside the U.S., firms with negative income before extraordinary items, and financial and utility firms. This yields a sample of 22,391 firm-year observations. Restricting the sample to observations that have month 1 (month 5) forecast errors results in 19,905 (15,327) observations between. I use these samples to replicate results from Weber (2009); these results serve as a benchmark for my primary analyses. Next, I merge earnings release data into the month 1 and month 5 datasets. I eliminate firm-year observations with no press release data resulting in 10,675 month 1 and 7,770 month 5 forecast error firm-year observations. These datasets are used to estimate equation (3).

The final forecast error tests also require all necessary Compustat, I/B/E/S, and CRSP-based disclosure variables. These additional data restrictions result in 9,921

performance. See the following link for additional information explaining Factiva search codes: <u>http://www.library.hbs.edu/helpsheets/factivahelp.html</u>.



month 1 and 7,240 month 5 firm-year observations. These final samples are used in twostage analyses that predict disclosure of deferred tax information in the first stage and then, controlling for the endogeneity of the disclosure decision, estimate the effect of voluntary deferred tax disclosure on analysts' abilities to incorporate BTD information in their earnings forecasts.

## 6.3. Stock Return Test Sample

The initial stock return test sample (Table 1, Panel C) includes firm-year observations between 1985 and 2006 that contain all necessary CRSP and Compustat data to estimate equation (4). I eliminate firms incorporated outside the U.S., firms with negative income before extraordinary items, and financial and utility firms. This yields a sample of 52,978 firm-year observations. Next I merge earnings release data into the stock return sample. Retaining firms from 1989-2006 with press release data results in 19,767 firm-year observations. I use this sample to estimate equation (5).

The two-stage stock return tests also require all necessary Compustat, I/B/E/S, and CRSP-based disclosure variables. These additional data restrictions result in 15,838 firm-year observations. The final stock return sample is used in a two-stage analysis that predicts disclosure of deferred tax information in the first stage and then, controlling for the endogeneity of the disclosure decision, estimates the effect of voluntary deferred tax disclosure on investors' abilities to impound BTD information into stock prices.



<sup>&</sup>lt;sup>17</sup> Prior to forming the consensus forecasts, I eliminate individual forecasts in the highest and lowest one percent of the distribution of price-scaled forecast errors to remove the effects of anomalous data and outliers.

# Chapter 7: Descriptive Statistics and Trends 7.1. Classification of Disclosers and Non-Disclosers

Using the dictionary of terms listed in Appendix B, I use textual analysis to identify firms that provide information that may assist market participants in processing information contained in BTDs. I initially classify firm-year observations as "disclosers" when press releases contain one or more of the primary deferred tax terms (see Appendix B). Firm-year observations without any primary deferred tax terms are classified as nondisclosures. I also partition the earnings releases into financial statement and text only components and use textual analysis on these earnings release components.

# 7.2. Descriptive Statistics

Table 2 provides descriptive statistics for the two-stage forecast error sample and for subsamples partitioned by BTD disclosure.<sup>18</sup> I provide descriptive statistics for the two-stage forecast error sample because it contains the most common observations across the disclosure, forecast error, and stock return samples. On average, firms that disclose BTD information in earnings releases (disclosers) are larger, as measured by *Assets* and *MktCap*. Disclosers are more profitable in the current year, as measured by *ROA*, than firms that do not disclose BTD information (non-disclosers) but are slightly more likely to have reported a prior year loss (*PyLoss*). Fewer analysts follow non-disclosers (*AFol*) but those analysts issue more optimistic forecasts (*FErr*<sub>t+1</sub>). Consistent with expectations, disclosers are more likely than non-disclosers to have net operating losses (*NOL*), foreign operations (*ForOps*), and discontinued operations (*DiscOps*). Disclosers are also more likely than non-disclosers to operate in high tech industries (*HighTech*). Interestingly, disclosers have larger positive differences between book and taxable

<sup>&</sup>lt;sup>18</sup> Variables are winsorized at the top and bottom 1% of their respective distributions. Forecast errors are not winsorized because outlying individual forecasts are eliminated prior to forming consensus forecasts as outlined in Weber (2008).



income, as measured by total (*TAX*) and temporary (*DTE*) BTDs. Disclosers also have higher absolute discretionary accruals (*AbsDA*), suggesting lower earnings quality than non-disclosers. Although disclosers have higher signed discretionary accruals (DA), there is no significant difference between signed discretionary accruals across disclosers and non-disclosers. Inconsistent with managers avoiding BTD disclosure when tax avoidance activities are high, disclosers engage in higher levels of tax avoidance than non-disclosers, as evidenced by *CashETR* and *ETR*.

## 7.3. Disclosure Trends

Figures 1 and 2 document basic trends in fourth quarter earnings release disclosure patterns from 1989 to 2006. Specifically, figures 1 and 2 document the change in the length of releases and the time lag between the fiscal year-end date and the earnings announcement date, respectively. Overall, firms have consistently increased the amount of information they provide via earnings releases. In 1989, press releases averaged less than 850 words whereas releases averaged approximately 3,500 words by 2006. The amount of time that elapsed between the fiscal year-end date and the earnings announcement declined from approximately 28 days in 1989 to approximately 26 days in 1996 through 2000. Since 2000, the time lag has monotonically increased with firms in 2006 averaging over 30 days between the fiscal year-end date and the earnings release.

Figures 3 through 8 provide more detailed information on trends in disclosure of specific types of tax information in earnings releases from 1989 through 2006. The trend data is based on searching earnings releases for specific words or phrases and grouping those search terms into different tax categories. See Appendix B for a complete list of all search terms and categories. Figures 3 and 4 document the change in discussion of effective tax rates and cash tax rates in earnings releases over time, respectively.



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Between 1989 and 1999, the percentage of earnings releases that contained terms such "effective tax", "ETR," and "book tax rate" ranged from as low as five percent of releases to as high as 7.5 percent of releases. In 2000, the percentage of releases that discussed effective tax rates monotonically increased and reached 25.80 percent in 2006. Figure 4 provides evidence that cash taxes are discussed much less frequently in earnings releases. From 1989 to 2000, less than one percent of release contained terms such as "cash tax," "cash effective tax," "cash ETR," "taxes paid," or "tax paid." Beginning in 2001, managers began disclosing more cash tax information and the percentage of earnings releases containing cash tax terms increased from approximately two percent in 2006.

Figure 5 documents the changes in the discussion of book-tax differences, tax avoidance, tax shelters, and tax rate reconciliation terms. None of these tax categories are discussed often. The discussion of tax avoidance terms such as "tax plan," "tax sav," and "tax manage" peak in 2004 and are only mentioned in approximately two percent of earnings releases. Not surprisingly, tax shelters are rarely mentioned in earnings releases and peak at approximately .4 percent in 2002. Terms intended to directly identify discussion of book-tax differences such as "book-tax diff," book-tax gap," and "tax gap" are also rarely mentioned in earnings releases. Interestingly, the percentage of earnings releases that contain these terms increases monotonically from 2002 to 2006. In 2006, only .75 percent of earnings releases contained a BTD search term.

Figure 6 documents changes in the discussion of domestic and foreign operations and tax terms. None of the categories included in this figure – domestic operations, foreign operations, domestic tax, and foreign tax – were discussed in more than three percent of releases until after 2003. Discussion of foreign operations (foreign taxes)



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increased after 2003 and peaked at approximately 12.5 percent in 2005 (5.5 percent in 2006). Discussion of domestic operations (domestic taxes) peaked at 3 percent in 2004 (3.8 percent in 2006).

Figure 7 documents the change in deferred tax information in earnings releases. The search terms included in figure 7, such as "deferred tax" and "deferred income tax," form the foundation for my empirical tests. In 1989, only 13.1 percent of earnings releases contained one of the primary deferred tax terms. From 1989 to 2006, discussion of these primary deferred tax terms increased almost monotonically to approximately 66.7 percent in 2006. Evaluating the disclosure trends of deferred tax information in the financial statement and text components of earnings releases provides evidence that the placement of deferred tax information in earnings releases has not remained constant through time. In early years, deferred tax information was primarily disclosed in the text component of the press release. During the 1990s, fewer firms disclosed deferred tax information in the text component of releases and there was a dramatic drop in disclosure of deferred tax information in the text of earnings releases between 1999 and 2001. This coincided with increased scrutiny of deferred taxes and book-tax differences by academics and the media. In 2002, there was a surge in text deferred tax disclosure as approximately 20 percent of releases contained textual discussion of deferred taxes. This dropped in subsequent years and ranged between approximately five and 10 percent between 2003 and 2006. Unlike deferred tax text disclosures, deferred tax financial statement disclosures increased fairly consistently from 1989 to 2006. This trend is likely due to both a general trend by firms to include financial statements in their earnings releases and larger BTDs through time. Interestingly, these trends suggest that managers may exercise little discretion over financial statement disclosures but that they may



exercise discretion over textual disclosures emphasizing deferred tax and BTD information.

Figure 8 also documents the change in terms related to deferred taxes. I classify these terms as "secondary" deferred tax terms because these terms do not indicate that the earnings release contains information that market participants can use to approximate my empirical measures of BTDs. These secondary terms include phrases such as "valuation allowance," "contingent tax," "tax cushion," and "permanently reinvest." Overall, managers infrequently discuss these terms from 1989 to 2001. The percentage of releases that contain secondary deferred tax terms does increase from approximately four percent in 2002 to 14 percent in 2006.

The final figure documents the trends in several of the empirical tax measures used in this study. Figure 9 documents that the gap between book and taxable income has grown through time, as evidenced by *TAX* less than one and a positive *DTE*. Book income exceeds taxable income by the largest margin from 2002 to 2006. Although *CashETR* has declined through time, the small decrease in *CashETR* suggests that only a portion of these BTDs is due to tax avoidance activities.

Table 3 presents the underlying data for many of the figures discussed above. Table 3 also presents the number of firm-year observations in each year from 1989 to 2006 that have sufficient financial and press release data for later forecast error tests. From 1989 to 1992, there are approximately 400 or fewer observations in each year. In the subsequent years, there are generally 500 or more observations per year.



### **Chapter 8: Multivariate Results – Disclosure of BTDs**

#### 8.1. Determinants of Voluntary BTD-related Disclosures – Full Earnings Release

To identify the determinants of BTD disclosures in earnings releases, I estimate equation (1) and present the results in Panel A of Table 4.<sup>19</sup> In Panel A, the dependent variable, *BtdDisc<sub>Full</sub>*, equals one if the earnings release contains one or more of the primary deferred tax search terms and zero otherwise. The positive and significant coefficients on *LrgPosDTE* and *LrgNegDTE* indicate that firms with large positive and negative BTDs are more likely than firms with small BTDs to disclose BTD information in earnings releases. I test for differences in the coefficients on *LrgPosDTE* and *LrgPosDTE* and *LrgNegDTE* indicate that, in full press releases, managers are equally likely to disclose deferred tax information regardless of whether firms have large positive or large negative BTDs. The positive and significant coefficients on *LrgPosDTE* and *LrgNegDTE* support H1a; the insignificant difference between those coefficients provides no support for H1b.

The coefficient on *AbsDA* indicates whether firms with low earnings quality are more or less likely to disclose BTD information in earnings releases. The coefficient on *AbsDA* is insignificant while the coefficient on *HighAbsDA* is negative but only marginally significant. These results provide weak evidence that firms with lower earnings quality (i.e., higher values of *AbsDA*) are less likely to disclose BTD-related information in earnings releases. Moreover, the insignificant coefficients on *AbsDA\*LrgPosDTE* and *AbsDA\*LrgNegDTE* indicate that the association between

<sup>&</sup>lt;sup>19</sup> Table 4 includes two measures of earnings quality and tax avoidance activities. The earnings quality metrics are (1) the absolute value of discretionary accruals (AbsDA) and (2) an indicator variable equal to one for firm-year observations in the highest quintile of the absolute value of discretionary accruals in a given year and zero otherwise (*HighAbsDA*). The tax avoidance metrics are (1) the cash ETR and (2) an indicator variable equal to one for firm-year observations in the lowest quintile of cash ETRs in a given



earnings quality and BTD disclosure does not vary with the sign and size of BTDs. Collectively, these results provide only limited evidence that managers are less likely to disclose BTD-related information when earnings quality is low. These results provide limited support for H2a and no support for H2b.

The coefficients on *CashETR* and *LowCashETR* indicate whether firms are more or less likely to disclose BTD information as tax avoidance activities increase. The negative and marginally significant (positive and significant) coefficient on *CashETR* (*LowCashETR*) indicates that firms are more likely to disclose additional BTD information in earnings releases when firms have low cash effective tax rates. These results suggest that managers are willing to disclose BTDs when tax avoidance activities, rather than earnings management, are the primary source of the difference. Moreover, these results suggest that managers are willing to disclose BTDs when such differences may indicate aggressive taxpayer behavior. Evidence that managers are more likely to disclose BTDs when tax avoidance activities are high is inconsistent with H3. This result is consistent, however, with the interpretation that managers are willing to bear potential tax-related costs to reassure investors that BTDs are not due to aggressive financial reporting.

The results in Table 4, Panel A also indicate that firms with merger and acquisition activity (M&A), firms operating in high tech industries (*HighTech*), and firms with less time elapsing between the fiscal year-end date and the earnings announcement date (*EarnAnnLag*) are more likely to voluntarily disclose BTD information. The positive and significant (negative and significant) coefficient on *HighTech* (*M&A*) is consistent (inconsistent) with expectations.

year and zero otherwise. I discuss the results collectively and discuss select results only when results differ across specifications.



# 8.2. Determinants of Voluntary BTD-related Disclosures – Financial Statement and Text Components

Prior studies provide evidence that managerial discretion can affect the financial statement and text components of earnings releases differently. Two such studies are Bowen, Davis, and Matsumoto (2005) and McGuire (2008). Bowen et al. investigate disclosure of pro forma financial metrics in earnings releases and focus primarily on disclosures made in the text of the release. The authors find that managers emphasize metrics that are more value-relevant and that portray more favorable firm performance. McGuire (2008) investigates textual disclosure of information pertaining to changes in effective tax rates in earnings releases and finds that managers are more likely to emphasize decreases in effective tax rates rather than increases in tax rates. The results of these studies suggest that managers can exercise discretion in the text component of earnings releases. These studies stand in contrast to Levi (2008) and Chen et al. (2002) that suggest that managers have little discretion when choosing to provide useful financial statement information via earnings releases. Because managerial discretion may vary between the financial statement and text components of earnings releases, I consider each component separately below.

# 8.2.1 Determinants of Voluntary BTD-related Disclosures – Financial Statement Component

To identify the determinants of voluntary BTD disclosures in the financial statement component of earnings releases, I estimate equation (1) and present the results in Panel B of Table 4. In Panel B, the dependent variable,  $BtdDisc_{Fin}$ , equals one if the financial statement component of the earnings release contains one or more of the primary deferred tax search terms and zero otherwise. Similar to the full earnings release findings, the positive and significant coefficients on *LrgPosDTE* and *LrgNegDTE* 



indicate that firms with large positive and negative BTDs are more likely than firms with small BTDs to disclose BTD information in financial statements within earnings releases. Unlike the full earnings release findings, however, I find evidence that that the coefficient on *LrgPosDTE* is significantly larger than the coefficient on *LrgNegDTE*. The differences in the *LrgPosDTE* and *LrgNegDTE* coefficients are significant at the five percent level in two specifications and the 10 percent level in the remaining two specifications. The positive and significant coefficients on *LrgPosDTE* and *LrgNegDTE* support H1a; the significant difference between those coefficients actually runs counter to H1b. The significant difference between *LrgPosDTE* and *LrgNegDTE* is likely due to the fact that, on average, large positive BTDs are larger in absolute magnitude than large negative BTDs. Thus, large positive BTDs may be more material and disclosed more often in the financial statements.

The coefficient on *AbsDA* is negative but not significant at conventional levels while the coefficient on *HighAbsDA* is negative and significant at the two percent level. These results provide some evidence that firms with lower earnings quality (i.e., higher values of *AbsDA*) are less likely to disclose BTD-related information in the financial statements of earnings releases. The insignificant coefficients on *AbsDA\*LrgPosDTE* and *AbsDA\*LrgNegDTE* indicate that the association between earnings quality and BTD disclosure do not vary with the sign and size of BTDs. Collectively, these results provide some evidence that managers are less likely to disclose BTD-related information when earnings quality is low. These results provide limited support for H2a and no support for H2b.

Unlike the results for the full releases, the coefficients on *CashETR* and *LowCashETR* are insignificant, indicating no relationship between tax avoidance



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activities and disclosure of BTD information in financial statements of earnings releases. This result is inconsistent with H2. The results in Table 4, Panel B also indicate that firms operating in high tech industries (*HighTech*) are more likely to disclose BTD information.

Overall, these results suggest that the magnitude of BTDs is the most significant driver of BTD disclosure in earnings announcement financial statements.

## 8.2.2 Determinants of Voluntary BTD-related Disclosures – Text Component

To identify the determinants of voluntary BTD disclosures in the text component of earnings releases, I estimate equation (1) and present the results in Panel C of Table 4. In Panel C, the dependent variable, *BtdDisc<sub>Text</sub>*, equals one if the text component of the earnings release contains one or more of the primary deferred tax search terms and zero otherwise. Similar to the full earnings release findings, the positive and significant coefficients on *LrgPosDTE* and *LrgNegDTE* indicate that firms with large positive and negative BTDs are more likely than firms with small BTDs to disclose BTD information in the text of earnings releases. Unlike the full release and financial statement component results, however, I find evidence that the coefficient on *LrgNegDTE* is significantly larger than the coefficient on *LrgPosDTE*. The differences in the *LrgNegDTE* and *LrgPosDTE* coefficients are significant at the five percent level in two specifications and the 10 percent level in the remaining two specifications. Finding that managers are more likely to provide additional emphasis on deferred tax information when they have large negative rather than large positive BTDs is interesting given that (1) the large positive BTDs are much larger in absolute magnitude than the large negative BTDs and (2) large positive BTDs are often seen as potential "red flags" to market participants (Palepu et al. 2000) that managers may be aggressively reporting book income.



The coefficients on *AbsDA* and *HighAbsDA* are both insignificant suggesting that there is no direct association between earnings quality and disclosure of deferred tax information in the text component of the earnings release. The insignificant coefficients on *AbsDA\*LrgPosDTE* and *AbsDA\*LrgNegDTE* indicate that the association between earnings quality and BTD disclosure do not vary with the sign and size of BTDs. These results provide no evidence that managers suppress BTD-related information in the text component of the earnings release when earnings quality is low. These results do not support H2a or H2b.

Unlike the results for the financial statement component, the coefficient on *CashETR (LowCashETR)* is negative (positive) and highly significant. These results suggest that managers are willing to disclose BTDs when tax avoidance activities, rather than earnings management, are the primary source of the difference. Moreover, these results suggest that managers are willing to disclose BTD-related information in the text component of earnings releases when such differences may indicate aggressive taxpayer behavior. Evidence that managers are more likely to disclose BTDs when tax avoidance activities are high is inconsistent with H3. As mentioned earlier, this result is consistent with the interpretation that managers are willing to bear potential tax-related costs to reassure investors that BTDs are not due to aggressive financial reporting.

The results in Table 4, Panel C also indicate that firms operating in high tech industries (*HighTech*), firms with discontinued operations (*DiscOps*), firms without M&A activities (*M&A*), firms with prior year losses (*PyLoss*), and firms with a shorter lag between the fiscal year-end and the earnings announcement date (*EarnAnnLag*) are more likely to disclose BTD-related information in the text component of earnings releases. Aside from the M&A result, these results are consistent with expectations.



#### 8.3 Determinants of Voluntary BTD-related Disclosures – Summary

To develop a more thorough understanding of BTD-related disclosure in earnings releases, it is useful to evaluate disclosure in the financial statement and text components separately. BTD disclosure in the financial statements appears to be largely driven by the magnitude of the BTDs. Although the magnitude of BTDs also appears to be important when managers decide whether to emphasize BTD information in the text of the release, managers are more likely to emphasize large negative BTDs than large positive BTDs. This result holds despite the fact that large positive BTDs are actually larger in absolute magnitude than large negative BTDs.

There is also evidence that the source of the BTD affects disclosure. In the financial statement component, there is limited evidence that managers are less likely to disclose BTD information when book earnings quality is low. This result suggests that managers may avoid disclosing BTD information when aggressive financial reporting may be a primary source of the BTD. In the text component of the release, I find no evidence that managers are more or less likely to provide BTD information when earnings quality is low. Although these results are weak, they do run counter to prior research suggesting that managers voluntarily disclose financial statement information when it is most useful to investors (Chen et al. 2002; Levi 2008). BTDs are most informative as an earnings signal when earnings quality is low, yet managers either suppress or are at least no more likely to provide BTD disclosures when earnings quality is low.

Although tax avoidance activities do not affect disclosure of BTD information in the financial statement component of the release, managers are more likely to emphasize BTD information in the text when tax avoidance activities are a likely source of the



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difference. It is difficult to determine whether this result indicates that (1) managers are more likely to disclose BTD information when it is less informative about earnings (as is the case when tax avoidance activities are high per Ayers et al. 2009), (2) managers use BTDs as a signal of efficient tax planning, or (3) managers do not think that market participants use BTDs as a signal for aggressive tax planning and are thus simply more likely to disclose these differences because they convey no "bad" news to the market.

Overall, evidence that managers are (1) less likely, or at least no more likely, to disclose BTD information when earnings quality is low and (2) more likely to emphasize large negative rather than large positive BTDs in the text despite large positive BTDs being more material provides some evidence that managers may be selectively disclosing BTD information in earnings releases.

## 8.4. Disclosure Tests – Economic Significance

Table 5 presents the marginal effects relating to the disclosure tests. To simplify the presentation of the marginal effects, I present the results for the specification of equation (1) that includes *HighAbsDA* as the earnings quality metric and *LowCashETR* as the tax aggressiveness metric. I focus on how key variables affect the probability of disclosure in the financial statement and text components. The baseline probability of deferred tax disclosure is based a firm that has a small BTD (i.e., *LrgPosDTE* and *LrgNegDTE* equal zero), has high earnings quality (i.e., *HighAbsDA* equals zero), has low tax avoidance activities (i.e., *LowCashETR* equals zero), has no NOLs, foreign operations, discontinued operations, M&A activity, or prior year loss (i.e., *NOL*, *ForOps*, *DiscOps*, *M&A*, and *PyLoss* equal zero), and does not operate in a high technology industry (i.e., *HighTech* equals zero).



The baseline firm discloses deferred tax information in the financial statement component of its press release approximately 16.9 percent of the time. The probability of disclosure increases to 21.4 percent for a firm with a large positive BTD but only to 18.6 percent for a firm with a large negative BTD. Low earnings quality (*HighAbsDA* equals one) reduces the probability of disclosure to 14.9 percent. Finally, a firm operating in a high technology industry discloses approximately 21.2 percent of the time.

The baseline firm discloses deferred tax information in the text component of its press release approximately 6.3 percent of the time. The probability of disclosure increases to 8.5 percent for a firm with a large positive BTD and to 10 percent for a firm with a large negative BTD. High tax avoidance activities (*LowCashETR* equals one) increase the probability of disclosure to 8.8 percent. Finally, a firm operating in a high technology industry discloses approximately 8.7 percent of the time.

These results suggest that firm characteristics considered in equation (1) have a large impact on the probability of disclosure. This is even more apparent as different combinations of firm characteristics are considered simultaneously rather than considering only one characteristic at a time.



#### **Chapter 9: Multivariate Results – Market Effects**

# 9.1. Forecast Errors

Table 6 reports the results from estimating equation (2) to benchmark my results against prior studies and equation (3) to test H4a. Panel A replicates the findings in Weber (2009) within a sample similar to his; Panel B replicates Weber (2009) in my sample consisting of firm-year observations from 1989 to 2006 with press release data necessary for my primary analyses. Consistent with Weber (2009), I find that future forecast errors are negatively associated with total accruals (*Acc*) and positively associated with the decile ranking of the ratio of taxable income to book income (*rTax*), firm size (*MV*), the change in analyst following ( $\Delta AFoI$ ), and prior period forecast errors (*PyFE*). These associations are significant regardless of whether month 1 or month 5 forecast errors are used as the dependent variable.

To test H4a, I estimate equation (3) in Panel C which incorporates disclosure of BTD-related information. As outlined earlier, *BtdDisc* equals one when a firm discloses BTD-related information in its fourth quarter earnings release and zero when a firm does not disclose BTD information. Consistent with earlier results, I find that future forecast errors are negatively associated with total accruals (*Acc*) and positively associated with firm size (*MV*), the change in analyst following ( $\Delta AFol$ ), and prior period forecast errors (*PyFE*). In equation (3), the positive and significant coefficient on *rTax* indicates that the ratio of taxable to book income is positively associated with future forecast errors for non-disclosers. The negative and significant coefficient on *BtdDisc\*rTax*, however, suggests that the association between the ratio of taxable income to book income and future forecast errors varies depending on whether a firm discloses BTD information in earnings releases. An F-test indicates that the sum of the coefficients on *rTax* and



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*BtdDisc\*rTax* is not significantly different than zero (month 1 forecast error, *p*-value=0.2094; month 5 forecast error, *p*-value=0.4334), suggesting that the ratio of taxable to book income is not associated with future forecast errors for disclosers. Consistent with H4a, these results suggest that voluntary disclosure of additional BTD information in earnings releases help analysts use BTDs when forecasting earnings.

## 9.2. Stock Returns

Table 7 reports the results from estimating equation (4) to benchmark my results against prior studies and equation (5) to test H4b. Panel A replicates the findings within Weber (2009) in a sample similar to his; Panel B replicates Weber (2009) in my sample consisting of firm-year observations from 1989 to 2006 with press release data necessary for my primary analyses. In Panel A, I find that future returns are positively associated with the decile rankings of the ratio of taxable to book income (rTax), prior period size-adjusted buy-and-hold returns (SAR), and the earnings to price ratio (EP) and negatively associated with the decile rankings of the market-to-book ratio (MB), firm size (MV), and total accruals (Acc). These results are consistent with expectations. Moreover, the results hold regardless of whether all fiscal year-end observations or only December year-end observations are used.

In Panel B using all fiscal-year end observations, I find that future returns are positively associated with the decile rankings of the ratio of taxable to book income (*rTax*) and prior period size-adjusted buy-and-hold returns (*SAR*) and negatively associated with the decile rankings of the market-to-book ratio (*MB*), firm size (MV), and total accruals (*Acc*). These results are consistent with expectations. I no longer find an association between the earnings to price ratio and future returns. When the sample is restricted to only December fiscal year-end firms in the press release sample, all the



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results hold except I no longer find an association between the rTax and future returns. This result raises the concern that the association between rTax and future returns is not robust in all samples and warrants future investigation.

To test H4b, I estimate equation (5) in Panel C which incorporates disclosure of BTD-related information. The coefficient on the variable of interest, BtdDisc\*rTax, is not significant at conventional levels, indicating that the association between the ratio of taxable to book income (rTax) and future returns is not statistically different across the disclosure and non-disclosure samples. However, an F-test indicates that the sum of rTax and BtdDisc\*rTax is not statistically different from zero (all fiscal year-ends, p-value = 0.8127; December year-end, p-value = 0.4879), suggesting that the decile ranking of the ratio of taxable to book income is not significantly associated with future returns for disclosers. This result provides limited evidence consistent with H4b that disclosure of BTD information in earnings releases helps investors impound the information contained in current BTDs into stock prices.



#### **Chapter 10: Robustness Checks and Supplemental Analyses**

# 10.1. Does the Relationship Between Tax Avoidance Activities and BTD Disclosure Vary with the Magnitude and Sign of BTDs?

It is possible that the relationship between tax avoidance activities and BTD disclosure may vary with the sign and magnitude of the BTD. To examine this directly, I estimate equation (1) including two additional interactions, *CashETR\*LrgPosDTE* and *CashETR\*LrgNegDTE*. The results from estimating these regression specifications are presented in Panels A, B, and C of Table 8.

In Panel A, the dependent variable is *BtdDisc<sub>Full</sub>*. Similar to earlier tests, managers are more likely to disclose BTD information when the firm has a large (positive or negative) BTD. The coefficient on *CashETR* and *LowCashETR* is insignificant indicating the BTD disclosure does not vary with CashETRs for firms with small BTDs. When using *CashETR* to proxy for tax avoidance activities, the negative and significant coefficient on *CashETR\*LrgPosDTE* suggests that managers are significantly more likely than firms with small BTDs to disclose deferred tax information when tax avoidance activities are the likely source of the BTD. When using *LowCashETR* to proxy for tax avoidance activities, the positive and significant coefficients on

*LowCashETR\*LrgPosDTE* and *LowCashETR\*LrgNegDTE* suggest that managers are more likely to disclose deferred tax information when tax avoidance activities may be a significant source of the BTDs. These results are consistent with managers bearing potential tax costs to assure investors that large BTDs are not due to aggressive financial reporting.

In Panels B and C, I investigate whether the full release results are being driven by the financial statement or text component of the release. In Panel B, the dependent variable is  $BtdDisc_{Fin}$ . In Panel C, the dependent variable is  $BtdDisc_{Text}$ . Similar to the



results presented in Table 4, the magnitude of the BTD is important in predicting financial statement disclosure. LrgPosDTE is positive and significant in both specifications while LrgNegDTE is positive and significant in only one specification. Unlike Table 4, however, the coefficients on LrgPosDTE and LrgNegDTE are not significantly different. The positive and significant coefficient on the LowCashETR\*LrgPosDTE interaction suggests that the tax avoidance activities results in Table 4 may be attributable to firms with positive BTDs driven by tax avoidance activities disclosing deferred tax information in earnings releases. The negative coefficient on the CashETR\*LrgPosDTE is consistent with this interpretation but this coefficient is not significant at conventional levels (p-value = 0.11).

In general, the results pertaining to textual disclosures are similar to those presented earlier with one notable exception. The coefficient on *LrgNegDTE* is no longer significantly larger than the coefficient on *LrgPosDTE* when *LowCashETR* is used to measure tax avoidance activities. Considering this result and the positive and highly significant coefficient on *LowCashETR\*LrgNegDTE* suggests that the earlier difference between *LrgPosDTE* and *LrgNegDTE* was driven by firms with large negative BTDs and low cash ETRs being much more likely to disclose BTD information in earnings releases. Overall, the inferences are similar though. In general, managers are more willing to disclose large negative rather than large positive BTDs, especially when those differences are likely due to tax avoidance activities.

## **10.2.** Alternative Controls for Earnings Quality

In general, it is difficult to decompose BTDs into components measuring potential sources of the differences (i.e., aggressive financial reporting, aggressive tax avoidance



activities, or mechanical differences between GAAP and the Internal Revenue Code).<sup>20</sup> Including absolute discretionary accruals and the related interactions in equation (1) is one attempt to control for earnings quality when investigating the relationship between other variables (such as tax avoidance activities) and BTD disclosure. In Table 9, I take an alternative approach by estimating equation (1) within each absolute discretionary accruals (i.e., earnings quality) quintile. By construction, *AbsDA* and the related interactions are excluded in this regression specification. Using this approach, I can examine how BTD disclosure varies with tax avoidance activities and the sign and size of BTDs as earnings quality changes. The dependent variables in Panels A, B, and C are *BtdDiscFull*, *BtdDiscFin*, and *BtdDiscText* respectively.

For brevity, I discuss only key results and patterns that emerge in the financial statement and text components. Financial statement disclosures are once again driven by the sign and size of the BTD but only in the low earnings quality quintiles (i.e., quintiles 4 and 5). This result may be explained by lower earnings quality firms likely having larger BTDs. Similar to results presented earlier, tax avoidance activities do not explain financial statement disclosures regardless of the level of earnings quality.

Regarding text disclosures, managers are more likely to disclose deferred tax information in the text component of the release when the firm engages in significant tax avoidance activities. Managers are also more likely to disclose BTD information in the text component of the release when the firm has large negative rather than large positive BTDs. This result is consistently significant only in earnings quality quintiles four and five (i.e., when earnings quality is low). Overall, these results suggest that managers are

<sup>&</sup>lt;sup>20</sup> Desai and Dharmapala (2006a) and Seidman (2009) have made attempts at decomposing BTDs but there is no generally agreed upon and accepted way of decomposing BTDs. Note also that many tax avoidance measures, such as ETR and cash ETR, often have a financial aggressiveness component because they are scaled by reported book earnings (which may be biased when managers report earnings aggressively).



(a) willing to bear a tax cost to assure investors that BTDs are not due to aggressive financial reporting and (b) less likely to emphasize large positive BTDs that may suggest aggressive financial reporting. These inferences are similar to those from the main analysis.

#### **10.3.** Estimating Equation (1) Using Ordinary Least Squares

Estimating the marginal effects of interaction terms in a logistic regression can be problematic unless certain corrections are made (Ai and Norton 2003). To ensure that the statistical significance and the signs of the estimated coefficients and marginal effects in equation (1) are valid, I estimate equation (1) using an ordinary least squares regression approach. Panels A, B, and C of Table 10 present the results when using the *BtdDisc<sub>Full</sub>*, *BtdDisc<sub>Fin</sub>*, and *BtdDisc<sub>Text</sub>* as the dependent variable. Although some results are slightly weaker, all main inferences still hold.

# **10.4.** Controlling for the Determinants of the Disclosure Decision

## 10.4.1. Two-stage regression methodology

Equations (3) and (5) treat disclosure as an exogenous effect. To control for the fact that firms self-select into the disclosure and non-disclosure categories, I re-estimate equations (3) and (5) using a two-stage regression that accounts for the endogeneity of the disclosure decision.

The sample used in these (untabulated) tests has approximately seven percent fewer firm-year observations because all data necessary to estimate equations (1) and (3) are necessary to estimate the two-stage regression. I estimate the baseline and extended models to ensure that the general results presented earlier hold in the smaller sample. The results are unchanged. All significant coefficients for control variables are consistent with expectations. I find a positive association between future forecast errors and the



decile ranking of the ratio of taxable income to book income (rTax). In the baseline model, this result indicates that in general there as a positive association between forecast errors and BTDs. In the extended model, this result indicates that there is a positive association between forecast errors and BTDs for non-disclosers. When BTD disclosure is considered in the extended model, the coefficient on the *BtdDisc\*rTax* interaction is negative and significant, and the sum of *rTax* and *BtdDisc\*rTax* is not significantly different from zero. These results indicate that future forecast errors are not associated with BTDs for disclosers.

The results from the two-stage regressions are generally consistent with those presented earlier. One interesting result is that the BtdDisc\*rTax interaction is only marginally significant when month 1 forecast errors are used as the dependent variable. The BtdDisc\*rTax interaction is highly significant when month 5 forecast error is used as the dependent variable. These results may suggest that disclosure in earnings releases draws attention to BTDs but analysts cannot fully utilize the information until complete BTD information is disclosed in the annual report. Regardless of the dependent variable, however, the sum of rTax and BtdDisc\*rTax is not significantly different from zero.

The sample used to estimate the stock return two-stage regression has approximately 20 percent fewer firm-year observations because all data necessary to estimate equations (1) and (5) are necessary to estimate the two-stage regression. I first estimate the baseline and extended models to ensure that the general results presented earlier hold in the smaller sample. The results are unchanged. All significant coefficients on control variables are consistent with expectations. I also still find a positive and significant association between the decile ranking of the ratio of taxable income to book income (rTax) and future returns when using all fiscal year-end firms. When BTD



disclosure is considered in the extended model, the coefficient on the BtdDisc\*rTaxinteraction is insignificant but the sum of rTax and BtdDisc\*rTax is not significantly different from zero. These results are similar to those presented earlier and suggest that, although there is no significant difference between the association of rTax and future returns across the disclosure and non-disclosure samples, there is no significant association between rTax and future returns for disclosers.

The results from the stock return two-stage regression are generally consistent with those presented earlier. Once again, the association between the ratio of taxable to book income and future stock returns for non-disclosers is also positive and significant when all fiscal year-end observations are used. The coefficient on the BtdDisc\*rTax interaction is not significant, and the sum of rTax and BtdDisc\*rTax is not significantly different from zero. Similar to the initial analyses, these results provide limited evidence that BTD disclosures help investors use BTDs. Also similar to earlier results, I do not find an association between the rTax and future returns when using only December year-end firms. This result continues to raise concerns that the association between rTax and future returns is not robust in all samples.

## 10.4.2. Propensity score methodology

As an alternative to a two-stage regression approach, I also match firms based on propensity scores using the methodology developed in Leven and Sianesi (2003) and reestimate the forecast error tests. This methodology relies on estimating a logistic model to compute the predicted probability that a firm will disclose deferred tax information (i.e., the firm's propensity score) given certain firm characteristics. Each discloser is matched with the firm with the closest propensity score.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> I use all variables that load significantly in equation (1), including year and industry fixed effects, to develop the propensity score. Matches are made without replacement.



Table 11 presents the results from re-estimating equation (1) after matching observations based on propensity scores. The results are unchanged. All significant coefficients on control variables are consistent with expectations. I still find a positive and significant association between the decile ranking of the ratio of taxable income to book income (rTax) and future forecast errors. The coefficient on BtdDisc\*rTax is negative and significant and the sum of rTax and BtdDisc\*rTax is not significantly different from zero. These results suggest that disclosing BTD information in earnings releases help analysts understand and use BTD information.

# 10.5. Calendar-time Portfolio Returns Tests

As an alternative method to test whether mispricing exists for disclosers and nondisclosers, I use a calendar-time portfolio approach to measure the abnormal returns of a BTD-based hedge portfolio. I construct the calendar-time hedge portfolio as follows: a firm enters the sample four months after its fiscal year-end and remains in the sample for twelve months. In each month, all firms in the monthly sample are ranked into quintiles based on their most recent fiscal year-end ratio of taxable income to book income (*TAX*). Firms in the highest quintile each month are purchased and held for the month while firms in the lowest quintile are sold short for the month. The portfolio is liquidated on April 30<sup>th</sup>, 2007. In the equation that follows, I regress the monthly portfolio returns on the three factors introduced by Fama and French (1993):

$$R_{p,t} = \alpha_p + b_p (R_{m,t} - R_{f,t}) + s_p SMB_t + h_p HML_t + \varepsilon_{p,b}$$
(6)

where the three factors are zero-investment portfolios representing (1) the excess return of the market,  $(R_{m,t} - R_{f,t})$ , (2) the difference between a portfolio of small stocks and big stocks, *SMB*, and (3) the difference between a portfolio of high book-to-market stocks and low book-to-market stocks, *HML*. The intercept,  $\alpha_p$ , measures the average monthly

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abnormal return on the portfolio, which is assumed to be zero under the hypothesis of no abnormal performance. In this framework, the intercept measures mispricing.

Table 12 reports the results from estimating several specifications of equation (6). Panel A forms portfolios based on all firms in the press release returns sample from 1989 to 2006. Panel B partitions the press release sample into disclosers and non-disclosers and repeats the analysis for each group separately. In Panel A,  $\alpha_p$  is insignificant indicating that a BTD-based hedge portfolio does not yield abnormal returns when disclosers and non-disclosers are aggregated in a single sample. In Panel B,  $\alpha_p$  is positive and significant, albeit marginally, for non-disclosers and insignificant for disclosers. This result is consistent with BTD mispricing existing only within the subset of firms that does not disclose BTD information in earnings releases. More importantly, this result is consistent with earlier returns tests and suggests that BTD disclosure in earnings releases helps investors impound BTD information into stock prices.

#### **10.6.** Conference Call Disclosures

In supplemental analyses, I investigate the determinants of BTD disclosure in conference calls, paying particular attention to how disclosures made via earnings releases affect the information content of conference calls. Examining BTD disclosures in conference calls is important for two reasons. First, it is important to understand the relationship between earnings release and conference call disclosures. The primary analyses in this study assume that earnings announcement BTD disclosures highlight the importance of BTDs and draw market participants' attention to BTDs. Moreover, the discloser versus non-discloser classifications assume that disclosers highlight BTD information and non-disclosers do not. This may not be a valid assumption if managers use earnings announcement and conference call disclosures as substitutes.



Second, this and prior voluntary disclosure studies investigating the disclosure of financial statement information in earnings releases assume that managers respond to investor demand by providing financial statement information that is useful to investors in assessing firm value. Earlier in the study, I provided evidence that managers do not provide additional BTD information when earnings quality is low, a setting in which BTDs are likely to be particularly informative to the market. It is difficult to conclude that managers are actively choosing not to provide this information without evidence that investors actually demand BTD information. This is a substantial concern with BTDs because BTDs are complex signals that contain information about earnings quality, tax avoidance activities, earnings effects due to changes in financial accounting standards, and taxable income effects due to tax law changes. By investigating the determinants of BTD disclosure in conference calls, especially in the question and answer component of the call, I can provide direct evidence concerning when analysts elicit BTD information from managers.

To identify the determinants of BTD disclosure, I estimate various specifications of the following logistic regression:

$$CcDisc_{i,t} = \begin{cases} \alpha_{ind} + \alpha_{year} + \beta_1 BtdDisc_{k,i,t} + \beta_2 LrgPosDTE_{i,t} + \beta_3 LrgNegDTE_{i,t} + \beta_4 AbsDA_{i,t} + \beta_5 CashETR_{i,t} + \beta_6 AbsDA_{i,t}*LrgPosDTE_{i,t} + \beta_7 AbsDA_{i,t}*LrgNegDTE_{i,t} + \beta_8 NOL_{i,t} + \beta_9 ForOps_{i,t} + \beta_{10} DiscOps_{i,t} + \beta_{11} M \&A_{i,t} + \beta_{12} HighTech_{i,t} + \beta_{13} PyLoss_{i,t} + \beta_{14} Age_{i,t} + \beta_{15} MB_{i,t} + \beta_{16} MV_{i,t} + \beta_{17} AFol_{i,t} + \beta_{18} RetVol_{i,t} + \beta_{19} AbsFErr_{i,t} + \beta_{20} EarnAnnLag_{i,t} + \varepsilon_{i,t}, \end{cases}$$

$$(7)$$

In the initial specification,  $CcDisc_{i,t}$  equals one if firm *i*'s fourth quarter earnings conference call at the end of year *t* includes BTD-related information and zero otherwise. These results are reported in Table 13, Panel A. I then split the conference call into the question and answer (Q&A) and management discussion components and re-estimate equation (7) for each component. These results are reported in Panels B and C of Table



13. In Panel B (Panel C),  $CcDisc_{i,t}$  equals one the if the Q&A component (management discussion component) of firm *i*'s fourth quarter earnings conference call at the end of year *t* includes BTD-related information and zero otherwise. In each panel, I also estimate the logistic regression (a) without *BtdDisc*, (b) with *BtdDisc<sub>Full</sub>*, (c) with *BtdDisc<sub>Fin</sub>*, and (d) with *BtdDisc<sub>Text</sub>*. All other variables are the same as previously defined.

Table 13, Panel A reports the results from estimating equation (7) where the dependent variable, *CcDisc*, is based on the full conference call transcript. In all specifications, conference calls are more likely to contain BTD-related information when firms have large (positive or negative) BTDs. Interestingly, in three of the four specifications, firms with large negative BTDs are significantly more likely to disclose BTD-related information in their conference calls than firms with large positive BTDs. This result is similar to the disclosure of BTD-related information in the text component of earnings releases and suggests that managers are more willing to emphasize large negative BTDs than large positive BTDs. This is surprising given that the large positive BTDs are larger in absolute magnitude in my sample than the large negative BTDs. Also similar to the earnings release disclosures, firms are more likely to disclose deferred tax information when tax avoidance activities are a likely source of the difference. Firms with net operating losses (NOL) and prior year losses (PyLoss) are also more likely to disclose BTD information in conference calls. I also find no evidence that managers are more likely to disclose BTD-related information in conference calls when earnings quality is low (i.e., when *AbsDA* is high). One final result of note is that *BtdDisc<sub>Full</sub>* is positive and significant, suggesting that conference calls are more likely to contain BTD information when the press release contained BTD information. Specifications (3) and



(4) provide evidence that textual earnings release disclosures are more likely to result in additional BTD information in conference calls than financial statement earnings release disclosures.

Collectively, the results in Panel A suggest that managers are more likely to disclose BTD information when the BTDs are less likely to be driven by aggressive financial reporting. The results also indicate that managers use earnings release and conference call disclosures as complements rather than substitutes. Interestingly, it also appears that analysts do not elicit BTD information from managers when earnings quality is low. To investigate this more directly, I next look at disclosure of BTD information in the Q&A and management discussion components of conference calls separately.

Table 13, Panel B reports the results from estimating equation (7) where the dependent variable, *CcDisc*, is based on only the Q&A component of the conference call. In all specifications, conference calls are more likely to contain BTD-related information when firms have large BTDs but analysts are no more likely to ask about BTDs when firms have large positive BTDs than when firms have large negative BTDs. The coefficient on *AbsDA* (and the related interactions) are not significant at conventional levels, indicating that analysts are not more likely to ask questions about BTDs when earnings quality is low. The positive (negative) and significant coefficient on *NOL* (*CashETR*) indicates that analysts are more likely to ask about BTDs when firms have net operating losses (when firms engage in significant tax avoidance activities). Analysts also appear to follow-up on BTD information disclosed in the text of the earnings release (*BtdDiscText*) rather than asking about BTD information if it was not disclosed or only disclosed in the financial statement component of the earnings release. Overall, the results indicate that analysts (1) ask questions about BTDs when firms have low Cash



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ETRs or net operating losses, (2) do not ask questions when firms have low earnings quality, and (3) do not ask any more questions about large positive BTDs than large negative BTDs. Collectively, these results suggest that analysts may view BTDs as a signal about tax avoidance activities but not necessarily as a signal about earnings quality.

Table 13, Panel C reports the results from estimating equation (7) where the dependent variable, *CcDisc*, is based on the management discussion component of the conference call. In all specifications, conference calls are more likely to contain BTD-related information when firms have large (positive or negative) BTDs. Interestingly, managers are significantly more likely to discuss BTD information in the management discussion component of the call when firms have large negative BTDs than when firms have large positive BTDs. The results also indicate that managers are willing to disclose BTD information when tax avoidance activities are a likely source of the BTDs and when they already disclosed BTD information in the text component of the release. Overall, these results suggest that managers are unlikely to disclose any additional BTD information in conference calls unless the source of the differences is likely due to tax avoidance activities.

Collectively, the results suggest that managers are more likely to (1) emphasize large negative rather than large positive BTDs, (2) discuss BTD information that was already discussed in the earnings announcement, and (3) disclose BTD information when taxes, rather than aggressive financial reporting, are the likely source of the BTD. The results also suggest that analysts (1) primarily follow-up on information already disclosed in the earnings release and (2) consider BTDs as a stronger signal of tax avoidance activities rather than financial reporting quality.



## **Chapter 11: Conclusion**

In this study, I examine two research questions. First, what are the determinants of voluntary BTD disclosures in earnings announcements? Second, do voluntary BTD disclosures help analysts and investors impound BTD information into earnings forecasts and stock prices? Using earnings releases from 1989 to 2006, I find (1) that managers are more likely to disclose BTD information in earnings releases when tax avoidance activities are the likely source of the difference, (2) that managers are more likely to disclose large negative rather than large positive BTDs, and (3) limited evidence that managers are less likely to disclose BTD information when earnings quality is low. In general, I find similar patterns of disclosure within subsequent conference calls.

These results provide some evidence of selective disclosure of BTD information by managers but provide stronger evidence that managers are willing to bear some taxrelated disclosure costs in order to reassure investors that BTDs are due to tax avoidance activities rather than aggressive financial reporting.

Evaluating the market effects of the BTD disclosures, I find that voluntary BTD disclosures attenuate the association between BTDs and future forecast errors. I provide limited evidence that BTD disclosures attenuate the association between BTDs and future stock returns. Collectively, these results suggest that voluntary BTD disclosures help analysts and investors understand and use BTDs.

This study contributes to the literature on voluntary disclosure of accounting information in earnings releases. Prior studies find that managers voluntarily disclose basic financial information in earnings releases, even when the disclosures help market participants unwind the discretionary component of reported earnings (Levi 2008). Selective disclosure of BTD information suggests that tax-related disclosures are affected



by a unique set of costs that change the pattern of disclosure. This study suggests that tax-related disclosures differ from other basic financial disclosures.

This study also contributes to the literature investigating analysts' and investors' use of BTD information. Finding that voluntary BTD disclosures attenuate the association between future analyst forecast errors and BTDs provides evidence that focused disclosures of BTD information help analysts fulfill their integral role as information intermediaries. The weaker evidence regarding whether BTD disclosures help investors price BTD information is puzzling and warrants further investigation.


## Tables

Table 1 Sample Selection

Panel A: Disclosure Tests	•				
Data Restrictions	Data Range	Ν	Purpose	Eq.	Tbl.
Initial press release sample	1989-2006	220,127			
Less firm-year observations:					
Where Factiva release date does not					
match Compustat or I/B/E/S fourth	1000 2007	(10(704))			
quarter earnings announcement date	1989-2006	(186,704)			
Without necessary Compustat, I/B/E/S,	1020 2006	(15, 970)			
Final Disclosure Sample	1989-2006	17 544	Disclosure test	(1)	4
Panel B: Forecast Error Tests	1989-2000	17,544	Disclosure test	(1)	-
		• •	D		<b>T1</b> 1
Data Restrictions	Data Range	Ν	Purpose	Eq.	Tbl.
and					
I/B/E/S data for forecast error tests	1985-2006	22,391			
Require Month 1 Forecast Error	1985-2006	19,905	Benchmark test	(2)	6
Less firm-year observations:		- )			-
Beginning prior to 1989	1989-2006	(2,626)			
Without press release data	1989-2006	(6,604)			
		10,675	Single-stage test	(3)	6
Without necessary Compustat, I/B/E/S,					
and CRSP-based disclosure variables	1989-2006	(754)			
		9,921	Two-stage test		
Require Month 1 Forecast Error	1985-2006	15,327	Benchmark test	(2)	6
Less firm-year observations:					
Beginning prior to 1989	1989-2006	(2,427)			
Without press release data	1989-2006	(5,130)			
		7,770	Single-stage test	(3)	6
Without necessary Compustat, I/B/E/S,	1000 0000	(520)			
and CRSP-based disclosure variables	1989-2006	(530)	Tour stars to t		
Danal C. Dura and Hald Staals Dataun Tag	4	7,240	I wo-stage test		
Faner C. Buy-and-Hold Stock Return Tes	15				
Data Restrictions	Data Range	Ν	Purpose	Eq.	Tbl.
Initial firms with necessary CRSP and	100-0000				_
Compustat data for basic return tests	1985-2006	52,978	Benchmark test	(4)	7
Less firm-year observations:	1000 2000	(0, 0, 1, 2)			
Without prograding data	1989-2006	(8,913)			
Single stage returns sample	1989-2000	(24,298)	Single stoge test	(5)	7
Without pagagame Commisted 1/D/E/C		19,/0/	single-stage test	( <b>3</b> )	/
and CRSP-based disclosure variables	1989-2006	(3,929)			
Two-stage returns sample		15,838	Two-stage Test		



			Table 2	2			
			Descriptive S	tatistics			
	All F	irms	Disclose	ers Only	Non-Disclo	osers Only	
	(9,921 fi	rm-year	(3,793 fi	rm-year	(6,128 fi	rm-year	
	observ	ations)	observ	ations)	observa	ations)	
Variable	Mean	Median	Mean	Median	Mean	Median	Diff.
Basic Descriptiv	ves						
TA	2,820.55	693.06	3,092.32	824.99	2,652.34	611.52	**
MktCap	3,595.49	894.78	3,847.07	1,077.01	3,439.77	777.51	*
ROA	0.078	0.068	0.080	0.069	0.076	0.067	***
Disclosure Test	Variables						
DTE	0.002	0.001	0.003	0.002	0.001	0.001	***
DA	0.019	0.007	0.021	0.007	0.019	0.007	
AbsDA	0.135	0.058	0.163	0.068	0.117	0.053	***
ETR	0.276	0.289	0.263	0.277	0.284	0.295	***
CashETR	0.280	0.277	0.256	0.252	0.295	0.294	***
NOL	0.225	0.000	0.281	0.000	0.191	0.000	***
M&A	0.245	0.000	0.248	0.000	0.244	0.000	
HighTech	0.240	0.000	0.277	0.000	0.217	0.000	***
DiscOps	0.089	0.000	0.108	0.000	0.077	0.000	***
ForOps	0.471	0.000	0.493	0.000	0.458	0.000	***
AFolt	12.319	10.000	12.516	10.000	12.197	10.000	*
Age	19.487	14.000	19.891	14.000	19.236	14.000	*
Loss	0.074	0.000	0.087	0.000	0.067	0.000	***
RetVol	0.026	0.024	0.026	0.024	0.026	0.024	
EarnAnnLag	37.892	37.000	37.601	36.000	38.072	37.000	
Market Effects	Test Variable	5					
FErr <sub>t+1</sub>	(0.010)	(0.002)	(0.008)	(0.001)	(0.011)	(0.002)	***
BtdDisc <sub>Full</sub>	0.382	0.000	1.000	1.000	0.000	0.000	***
BtdDisc <sub>Fin</sub>	0.288	0.000	0.753	1.000	0.000	0.000	***
BtdDisc <sub>Text</sub>	0.120	0.000	0.315	0.000	0.000	0.000	***
TAX	0.905	0.874	0.852	0.828	0.938	0.901	***
Size	6.855	6.797	7.055	6.982	6.732	6.656	***
MB	3.120	2.482	3.205	2.530	3.067	2.461	***
$\Delta AFol_{t+1}$	0.061	0.000	0.079	0.000	0.049	0.000	***
PyFErr	(0.002)	0.000	(0.001)	0.000	(0.002)	(0.000)	***
Acc	(0.030)	(0.034)	(0.033)	(0.034)	(0.029)	(0.034)	***

\*\*\*, \*\*, \* denote differences in means between the disclosure and non-disclosure samples at the 1%, 5%, and 10% level respectively. See Appendix A for additional information about variable construction.



								Та	ble 3									
	1000	1000	1001	1000	1002	<u> </u>	Descriptiv	e Statisti	cs and Tr	ends by Y	lear	2000	2001	2002	2002	2004	2005	2006
Variable	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Basic Descript	tives	42.1	120	410	506	50.4	(2)(	(17	(00	(25	(01	520	501	400	(25	(02	(00	52.1
N N	275	431	438	412	506	584	636	647	689	625	601	539	521	480	625	682	699	531
WordCount	821	859	864	972	976	1,040	1,096	1,191	1,298	1,436	1,635	2,021	2,140	2,478	2,812	3,037	3,276	3,481
BTD Measure	<b>'S</b>																	
TAX	0.941	0.994	1.019	0.980	0.987	0.966	0.949	0.971	0.945	1.022	0.985	0.922	0.924	0.761	0.696	0.702	0.774	0.882
DTE	0.001	0.000	-0.001	-0.001	0.000	0.000	0.000	0.001	0.002	0.002	0.002	0.003	0.003	0.005	0.006	0.005	0.002	0.001
<b>BTD</b> Informa	tion in Pre	ss Releas	es															
Full	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%
Financials	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.3%	0.6%
Text	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.2%
Primary Defe	rred Tax I	nformatio	on in Press	s Releases	5													
Full	13.1%	13.2%	16.0%	19.9%	23.5%	25.0%	27.7%	28.7%	30.3%	30.1%	35.9%	44.2%	44.7%	50.2%	58.7%	61.4%	65.2%	66.7%
Financials	1.8%	1.4%	2.5%	2.9%	4.0%	5.0%	8.8%	17.6%	17.4%	18.4%	35.4%	43.4%	44.1%	31.0%	57.9%	58.8%	62.4%	64.4%
Text	12.0%	12.1%	13.5%	17.7%	20.8%	22.1%	20.6%	12.7%	15.4%	13.9%	1.8%	1.9%	2.1%	20.2%	4.6%	7.9%	10.0%	10.2%
Secondary De	ferred Tax	: Informa	tion in Pr	ess Relea	ses													
Full	0.7%	1.4%	0.7%	0.5%	1.8%	1.7%	1.1%	1.7%	1.0%	1.1%	1.8%	2.8%	1.5%	4.0%	5.1%	8.8%	15.0%	13.6%
Financials	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.3%	0.5%	0.3%	0.6%	1.0%	1.7%	0.8%	0.8%	3.0%	3.7%	7.9%	6.6%
Text	0.7%	1.4%	0.7%	0.2%	1.8%	1.7%	0.8%	1.4%	0.7%	0.6%	1.2%	1.3%	1.2%	3.1%	3.2%	6.2%	10.2%	10.4%
ETR Measure																		
ETR	0 297	0 300	0 313	0 303	0 294	0 290	0 291	0 288	0 281	0 286	0 289	0 277	0 270	0 240	0 224	0 231	0 2 5 7	0 274
ETR Informa	tion in Pre	ss Releas	es	0.505	0.291	0.290	0.291	0.200	0.201	0.200	0.209	0.277	0.270	0.210	0.221	0.231	0.207	0.271
Full	6.5%	6 5%	6.4%	5.6%	4 9%	6 5%	7 5%	7 4%	6.0%	6.2%	6.8%	8 5%	9.6%	12.9%	18.1%	20.5%	24 5%	25.8%
Financials	0.0%	0.0%	0.2%	0.5%	0.4%	0.3%	1.1%	1.5%	1.0%	1.1%	1.5%	4 3%	3.8%	2 7%	6.6%	6.9%	8.3%	11.3%
Text	6.5%	6.5%	6.2%	5 3%	4 5%	6.3%	6.8%	6.2%	4 9%	5.6%	5 3%	5.4%	61%	10.6%	13.3%	15.2%	18.9%	19.2%
	0.070	0.070	0.270	0.070		0.070	0.070	0.270	, / 0	0.070	0.070	0.170	0.170	10.070	10.070	10.270	10.970	17.270
Cash ETR Me	asure																	
CashETR	0.347	0.331	0.345	0.319	0.318	0.312	0.308	0.297	0.284	0.290	0.290	0.256	0.273	0.222	0.209	0.212	0.238	0.272
Cash ETR Inf	formation	in Press H	Releases															
Full	0.4%	0.7%	0.0%	0.2%	0.4%	0.2%	0.2%	0.5%	0.6%	0.3%	0.5%	0.7%	1.9%	4.2%	3.8%	5.1%	5.3%	6.2%
Financials	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.2%	0.3%	0.7%	1.0%	1.0%	3.0%	3.7%	3.7%	5.1%
Text	0.4%	0.7%	0.0%	0.2%	0.4%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%	0.0%	1.2%	3.1%	1.4%	2.3%	2.4%	2.4%
Earnings Qua	lity Measu	ires																
Acc	-0.026	-0.033	-0.034	-0.029	-0.025	-0.021	-0.016	-0.025	-0.025	-0.025	-0.030	-0.031	-0.053	-0.047	-0.041	-0.034	-0.033	-0.025
AbsDA	0.064	0.082	0.080	0.061	0.083	0.077	0.077	0.129	0.074	0.105	0.089	0.116	0.199	0.162	0.304	0.215	0.221	0.183
DA	-0.001	0.005	0.000	-0.010	-0.005	0.011	0.008	0.065	0.000	-0.007	0.028	0.018	0.039	0.060	-0.019	0.073	0.048	0.000

See Appendix A for variable defintions and Appendix B for search terms and categories.



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	Determina	ants of Boo	k-Tax Differen	ce-related Di	sclosures in Ea	rnings Press	Releases		
$BtdDisc = \alpha_{ind} + \alpha_{year} + \beta_1 LrgPe + \beta_9 DiscOps + \beta_{10} M\&A$	$\beta SDTE + \beta_2 I = \beta_1 HighT$	LrgNegDTE ech + $\beta_{12}Py$	$\lambda + \beta_3 AbsDA + \lambda Loss + \beta_{13}Age - \lambda Loss + \lambda Loss + \beta_{13}Age - \lambda Loss + \lambda Los $	$\beta_4 Abs DA^* Lr_3$ + $\beta_{14} MB + \beta_{15}$	$gPosDTE + \beta_5 A^{\dagger}$ $MV + \beta_{16}AFol = 0$	bsDA*LrgNe + β <sub>17</sub> RetVol +	gDTE+ β <sub>6</sub> Cashl - β <sub>18</sub> AbsFErr + β	ETR + $\beta_7$ NOI $\beta_{19}$ EarnAnnLa	$L + \beta_8 ForOps$ $\log + \varepsilon$
Panel A: Full Press Release (N	N = 17,544)								
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value
LrgPosDTE	+	0.2926	(<0.0001)	0.2936	(<0.0001)	0.2958	(<0.0001)	0.2964	(<0.0001)
LrgNegDTE	+	0.2564	(<0.0001)	0.2487	(<0.0001)	0.2344	(<0.0001)	0.2264	(<0.0001)
AbsDA	-	-0.0754	(0.2400)	-0.0767	(0.2370)				
AbsDA*LrgPosDTE	?	0.0285	(0.8660)	0.0270	(0.8730)				
AbsDA*LrgNegDTE	?	0.1075	(0.5570)	0.1086	(0.5530)				
HighAbsDA	-		× /		× ,	-0.0861	(0.0860)	-0.0885	(0.0805)
HighAbsDA*LrgPosDTE	?					0.0086	(0.9410)	0.0083	(0.9430)
HighAbsDA*LrgNegDTE	?					0.1664	(0.1140)	0.1690	(0.1080)
CashETR	+	-0.1820	(0.0785)			-0.1804	(0.0805)		
LowCashETR	-			0.1015	(0.0470)			0.1023	(0.0460)
NOL	+	-0.0600	(0.1975)	-0.0631	(0.1860)	-0.0595	(0.1990)	-0.0628	(0.1875)
ForOps	+	-0.0595	(0.2290)	-0.0582	(0.2345)	-0.0599	(0.2280)	-0.0585	(0.2330)
DiscOps	+	-0.0082	(0.4605)	-0.0140	(0.4325)	-0.0082	(0.4605)	-0.0139	(0.4330)
M&A	+	-0.1061	(0.0225)	-0.1046	(0.0240)	-0.1060	(0.0230)	-0.1045	(0.0245)
HighTech	+	0.3760	(0.0025)	0.3755	(0.0025)	0.3767	(0.0025)	0.3761	(0.0025)
PyLoss	?	0.0443	(0.4830)	0.0341	(0.5860)	0.0449	(0.4770)	0.0343	(0.5840)
Age	?	-0.0030	(0.2540)	-0.0031	(0.2490)	-0.0031	(0.2480)	-0.0031	(0.2420)
MB	?	-0.0092	(0.4880)	-0.0089	(0.5010)	-0.0091	(0.4890)	-0.0088	(0.5020)
MV	?	0.0517	(0.2030)	0.0541	(0.1830)	0.0518	(0.2030)	0.0542	(0.1830)
Afol	?	0.0020	(0.7500)	0.0018	(0.7680)	0.0019	(0.7570)	0.0018	(0.7760)
RetVol	?	-0.3941	(0.8940)	-0.5786	(0.8450)	-0.3814	(0.8970)	-0.5681	(0.8470)
AbsFErr	?	-0.0959	(0.1580)	-0.1062	(0.1170)	-0.0955	(0.1590)	-0.1059	(0.1180)
EarnAnnLag	?	-0.0056	(0.0280)	-0.0056	(0.0270)	-0.0056	(0.0280)	-0.0056	(0.0270)
$X^2$ -test of $\beta_1 = \beta_2$ :		0.21 (p	0 = 0.6431)	0.33 (p	= 0.5652)	0.66 (p	= 0.4156)	0.86 (p	= 0.3546)
$X^2$ -test of $\beta_4 = \beta_5$ :		0.14 (p	0 = 0.7078)	0.15 (p	= 0.6987)	1.38 (p	= 0.2406)	1.43 (p	= 0.2323)
Pseudo R <sup>2</sup>		0	.1406	0	.1407	0	1407	0.	1408

Table 4
eterminants of Book-Tax Difference-related Disclosures in Earnings Press Releases

BtdDisc = $\alpha_{ind} + \alpha_{year} + \beta_1 LrgPc$	$\rho$ sDTE + $\beta_2 L$	rgNegDTE	$+\beta_3AbsDA +$	β₄AbsDA*Lrg	$\frac{\text{scrosures in Ea}}{\text{gPosDTE} + \beta_5 \text{A}}$	bsDA*LrgNe	$gDTE + \beta_6Cashl$	ETR + $\beta_7$ NOI	$L + \beta_8 ForOps$
+ $\beta_9$ DiscOps + $\beta_{10}$ M&A	$+\beta_{11}$ HighT	$ech + \beta_{12}Py$	$Loss + \beta_{13}Age -$	$+\beta_{14}MB + \beta_{15}$	$MV + \beta_{16}AFol$	+ $\beta_{17}$ RetVol +	$-\beta_{18}$ AbsFErr + (	3 <sub>19</sub> EarnAnnLa	$g + \varepsilon$
Panel B: Financial Statement	Component	Only (N =	17,544)						
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value
LrgPosDTE	+	0.2708	(<0.0001)	0.2769	(<0.0001)	0.2849	(<0.0001)	0.2907	(<0.0001)
LrgNegDTE	+	0.1271	(0.0305)	0.1235	(0.0335)	0.1175	(0.0355)	0.1143	(0.0385)
AbsDA	-	-0.1244	(0.1415)	-0.1244	(0.1415)				
AbsDA*LrgPosDTE	?	0.0966	(0.5750)	0.0980	(0.5690)				
AbsDA*LrgNegDTE	?	0.1967	(0.2950)	0.1981	(0.2920)				
HighAbsDA	-				. ,	-0.1538	(0.0185)	-0.1539	(0.0185)
HighAbsDA*LrgPosDTE	?					0.0203	(0.8750)	0.0208	(0.8720)
HighAbsDA*LrgNegDTE	?					0.1975	(0.1020)	0.1977	(0.1020)
CashETR	+	-0.0484	(0.3650)			-0.0466	(0.3700)		. ,
LowCashETR	-			-0.0148	(0.4125)			-0.0130	(0.4235)
NOL	+	-0.0898	(0.1170)	-0.0873	(0.1245)	-0.0889	(0.1190)	-0.0866	(0.1260)
ForOps	+	-0.1064	(0.1075)	-0.1064	(0.1075)	-0.1073	(0.1055)	-0.1073	(0.1055)
DiscOps	+	-0.0449	(0.2980)	-0.0457	(0.2940)	-0.0452	(0.2965)	-0.0461	(0.2925)
M&A	+	-0.0523	(0.1795)	-0.0524	(0.1790)	-0.0511	(0.1850)	-0.0512	(0.1850)
HighTech	+	0.2764	(0.0265)	0.2796	(0.0250)	0.2752	(0.0265)	0.2782	(0.0255)
PyLoss	?	-0.0578	(0.4210)	-0.0503	(0.4800)	-0.0565	(0.4310)	-0.0496	(0.4860)
Age	?	-0.0028	(0.2930)	-0.0028	(0.2910)	-0.0028	(0.2840)	-0.0028	(0.2810)
MB	?	-0.0027	(0.8420)	-0.0023	(0.8660)	-0.0024	(0.8590)	-0.0020	(0.8810)
MV	?	0.0537	(0.2000)	0.0536	(0.2020)	0.0536	(0.2010)	0.0535	(0.2030)
Afol	?	-0.0042	(0.5100)	-0.0041	(0.5150)	-0.0042	(0.5050)	-0.0042	(0.5090)
RetVol	?	2.9237	(0.3490)	3.0315	(0.3310)	3.0291	(0.3320)	3.1286	(0.3160)
AbsFErr	?	-0.1533	(0.0580)	-0.1536	(0.0570)	-0.1534	(0.0580)	-0.1538	(0.0560)
EarnAnnLag	?	-0.0034	(0.2210)	-0.0034	(0.2160)	-0.0034	(0.2260)	-0.0034	(0.2220)
$X^2$ -test of $\beta_1 = \beta_2$ :		2.73 (p	= 0.0982)	3.19 (p	= 0.0741)	3.95 (1	p = 0.047)	4.51 (p	= 0.0337)
$X^2$ -test of $\beta_4 = \beta_5$ :		0.23 (p	= 0.6318)	0.23 (p	= 0.6324)	1.5 (p	= 0.2203)	1.5 (p	= 0.2211)
Pseudo R <sup>2</sup>		0.	2576	0.	2576	0.	2578	0.	2578

Table 4 (continued)
Determinants of Book-Tax Difference-related Disclosures in Earnings Press Releases

$BtdDisc = \alpha_{ind} + \alpha_{year} + \beta_1 LrgPe + \beta_9 DiscOps + \beta_{10} M\&A$	$posDTE + \beta_2 L_{1}$ + $\beta_{11}$ HighTe	rgNegDTE ech + $\beta_{12}$ Pyl	+ $\beta_3$ AbsDA + $\beta_2$ Loss + $\beta_{13}$ Age +	$\beta_4 AbsDA*Lrg - \beta_{14}MB + \beta_{15}$	$\beta_{\rm SPOSDTE} + \beta_5 A^{\rm S}$ MV + $\beta_{16}$ AFol -	bsDA*LrgNe + β <sub>17</sub> RetVol +	$gDTE + \beta_6 Cashl$ $\beta_{18}AbsFErr + \beta_{18}$	ETR + $\beta_7$ NOI $\beta_{19}$ EarnAnnL	$L + \beta_8 ForOps$ ag + $\epsilon$
Panel C: Text Component Or	nly (N = 17,54	44)							
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value
LrgPosDTE	+	0.2860	(<0.0001)	0.2957	(<0.0001)	0.3190	(<0.0001)	0.3288	(<0.0001)
LrgNegDTE	+	0.4976	(<0.0001)	0.4617	(<0.0001)	0.5384	(<0.0001)	0.5011	(<0.0001)
AbsDA	-	0.0970	(0.2795)	0.0895	(0.2945)				
AbsDA*LrgPosDTE	?	0.1612	(0.5200)	0.1556	(0.5360)				
AbsDA*LrgNegDTE	?	0.3837	(0.1120)	0.3937	(0.1000)				
HighAbsDA	-				. ,	0.0918	(0.1530)	0.0849	(0.1710)
HighAbsDA*LrgPosDTE	?					-0.0524	(0.7370)	-0.0573	(0.7140)
HighAbsDA*LrgNegDTE	?					0.0749	(0.5940)	0.0868	(0.5350)
CashETR	+	-0.7983	(<0.0001)			-0.8013	(<0.0001)		
LowCashETR	-			0.3618	(<0.0001)			0.3634	(<0.0001)
NOL	+	0.0534	(0.2485)	0.0414	(0.2990)	0.0519	(0.2545)	0.0398	(0.3060)
ForOps	+	0.0506	(0.2805)	0.0505	(0.2810)	0.0504	(0.2815)	0.0500	(0.2825)
DiscOps	+	0.1713	(0.0455)	0.1450	(0.0765)	0.1700	(0.0470)	0.1435	(0.0785)
M&A	+	-0.1803	(0.0055)	-0.1759	(0.0065)	-0.1798	(0.0060)	-0.1754	(0.0070)
HighTech	+	0.3565	(0.0040)	0.3565	(0.0035)	0.3536	(0.0040)	0.3538	(0.0040)
PyLoss	?	0.2984	(<0.0001)	0.2711	(<0.0001)	0.3013	(<0.0001)	0.2737	(<0.0001)
Age	?	-0.0028	(0.3780)	-0.0030	(0.3410)	-0.0028	(0.3780)	-0.0030	(0.3400)
MB	?	-0.0148	(0.3250)	-0.0128	(0.3870)	-0.0146	(0.3340)	-0.0126	(0.3980)
MV	?	0.0155	(0.7390)	0.0257	(0.5800)	0.0138	(0.7660)	0.0242	(0.6030)
Afol	?	0.0063	(0.3400)	0.0058	(0.3840)	0.0066	(0.3180)	0.0061	(0.3600)
RetVol	?	-4.5281	(0.2440)	-4.8348	(0.2140)	-4.7641	(0.2210)	-5.0761	(0.1930)
AbsFErr	?	0.0651	(0.4490)	0.0312	(0.7160)	0.0641	(0.4560)	0.0302	(0.7260)
EarnAnnLag	?	-0.0052	(0.0500)	-0.0054	(0.0430)	-0.0051	(0.0570)	-0.0052	(0.0480)
$X^2$ -test of $\beta_1 = \beta_2$ :		4.55 (p	0 = 0.033)	2.85 (p	= 0.0916)	5.05 (p	= 0.0247)	3.16 (p	= 0.0753)
$X^2$ -test of $\beta_4 = \beta_5$ :		0.69 (p	= 0.4064)	0.79 (p	= 0.3737)	0.53 (p	= 0.4654)	0.68 (p	= 0.4084)
Pseudo R <sup>2</sup>		0.	0891	0.	0894	0.	0888	0.	.0891

Table 4 (continued)
Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases

 Table 4 (continued)

 Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases

 $BtdDisc = \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_3 AbsDA + \beta_4 AbsDA * LrgPosDTE + \beta_5 AbsDA * LrgNegDTE + \beta_6 CashETR + \beta_7 NOL + \beta_8 ForOps + \beta_9 DiscOps + \beta_{10} M & A + \beta_{11} HighTech + \beta_{12} PyLoss + \beta_{13} Age + \beta_{14} MB + \beta_{15} MV + \beta_{16} AFol + \beta_{17} RetVol + \beta_{18} AbsFErr + \beta_{19} EarnAnnLag + \epsilon$ 

This table presents the results from estimating equation (1). The dependent variable is either  $BtdDisc_{Full}$  (Panel A),  $BtdDisc_{Fin}$  (Panel B), or  $BtdDisc_{Text}$  (Panel C). These variables equal one for firm-year observations if the firm's fourth quarter earnings announcement (or earnings announcement component) includes BTD-related information and zero otherwise. See Appendix A for all other variable definitions. *p*-values are based on one-tailed test statistics when predictions are made for variables. All *p*-values are based on Huber-White, cluster-adjusted (by firm) standard errors.



			β <sub>19</sub>	EarnAnnLag	+ε					
		Full Release			<b>Financial Statement</b>			Text	t Comp	onent
Variable	Pred.	Coeff.		dy/dx	Coeff.		dy/dx	Coeff.		dy/dx
LrgPosDTE	+	0.2964	***	0.0658	0.2907	***	0.0449	0.3288	***	0.0224
LrgNegDTE	+	0.2264	***	0.0497	0.1143	**	0.0167	0.5011	***	0.0368
HighAbsDA	-	-0.0885	*	-0.0183	-0.1539	**	-0.0206	0.0849		0.0052
HighAbsDA*LrgPosDTE	?	0.0083		0.0017	0.0208		0.0030	-0.0573		-0.0033
HighAbsDA*LrgNegDTE	?	0.1690		0.0367	0.1977		0.0297	0.0868		0.0053
LowCashETR	-	0.1023	**	0.0220	-0.0130		-0.0018	0.3634	***	0.0251
NOL	+	-0.0628		-0.0130	-0.0866		-0.0118	0.0398		0.0024
ForOps	+	-0.0585		-0.0122	-0.1073		-0.0146	0.0500		0.0030
DiscOps	+	-0.0139		-0.0029	-0.0461		-0.0064	0.1435	*	0.0090
M&A	+	-0.1045	**	-0.0215	-0.0512		-0.0071	-0.1754	***	-0.0096
HighTech	+	0.3761	***	0.0845	0.2782	**	0.0428	0.3538	***	0.0243
PyLoss	?	0.0343		0.0073	-0.0496		-0.0069	0.2737	***	0.0182
Age	?	-0.0031		-0.0007	-0.0028		-0.0004	-0.0030		-0.0002
MB	?	-0.0088		-0.0019	-0.0020		-0.0003	-0.0126		-0.0007
MV	?	0.0542		0.0114	0.0535		0.0075	0.0242		0.0014
Afol	?	0.0018		0.0004	-0.0042		-0.0006	0.0061		0.0004
RetVol	?	-0.5681		-0.1196	3.1286		0.4401	-5.0761		-0.2987
AbsFErr	?	-0.1059		-0.0218	-0.1538	*	-0.0206	0.0302		0.0018
EarnAnnTimeLag	?	-0.0056	**	-0.0012	-0.0034		-0.0005	-0.0052	**	-0.0003
$X^2$ -test of $\beta_1 = \beta_2$ :		0.86 (p = 0)	.3546)		4.51 (p = 0	0.0337)		3.16 (p = 0	.0753)	
$X^2$ -test of $\beta_4=\beta_5$ :		1.43 (p = 0)	.2323)		1.5 (p = 0.2)	2211)		0.68 (p = 0	.4084)	
Pseudo R <sup>2</sup>		0.1408			0.2578			0.0891		

 Table 5

 Marginal Effects of the Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases

 BtdDisc =  $\alpha_{ind} + \alpha_{vear} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_{3High}AbsDA + \beta_{4High}AbsDA * LrgPosDTE + \beta_{5High}AbsDA * LrgNegDTE + \beta_{6Low}CashETR + \beta_{6Low}Cas$ 

This table presents select results and marginal effects from estimating equation (1). The dependent variable is either  $BtdDisc_{Full}$ ,  $BtdDisc_{Full}$ ,



$FErr = \alpha + \alpha + \beta$	$\frac{\text{Analyst}}{r\text{Tay} \pm \beta \text{ BtdDisc}}$	$\frac{\text{Forecast Err}}{R}$	$\frac{1}{10}$	$\pm \beta D_{\rm W} EE \pm 0$	$3 \Lambda cc \pm$
$\Gamma E \Pi_{t+1} - \alpha_{ind} + \alpha_{year} + p$	$\beta_8Btdl$	$p_{3}$ or $v + p_{4}$ or $v$ Disc*rTax + $\varepsilon$	$\mu = \mu_5 \Delta A \Gamma 0 I_{t+1}$	+ μ <sub>6</sub> гугс + μ	57ACC +
Panel A: Baseline Model, U	nrestricted Sample	(1985-2006)			
		FErr <sub>t+1</sub>	(Month 1)	FErr <sub>t+1</sub>	(Month 5)
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
rTax	+	0.0071	(<0.0001)	0.0054	(<0.0001)
MV	+	0.0037	(<0.0001)	0.0024	(<0.0001)
MB	+	0.0000	(0.3490)	0.0000	(0.2080)
$\Delta AFol_{t+1}$	+	0.0083	(<0.0001)	0.0048	(<0.0001)
PyFE	+	0.5210	(<0.0001)	0.3373	(<0.0001)
Acc	-	-0.0407	(<0.0001)	-0.0270	(<0.0001)
Adj R <sup>2</sup>		0.	.1637	0.	1273
Ν		19	9,905	1:	5,327
Panel B: Baseline Model, Pr	ess Release Sample	e (1989-2006)			
		FErr <sub>t+1</sub>	(Month 1)	FErr <sub>t+1</sub>	(Month 5)
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
rTax	+	0.0047	(<0.0001)	0.0041	(<0.0001)
MV	+	0.0032	(<0.0001)	0.0021	(<0.0001)
MB	+	0.0000	(0.4880)	0.0000	(0.3185)
$\Delta AFol_{t+1}$	+	0.0081	(<0.0001)	0.0056	(<0.0001)
PyFE	+	0.5455	(<0.0001)	0.3268	(<0.0001)
Acc	-	-0.0317	(<0.0001)	-0.0228	(<0.0001)
$A di R^2$		0	1554	0	109
N		10	0,675	7	,770
Panel C: Extended Model, F	ress Release Samp	le (1989-200	6)		,
, ,		FErr <sub>t+1</sub>	(Month 1)	FErr <sub>t+1</sub>	(Month 5)
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
rTax	+	0.0062	(<0.0001)	0.0058	(<0.0001)
BtdDisc	?	0.0018	(0.2050)	0.0020	(0.1080)
MV	+	0.0032	(<0.0001)	0.0021	(<0.0001)
MB	+	0.0000	(0.4750)	0.0000	(0.3185)
$\Delta AFol_{t+1}$	+	0.0081	(<0.0001)	0.0056	(<0.0001)
PyFE	+	0.5451	(<0.0001)	0.3264	(<0.0001)
Acc	-	-0.0318	(<0.0001)	-0.0229	(<0.0001)
BtdDisc*rTax	-	-0.0039	(0.0440)	-0.0045	(0.0165)
F-test of $\beta_1 + \beta_8 = 0$		1.58 (p	o = 0.2094)	0.61 (p	0 = 0.4334)
Adj R <sup>2</sup>		0.	.1558	0.	1098
N		10	0,675	7	,770

 
 Table 6

 Effect of BTD Disclosure on the Relationship between the Ratio of Taxable to Book Income and Analyst Forecast Errors

This table presents the results from estimating equations (2) and (3). The dependent variable,  $FErr_{i,t+1}$ , equals firm *i*'s actual t+1 earnings minus the month 1 (or month 5) consensus forecast of those earnings, scaled by month 1 stock price. Firm and time subscripts have been omitted. All variables are firmspecific at the end of year *t* unless specified otherwise. See Appendix A for variable definitions. Year and industry fixed effects have been included in the regression. *p*-values are based on Huber-White, cluster-adjusted (by firm) standard errors and on one-tailed test statistics when predictions are made.



Panel A: Baseline Model,	Unrestricted Sau	mple				
		All FYE	: 1985-2006	Dec FYF	<b>C: 1985-2006</b>	
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	
rTax	+	0.0549	(<0.0001)	0.0505	(<0.0001)	
MV	-	-0.0348	(0.0010)	-0.0456	(0.0015)	
MB	-	-0.0697	(<0.0001)	-0.0670	(<0.0001)	
Beta	+	0.0179	(0.0605)	0.0264	(0.0305)	
EP	+	0.0622	(<0.0001)	0.0611	(<0.0001)	
SAR	+	0.0878	(<0.0001)	0.1010	(<0.0001)	
Acc	-	-0.1246	(<0.0001)	-0.0926	(<0.0001)	
Adj R <sup>2</sup>		0.	0169	0.	.0199	
N		52	2,978	29	9,568	
Panel B: Baseline Model,	Press Release Sa	mple				
		AIIFYE	: 1989-2006	Dec FYE	2: 1989-2006	
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	
rTax	+	0.0281	(0.0215)	0.0010	(0.4775)	
MV	-	-0.0476	(0.0005)	-0.0632	(<0.0001)	
MB	-	-0.0559	(<0.0001)	-0.0585	(0.0005)	
Beta	+	0.0239	(0.0565)	0.0418	(0.0135)	
EP	+	0.0071	(0.3060)	0.0056	(0.3780)	
SAR	+	0.0630	(<0.0001)	0.0685	(<0.0001)	
Acc	-	-0.0936	(<0.0001)	-0.0716	(<0.0001	
Adj R <sup>2</sup>		0.	0227	0.	.0274	
N		19	9,779	1	1,391	
Panel C: Extended Model	, Press Release S	ample	. 1090 2007	Dee EVE	. 1000 2007	
Variable	Pred	Coeff	n-value	Coeff	n-value	
rTax	+	0.0415	(0.0080)	0.0137	(0.2625)	
BtdDisc	?	0.0373	(0.0145)	0.0277	(0.1105)	
MV	-	-0.0494	(<0.0001)	-0.0637	(<0.0001	
MB	-	-0.0554	(<0.0001)	-0.0583	(0.0005)	
Beta	+	0.0222	(0.0645)	0.0405	(0.0160)	
EP	+	0.0069	(0.3105)	0.0053	(0.3850)	
SAR	+	0.0630	(<0.0001)	0.0689	(<0.0001	
Acc	_	-0.0932	(<0.0001)	-0.0714	(<0.0001	
BtdDisc*rTax	-	-0.0361	(0.0970)	-0.0338	(0.1740)	
F-test of $\beta_1 + \beta_9 = 0$		0.06	(p = 0.8127)	0.48	(p = 0.4879)	
$A di R^2$		Ο	0230	Ο	0276	
1 MJ 11		0.	0230	0.	0410	

 Table 7

 Effect of BTD Disclosure on the Relationship between the Ratio of Taxable to Book Income and Returns

The dependent variable,  $SAR_{i,t+1}$ , equals firm *i*'s size-adjusted annual buy-hold return starting four months after the end of fiscal year *t*, calculated as the raw annual return minus the corresponding size decile portfolio return. Variables are firm-specific at the end of year t unless specified otherwise. Year and industry fixed effects are included. See Appendix A for variable definitions. *p*-values are based on Huber-White, cluster-adjusted (by firm) standard errors and one-tailed test statistics when predictions are made.

19,779



Ν

11,391

## Table 8

#### Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases with Cash ETR Interactions

$$\begin{split} BtdDisc &= \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_3 AbsDA + \beta_4 AbsDA * LrgPosDTE + \\ \beta_5 AbsDA * LrgNegDTE + \beta_6 CashETR + \beta_7 CashETR * LrgPosDTE + \beta_8 CashETR * LrgNegDTE + \beta_9 NOL + \\ \beta_{10} ForOps + \beta_{11} DiscOps + \beta_{12} M \&A + \beta_{13} HighTech + \beta_{14} PyLoss + \beta_{15} Age + \beta_{16} MB + \beta_{17} MV + \beta_{18} AFol + \\ \beta_{19} RetVol + \beta_{20} AbsFErr + \beta_{21} EarnAnnLag + \epsilon \end{split}$$

Panel A: Full Press Release					
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
LrgPosDTE	+	0.4192	(<0.0001)	0.2171	(0.0010)
LrgNegDTE	+	0.3542	(<0.0001)	0.1456	(0.0080)
AbsDA	-	-0.0660	(0.2680)		
AbsDA*LrgPosDTE	?	0.0025	(0.9880)		
AbsDA*LrgNegDTE	?	0.0886	(0.6290)		
HighAbsDA	-			-0.0771	(0.1110)
HighAbsDA*LrgPosDTE	?			-0.0081	(0.9440)
HighAbsDA*LrgNegDTE	?			0.1399	(0.1830)
CashETR	+	-0.0022	(0.4945)		
CashETR*LrgPosDTE	?	-0.5802	(0.0710)		
CashETR*LrgNegDTE	?	-0.3204	(0.1810)		
LowCashETR	-			-0.1020	(0.1010)
LowCashETR*LrgPosDTE	?			0.3452	(0.0020)
LowCashETR*LrgNegDTE	?			0.5338	(<0.0001)
NOL	+	-0.0601	(0.1970)	-0.0644	(0.1820)
ForOps	+	-0.0573	(0.2380)	-0.0548	(0.2475)
DiscOps	+	-0.0070	(0.4660)	-0.0080	(0.4615)
M&A	+	-0.1059	(0.0230)	-0.1072	(0.0215)
HighTech	+	0.3767	(0.0025)	0.3801	(0.0025)
PyLoss	?	0.0458	(0.4690)	0.0434	(0.4900)
Age	?	-0.0030	(0.2600)	-0.0032	(0.2360)
MB	?	-0.0091	(0.4910)	-0.0088	(0.5040)
MV	?	0.0517	(0.2040)	0.0548	(0.1790)
Atol	?	0.0020	(0.7530)	0.0017	(0.7850)
RetVol	?	-0.3634	(0.9020)	-0.5141	(0.8620)
AbsFErr	?	-0.0957	(0.1580)	-0.1025	(0.1300)
EarnAnnTimeLag	?	-0.0056	(0.0270)	-0.0056	(0.0270)
Industry and Year Fixed Effects		Yes		Yes	
$X^2$ -test of $\beta_1 = \beta_2$ :		(0.5775)		(0.3909)	
$X^2$ -test of $\beta_3 + \beta_4 = 0$ :		(0.6518)		(0.3888)	
$X^2$ -test of $\beta_3 + \beta_5 = 0$ :		(0.8862)		(0.4901)	
$X^2$ -test of $\beta_4 = \beta_5$ :		(0.6849)		(0.2712)	
$X^2$ -test of $\beta_6 + \beta_7 = 0$ :		(0.0525)		(0.0078)	
$X^2$ -test of $\beta_6 + \beta_8 = 0$ :		(0.1213)		(0.0003)	
$X^2$ -test of $\beta_7 = \beta_8$ :		(0.4551)		(0.1867)	
Pseudo R <sup>2</sup>		0.1408		0.1419	
Ν		17,544		17,544	



## Table 8 (continued)

## Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases with Cash ETR Interactions

$$\begin{split} BtdDisc &= \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_3 AbsDA + \beta_4 AbsDA * LrgPosDTE + \\ \beta_5 AbsDA * LrgNegDTE + \beta_6 CashETR + \beta_7 CashETR * LrgPosDTE + \beta_8 CashETR * LrgNegDTE + \beta_9 NOL + \\ \beta_{10} ForOps + \beta_{11} DiscOps + \beta_{12} M \&A + \beta_{13} HighTech + \beta_{14} PyLoss + \beta_{15} Age + \beta_{16} MB + \beta_{17} MV + \beta_{18} AFol + \\ \beta_{19} RetVol + \beta_{20} AbsFErr + \beta_{21} EarnAnnLag + \epsilon \end{split}$$

Panel B: Financial Statement Component Only											
Variable	Pred.	Coeff.	p-value	Coeff.	p-value						
LrgPosDTE	+	0.3935	(<0.0001)	0.1770	(0.0100)						
LrgNegDTE	+	0.2120	(0.0245)	0.0537	(0.2140)						
AbsDA	-	-0.1169	(0.1565)								
AbsDA*LrgPosDTE	?	0.0742	(0.6680)								
AbsDA*LrgNegDTE	?	0.1828	(0.3310)								
HighAbsDA	-			-0.1434	(0.0255)						
HighAbsDA*LrgPosDTE	?			-0.0002	(0.9990)						
HighAbsDA*LrgNegDTE	?			0.1769	(0.1430)						
CashETR	+	0.1236	(0.2370)								
CashETR*LrgPosDTE	?	-0.5993	(0.1110)								
CashETR*LrgNegDTE	?	-0.2928	(0.2670)								
LowCashETR	-			-0.2327	(0.0050)						
LowCashETR*LrgPosDTE	?			0.4638	(<0.0001)						
LowCashETR*LrgNegDTE	?			0.3880	(0.0060)						
NOL	+	-0.0906	(0.1150)	-0.0905	(0.1165)						
ForOps	+	-0.1036	(0.1140)	-0.1024	(0.1165)						
DiscOps	+	-0.0440	(0.3015)	-0.0392	(0.3215)						
M&A	+	-0.0518	(0.1815)	-0.0524	(0.1795)						
HighTech	+	0.2771	(0.0260)	0.2834	(0.0235)						
PyLoss	?	-0.0568	(0.4280)	-0.0372	(0.6020)						
Age	?	-0.0027	(0.2980)	-0.0029	(0.2730)						
MB	?	-0.0026	(0.8470)	-0.0011	(0.9330)						
MV	?	0.0537	(0.2010)	0.0526	(0.2120)						
Afol	?	-0.0042	(0.5100)	-0.0040	(0.5280)						
RetVol	?	2.9576	(0.3430)	3.3055	(0.2890)						
AbsFErr	?	-0.1523	(0.0590)	-0.1459	(0.0710)						
EarnAnnTimeLag	?	-0.0034	(0.2160)	-0.0034	(0.2160)						
Industry and Year Fixed Effects		Yes		Yes							
$X^2$ -test of $\beta_1 = \beta_2$ :		(0.1540)		(0.1765)							
$X^2$ -test of $\beta_3 + \beta_4 = 0$ :		(0.7523)		(0.1737)							
$X^2$ -test of $\beta_3 + \beta_5 = 0$ :		(0.6808)		(0.7418)							
$X^2$ -test of $\beta_4 = \beta_5$ :		(0.6043)		(0.2210)							
$X^2$ -test of $\beta_6 + \beta_7 = 0$ :		(0.1821)		(0.0258)							
$X^2$ -test of $\beta_6 + \beta_8 = 0$ :		(0.4508)		(0.2161)							
$X^2$ -test of $\beta_7 = \beta_8$ :		(0.4492)		(0.6248)							
Pseudo R <sup>2</sup>		0.2578		0.2587							
Ν		17,544		17,544							



## Table 8 (continued)

## Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases with Cash ETR Interactions

 $\begin{array}{l} BtdDisc = \alpha_{ind} + \alpha_{year} + \beta_{1}LrgPosDTE + \beta_{2}LrgNegDTE + \beta_{3}AbsDA + \beta_{4}AbsDA^{*}LrgPosDTE + \\ \beta_{5}AbsDA^{*}LrgNegDTE + \beta_{6}CashETR + \beta_{7}CashETR^{*}LrgPosDTE + \beta_{8}CashETR^{*}LrgNegDTE + \beta_{9}NOL + \\ \beta_{10}ForOps + \beta_{11}DiscOps + \beta_{12}M\&A + \beta_{13}HighTech + \beta_{14}PyLoss + \beta_{15}Age + \beta_{16}MB + \beta_{17}MV + \beta_{18}AFol + \\ \beta_{19}RetVol + \beta_{20}AbsFErr + \beta_{21}EarnAnnLag + \epsilon \end{array}$ 

Panel C: Text Component Only					
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
LrgPosDTE	+	0.3767	(0.0010)	0.3580	(<0.0001)
LrgNegDTE	+	0.8083	(<0.0001)	0.3310	(<0.0001)
AbsDA	-	0.1218	(0.2310)		
AbsDA*LrgPosDTE	?	0.1420	(0.5720)		
AbsDA*LrgNegDTE	?	0.3060	(0.2090)		
HighAbsDA	-			0.0993	(0.1335)
HighAbsDA*LrgPosDTE	?			-0.0592	(0.7040)
HighAbsDA*LrgNegDTE	?			0.0309	(0.8270)
CashETR	+	-0.3902	(0.0460)		
CashETR*LrgPosDTE	?	-0.3004	(0.4970)		
CashETR*LrgNegDTE	?	-1.0194	(0.0080)		
LowCashETR	-			0.1612	(0.0555)
LowCashETR*LrgPosDTE	?			0.0170	(0.9040)
LowCashETR*LrgNegDTE	?			0.8857	(<0.0001)
NOL	+	0.0566	(0.2360)	0.0372	(0.3185)
ForOps	+	0.0556	(0.2620)	0.0577	(0.2540)
DiscOps	+	0.1751	(0.0425)	0.1480	(0.0725)
M&A	+	-0.1829	(0.0050)	-0.1814	(0.0055)
HighTech	+	0.3561	(0.0040)	0.3620	(0.0035)
PyLoss	?	0.3077	(<0.0001)	0.2769	(<0.0001)
Age	?	-0.0027	(0.3840)	-0.0031	(0.3180)
MB	?	-0.0158	(0.2970)	-0.0150	(0.3200)
MV	?	0.0144	(0.7560)	0.0275	(0.5560)
Afol	?	0.0062	(0.3510)	0.0055	(0.4080)
RetVol	?	-4.5684	(0.2420)	-5.4712	(0.1660)
AbsFErr	?	0.0598	(0.4870)	0.0217	(0.8020)
EarnAnnTimeLag	?	-0.0052	(0.0490)	-0.0052	(0.0510)
Industry and Year Fixed Effects		Yes		Yes	
$X^2$ -test of $\beta_1 = \beta_2$ :		(0.0068)		(0.7981)	
$X^2$ -test of $\beta_3 + \beta_4 = 0$ :		(0.1913)		(0.7630)	
$X^2$ -test of $\beta_3 + \beta_5 = 0$ :		(0.0262)		(0.2583)	
$X^2$ -test of $\beta_4 = \beta_5$ :		(0.5484)		(0.6079)	
$X^2$ -test of $\beta_6 + \beta_7 = 0$ :		(0.0787)		(0.1119)	
$X^2$ -test of $\beta_6 + \beta_8 = 0$ :		(<0.0001)		(<0.0001)	
$X^2$ -test of $\beta_7 = \beta_8$ :		(0.1498)		(<0.0001)	
Pseudo R <sup>2</sup>		0.0900		0.0923	
N		17,512		17,512	



#### Table 8 (continued)

## Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases with Cash ETR Interactions

$$\begin{split} BtdDisc &= \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_3 AbsDA + \beta_4 AbsDA * LrgPosDTE + \\ \beta_5 AbsDA * LrgNegDTE + \beta_6 CashETR + \beta_7 CashETR * LrgPosDTE + \beta_8 CashETR * LrgNegDTE + \beta_9 NOL + \\ \beta_{10} ForOps + \beta_{11} DiscOps + \beta_{12} M \& A + \beta_{13} HighTech + \beta_{14} PyLoss + \beta_{15} Age + \beta_{16} MB + \beta_{17} MV + \beta_{18} AFol + \\ \beta_{19} RetVol + \beta_{20} AbsFErr + \beta_{21} EarnAnnLag + \epsilon \end{split}$$

This table presents the results from estimating equation (1) with additional *CashETR* interaction terms. The dependent variable is either  $BtdDisc_{Full}$  (Panel A),  $BtdDisc_{Fin}$  (Panel B), or  $BtdDisc_{Text}$  (Panel C). These variables equal one for firm-year observations if the firm's fourth quarter earnings announcement (or earnings announcement component) includes BTD-related information and zero otherwise. See Appendix A for all other variable definitions. *p*-values are based on one-tailed test statistics when predictions are made for variables. All *p*-values are based on Huber-White, cluster-adjusted (by firm) standard errors.



Table 9	
Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases by Earnings Quality Quintile	S

$BtdDisc = \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_4 CashETR + \beta_7 NOL + \beta_8 ForOps + \beta_9 DiscOps + \beta_{10} M\&A + \beta_{11} HighTech + \beta_{12} PyLoss + \beta_{13} Age + \beta_{14} MB$	$+ \beta_{15}MV$
$+ \beta_{16}AFol + \beta_{17}RetVol + \beta_{18}AbsFErr + \beta_{19}EarnAnnLag + \varepsilon$	

Panel A: Full Press Release												
	Absolute Discretionary Accruals Quintiles											
			Q1		Q2	(	23	(	24	Q5		
Variable	Pred.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	
LrgPosDTE	+	0.1918 *	0.1972 *	0.2295 **	0.2336 **	0.2930 **	0.2888 **	0.4149 ***	0.4013 ***	0.3330 ***	0.3051 ***	
LrgNegDTE	+	0.3852 **	* 0.3603 ***	0.1444	0.1345	0.1823 *	0.1778 *	0.2689 ***	0.2662 ***	0.3707 ***	0.3778 ***	
CashETR	+	-0.4462 **		-0.2310		-0.2184		-0.1063		0.0239		
LowCashETR	-		0.1908 *		0.1124		0.1622 *		0.1533 *		0.1825 *	
NOL	+	-0.0239	-0.0308	0.0174	0.0162	0.0138	0.0110	-0.0911	-0.1044	-0.2420 **	-0.2588 **	
ForOps	+	0.0154	0.0184	0.0487	0.0479	-0.1905 *	-0.1857 *	-0.0196	-0.0170	-0.1229	-0.1261	
DiscOps	+	-0.2082 *	-0.2164 *	-0.1441	-0.1492	0.1462	0.1352	0.0020	-0.0029	0.1875	0.1926 *	
M&A	+	-0.0100	-0.0078	-0.2088 **	-0.2086 **	-0.1285	-0.1241	-0.0511	-0.0476	-0.1010	-0.1047	
HighTech	+	0.2772	0.2827	0.3305 *	0.3318 *	0.5519 ***	0.5440 ***	0.3274 **	0.3191 **	0.3586 **	0.3405 **	
PyLoss	?	0.2298 *	0.2093	-0.0419	-0.0566	0.0563	0.0375	-0.0123	-0.0419	0.0025	-0.0379	
Age	?	-0.0063	-0.0063	0.0006	0.0005	0.0043	0.0042	-0.0045	-0.0045	-0.0091 **	-0.0090 **	
MB	?	-0.0464 *	-0.0449 *	0.0112	0.0118	0.0216	0.0216	-0.0212	-0.0219	-0.0123	-0.0139	
MV	?	-0.0613	-0.0549	0.1078 *	0.1106 *	0.0223	0.0263	0.0025	0.0048	0.1093 *	0.1125 *	
Afol	?	0.0264 **	0.0259 **	-0.0114	-0.0115	-0.0099	-0.0100	0.0081	0.0081	0.0069	0.0067	
RetVol	?	-14.7111 **	-14.7398 **	-3.5820	-3.7727	0.9972	0.7631	2.1404	1.7733	3.3064	2.7596	
AbsFErr	?	-0.3774 **	-0.3890 **	-0.1218	-0.1342	-0.0926	-0.1070	0.0424	0.0323	-0.0407	-0.0455	
EarnAnnTimeLag	?	-0.0008	-0.0010	-0.0019	-0.0018	-0.0050	-0.0050	-0.0077 **	-0.0078 **	-0.0110 ***	-0.0109 ***	
$X^2$ -test of $\beta_1 = \beta_2$ :		(0.1809)	(0.2525)	(0.5544)	(0.4829)	(0.4389)	(0.4310)	(0.2610)	(0.2883)	(0.7876)	(0.5970)	
Pseudo R <sup>2</sup>		0.1670	0.1670	0.1436	0.1436	0.1731	0.1734	0.1512	0.1516	0.1370	0.1376	
N		3,496	3,496	3,500	3,500	3,494	3,494	3,468	3,468	3,481	3,481	



Table 9 (continued)	
Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases by Earnings Quality Quintiles	

$BtdDisc = \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE$	$-\beta_4 CashETR + \beta_7 NOL + \beta_8 ForOps + \beta_9 DiscOps + \beta_{10} M \&A + \beta_{11} HighTech + \beta_{12} PyLoss + \beta_{13} Age + \beta_{14} MB + \beta_{15} Mage + \beta_{16} Mage + \beta_{16} Mage + \beta_{16} Mage + \beta_{16} MB + \beta_{15} Mage + \beta_{16} MB + \beta_{16} MB + \beta_{15} Mage + \beta_{16} MB + \beta_{16$	ſV
	$+\beta_{15}AFol + \beta_{17}RetVol + \beta_{19}AbsFErr + \beta_{19}EarnAnnLag + \varepsilon$	

Panel B: Financial Statements Only												
	Absolute Discretionary Accruals Quintiles											
			Q1		Q2		Q3	(	)4	Q5		
Variable	Pred.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	
LrgPosDTE	+	0.2070	0.2285 *	0.2012	0.2091	0.2371 *	0.2577 **	0.4550 ***	0.4295 ***	0.3660 ***	0.3353 ***	
LrgNegDTE	+	0.2448 **	0.2331 **	-0.0442	-0.0563	0.0664	0.0603	0.1568	0.1601 *	0.3306 ***	0.3398 ***	
CashETR	+	-0.1528		-0.2646		-0.0640		0.0213		0.1627		
LowCashETR	-		-0.0388		0.1000		-0.0872		0.1689 *		0.0980	
NOL	+	-0.1114	-0.1033	0.0103	0.0121	0.0943	0.0987	-0.1847 *	-0.2053 **	-0.2826 **	-0.2926 **	
ForOps	+	0.0484	0.0482	0.0800	0.0793	-0.2586 **	-0.2611 **	-0.1325	-0.1268	-0.2071 *	-0.2104 *	
DiscOps	+	-0.2881 **	-0.2879 **	-0.1406	-0.1446	-0.0086	-0.0100	0.0419	0.0400	0.1552	0.1618	
M&A	+	0.0906	0.0884	-0.0476	-0.0476	-0.2175 **	-0.2216 **	-0.0140	-0.0100	-0.0637	-0.0690	
HighTech	+	-0.0055	0.0038	0.5313 **	0.5349 **	0.4164 **	0.4276 **	0.3035 *	0.2928 *	0.1509	0.1337	
PyLoss	?	0.2637 *	0.2808 *	-0.0678	-0.0762	-0.1956	-0.1692	-0.1713	-0.2150	-0.0839	-0.1176	
Age	?	-0.0077 *	-0.0076 *	-0.0018	-0.0018	0.0080 **	0.0080 **	-0.0037	-0.0035	-0.0099 **	-0.0098 **	
MB	?	-0.0294	-0.0287	0.0077	0.0086	0.0142	0.0152	-0.0075	-0.0097	0.0003	-0.0014	
MV	?	-0.0063	-0.0068	0.1422 **	0.1455 **	0.0311	0.0290	-0.0110	-0.0103	0.0598	0.0620	
Afol	?	0.0086	0.0087	-0.0139	-0.0140	-0.0148	-0.0146	0.0019	0.0019	0.0054	0.0052	
RetVol	?	-7.9709	-7.5327	-2.1991	-2.2186	6.9598	7.2819	2.0607	1.5148	5.6846	5.3574	
AbsFErr	?	-0.4909 **	-0.4912 **	-0.0402	-0.0530	-0.2262	-0.2206	0.0779	0.0641	-0.1589	-0.1506	
EarnAnnTimeLag	?	-0.0002	-0.0002	0.0035	0.0036	-0.0032	-0.0033	-0.0079 *	-0.0079 *	-0.0089 **	-0.0087 **	
$X^2$ -test of $\beta_1 = \beta_2$ :		(0.8241)	(0.9782)	(0.1602)	(0.1193)	(0.3044)	(0.2203)	(0.0520)	(0.0702)	(0.8120)	(0.9754)	
Pseudo R <sup>2</sup>		0.2865	0.2865	0.2636	0.2636	0.2869	0.2870	0.2698	0.2702	0.2565	0.2565	
Ν		3,496	3,496	3,494	3,494	3,494	3,494	3,462	3,462	3,432	3,432	

Table 9 (continued)
Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases by Earnings Quality Quintiles
$+ \theta LraDeaDTE + \theta LraDeaDTE + \theta CackETD + \theta NOL + \theta EarOng + \theta DiacOng + \theta M \theta A + \theta LickTack + \theta Did and + \theta MD + \theta MD + \theta MD + \theta AEd + \theta DatVal + \theta DiacOng + \theta M \theta A + \theta LickTack + \theta DiacOng + \theta A + \theta DiacOng + \theta DiacO$

BtdDisc = $\alpha_{ind} + \alpha_{ind}$	$BtdDisc = \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_4 CashETR + \beta_7 NOL + \beta_8 ForOps + \beta_9 DiscOps + \beta_{10} M&A + \beta_{11} HighTech + \beta_{12} PyLoss + \beta_{13} Age + \beta_{14} MB + \beta_{15} MV + \beta_{16} AFol + \beta_{17} RetVol + \beta_{16} RetVol $																				
Panel C: Text Onl	$p_{18}Ausren + p_{19}eanAnneag + \varepsilon$ Panel C: Text Only																				
	Absolute Discretionary Accruals Quintiles																				
	•		Q	1			Q	2			C	23			Q	4			Q	5	
Variable	Pred.	Coeff.																			
LrgPosDTE	+	0.3561	**	0.3561	**	0.1698		0.1924		0.4725	***	0.4507	***	0.2621	*	0.2910	*	0.2368		0.2463	*
LrgNegDTE	+	0.6697	***	0.6112	***	0.5452	***	0.5070	***	0.4194	***	0.4173	***	0.6395	***	0.5945	***	0.6215	***	0.6046	***
CashETR	+	-1.1656	***			-0.7763	**			-0.6179	*			-0.7763	**			-0.7115	**		
LowCashETR	-			0.5819	***			0.2874	**			0.4825	***			0.2455	**			0.3502	***
NOL	+	0.2385	*	0.1996		-0.1102		-0.1158		-0.1313		-0.1427		0.1183		0.1109		0.0693		0.0521	
ForOps	+	-0.0409		-0.0438		0.0308		0.0290		0.0972		0.1054		0.2526	**	0.2535	**	-0.0374		-0.0450	
DiscOps	+	0.0210		0.0063		0.1829		0.1679		0.4685	**	0.4252	**	0.1751		0.1367		0.1145		0.1018	
M&A	+	-0.3060	**	-0.3050	**	-0.5393	***	-0.5349	***	0.0952		0.1104		-0.1287		-0.1228		-0.0368		-0.0328	
HighTech	+	0.5046	**	0.5009	**	0.0601		0.0692		0.6116	***	0.5852	**	0.0025		0.0001		0.5014	***	0.4895	***
PyLoss	?	0.1861		0.1026		0.1438		0.1182		0.6072	***	0.5492	***	0.3658	**	0.3630	**	0.2003		0.1862	
Age	?	-0.0017		-0.0017		0.0031		0.0028		-0.0037		-0.0041		-0.0081		-0.0084		-0.0044		-0.0048	
MB	?	-0.0516		-0.0486		-0.0177		-0.0157		0.0288		0.0287		-0.0387		-0.0357		-0.0038		-0.0027	
MV	?	-0.1037		-0.0843		0.0373		0.0444		-0.0302		-0.0183		-0.0081		0.0036		0.0859		0.0966	
Afol	?	0.0301	**	0.0295	**	-0.0046		-0.0049		0.0027		0.0021		0.0125		0.0121		0.0009		0.0003	
RetVol	?	-21.8863	**	-22.2539	***	-4.3798		-4.6426		-9.0224		-9.6948		2.1520		2.7287		-2.4042		-3.0468	
AbsFErr	?	-0.0106		-0.0283		-0.1420		-0.1747		0.0341		-0.0046		0.1731		0.1598		0.1301		0.0892	
EarnAnnTimeLag	?	-0.0005		-0.0008		-0.0034		-0.0033		-0.0026		-0.0030		-0.0050		-0.0050		-0.0102	**	-0.0106	**
$X^2$ -test of $\beta_1 = \beta_2$ :		(0.1242)		(0.1966)		(0.0434)		(0.0848)		(0.7812)		(0.8592)		(0.0312)		(0.0723)		(0.0260)		(0.0329)	
Pseudo R <sup>2</sup>		0.1349		0.1371		0.1166		0.1161		0.1099		0.1134		0.1020		0.1007		0.0905		0.0910	
N		3,400		3,400		3,416		3,416		3,432		3,432		3,411		3,411		3,416		3,416	

This table presents the results from estimating equation (1) within earnings quality quintiles. The dependent variable is either  $BtdDisc_{Full}$  (Panel A),  $BtdDisc_{Fin}$  (Panel B), or  $BtdDisc_{Text}$  (Panel C). These variables equal one for firm-year observations if the firm's fourth quarter earnings announcement (or earnings announcement component) includes BTD-related information and zero otherwise. See Appendix A for all other variable definitions. p-values are based on one-tailed test statistics when predictions are made for variables. All p-values are based on Huber-White, cluster-adjusted (by firm) standard errors.

# Table 10 Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases: OLS

$$\begin{split} BtdDisc &= \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_3 AbsDA + \beta_4 AbsDA * LrgPosDTE + \\ \beta_5 AbsDA * LrgNegDTE + \beta_6 CashETR + \beta_7 NOL + \beta_8 ForOps + \beta_9 DiscOps + \beta_{10} M \& A + \beta_{11} HighTech + \\ \beta_{12} PyLoss + \beta_{13} Age + \beta_{14} MB + \beta_{15} MV + \beta_{16} AFol + \beta_{17} RetVol + \beta_{18} AbsFErr + \beta_{19} EarnAnnLag + \epsilon \end{split}$$

Panel A: Full Press Release (N = 17,544)					
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
Intercept	?	0.0691	(0.5730)	0.0524	(0.6690)
LrgPosDTE	+	0.0554	(<0.0001)	0.0572	(<0.0001)
LrgNegDTE	+	0.0478	(<0.0001)	0.0431	(<0.0001)
AbsDA	-	-0.0165	(0.2375)		
AbsDA*LrgPosDTE	?	0.0161	(0.6620)		
AbsDA*LrgNegDTE	?	0.0304	(0.4330)		
HighAbsDA	-			-0.0169	(0.0740)
HighAbsDA*LrgPosDTE	?			0.0027	(0.9030)
HighAbsDA*LrgNegDTE	?			0.0334	(0.1050)
CashETR	+	-0.0340	(0.0760)		
LowCashETR	-			0.0196	(0.0460)
NOL	+	-0.0109	(0.2190)	-0.0116	(0.2075)
ForOps	+	-0.0100	(0.2615)	-0.0099	(0.2625)
DiscOps	+	-0.0028	(0.4325)	-0.0039	(0.4070)
M&A	+	-0.0201	(0.0255)	-0.0197	(0.0280)
HighTech	+	0.0724	(0.0030)	0.0723	(0.0030)
PyLoss	?	0.0101	(0.4150)	0.0081	(0.5100)
Age	?	-0.0006	(0.2460)	-0.0006	(0.2330)
MB	?	-0.0016	(0.5350)	-0.0016	(0.5560)
MV	?	0.0103	(0.1940)	0.0107	(0.1760)
Afol	?	0.0005	(0.6760)	0.0005	(0.6990)
RetVol	?	0.0728	(0.8980)	0.0416	(0.9420)
AbsFErr	?	-0.0161	(0.1790)	-0.0179	(0.1330)
EarnAnnTimeLag	?	-0.0011	(0.0250)	-0.0011	(0.0240)
Industry and Year Fixed Effects		Yes		Yes	
<i>F</i> -test of $\beta_1 = \beta_2$ :		(0.6214)		(0.3431)	
<i>F</i> -test of $\beta_4 = \beta_5$ :		(0.7500)		(0.2554)	
Pseudo R <sup>2</sup>		0.1720		0.1408	



 Table 10 (continued)

 Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases: OLS

$$\begin{split} BtdDisc &= \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_3 AbsDA + \beta_4 AbsDA * LrgPosDTE + \\ \beta_5 AbsDA * LrgNegDTE + \beta_6 CashETR + \beta_7 NOL + \beta_8 ForOps + \beta_9 DiscOps + \beta_{10} M \&A + \beta_{11} HighTech + \\ \beta_{12} PyLoss + \beta_{13} Age + \beta_{14} MB + \beta_{15} MV + \beta_{16} AFol + \beta_{17} RetVol + \beta_{18} AbsFErr + \beta_{19} EarnAnnLag + \epsilon \end{split}$$

Panel B: Financial Statement Component	t Only (N	( = 17,544)			
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
Intercept	?	-0.0542	(0.5280)	-0.0571	(0.5050)
LrgPosDTE	+	0.0355	(<0.0001)	0.0408	(<0.0001)
LrgNegDTE	+	0.0138	(0.0755)	0.0143	(0.0630)
AbsDA	-	-0.0307	(0.0925)		
AbsDA*LrgPosDTE	?	0.0422	(0.2280)		
AbsDA*LrgNegDTE	?	0.0524	(0.1520)		
HighAbsDA	-			-0.0235	(0.0105)
HighAbsDA*LrgPosDTE	?			0.0069	(0.7210)
HighAbsDA*LrgNegDTE	?			0.0305	(0.0850)
CashETR	+	-0.0062	(0.3740)		
LowCashETR	-			-0.0007	(0.4725)
NOL	+	-0.0111	(0.1815)	-0.0107	(0.1915)
ForOps	+	-0.0128	(0.1560)	-0.0132	(0.1500)
DiscOps	+	-0.0108	(0.2265)	-0.0108	(0.2255)
M&A	+	-0.0074	(0.1975)	-0.0069	(0.2110)
HighTech	+	0.0366	(0.0400)	0.0369	(0.0385)
PyLoss	?	-0.0055	(0.5980)	-0.0047	(0.6550)
Age	?	-0.0004	(0.2940)	-0.0004	(0.2780)
MB	?	-0.0005	(0.8280)	-0.0003	(0.8750)
MV	?	0.0089	(0.1620)	0.0088	(0.1630)
Afol	?	-0.0004	(0.6430)	-0.0005	(0.6350)
RetVol	?	0.5976	(0.1970)	0.6247	(0.1780)
AbsFErr	?	-0.0172	(0.0780)	-0.0173	(0.0760)
EarnAnnTimeLag	?	-0.0005	(0.2060)	-0.0005	(0.2160)
Industry and Year Fixed Effects		Yes		Yes	
<i>F</i> -test of $\beta_1 = \beta_2$ :		(0.0823)		(0.0289)	
<i>F</i> -test of $\beta_4 = \beta_5$ :		(0.8055)		(0.2806)	
Pseudo R <sup>2</sup>		0.2680		0.2681	



Table 10 (continued)
Determinants of Book-Tax Differences-related Disclosures in Earnings Press Releases: OLS

$$\begin{split} BtdDisc &= \alpha_{ind} + \alpha_{year} + \beta_1 LrgPosDTE + \beta_2 LrgNegDTE + \beta_3 AbsDA + \beta_4 AbsDA^* LrgPosDTE + \\ \beta_5 AbsDA^* LrgNegDTE + \beta_6 CashETR + \beta_7 NOL + \beta_8 ForOps + \beta_9 DiscOps + \beta_{10} M&A + \beta_{11} HighTech + \\ \beta_{12} PyLoss + \beta_{13} Age + \beta_{14} MB + \beta_{15} MV + \beta_{16} AFol + \beta_{17} RetVol + \beta_{18} AbsFErr + \beta_{19} EarnAnnLag + \\ \epsilon \end{split}$$

Panel C: Text Component Only (N = 17,5	544)				
Variable	Pred.	Coeff.	p-value	Coeff.	p-value
Intercept	?	0.1398	(0.0180)	0.1029	(0.0790)
LrgPosDTE	+	0.0279	(0.0005)	0.0309	(<0.0001)
LrgNegDTE	+	0.0487	(<0.0001)	0.0489	(<0.0001)
AbsDA	-	0.0075	(0.2895)		
AbsDA*LrgPosDTE	?	0.0095	(0.7040)		
AbsDA*LrgNegDTE	?	0.0481	(0.1000)		
HighAbsDA	-			0.0056	(0.2425)
HighAbsDA*LrgPosDTE	?			-0.0049	(0.7620)
HighAbsDA*LrgNegDTE	?			0.0165	(0.3030)
CashETR	+	-0.0729	(<0.0001)		
LowCashETR	-			0.0392	(<0.0001)
NOL	+	0.0042	(0.2925)	0.0028	(0.3600)
ForOps	+	0.0049	(0.2835)	0.0052	(0.2710)
DiscOps	+	0.0152	(0.0665)	0.0126	(0.1050)
M&A	+	-0.0171	(0.0040)	-0.0166	(0.0050)
HighTech	+	0.0375	(0.0020)	0.0373	(0.0025)
PyLoss	?	0.0319	(<0.0001)	0.0283	(0.0010)
Age	?	-0.0003	(0.3580)	-0.0003	(0.3320)
MB	?	-0.0014	(0.3020)	-0.0013	(0.3620)
MV	?	0.0004	(0.9320)	0.0012	(0.7770)
Afol	?	0.0008	(0.2730)	0.0007	(0.2990)
RetVol	?	-0.5190	(0.1390)	-0.5921	(0.0930)
AbsFErr	?	0.0070	(0.4010)	0.0029	(0.7330)
EarnAnnTimeLag	?	-0.0005	(0.0350)	-0.0005	(0.0320)
Industry and Year Fixed Effects		Yes		Yes	
<i>F</i> -test of $\beta_1 = \beta_2$ :		(0.0690)		(0.0980)	
<i>F</i> -test of $\beta_4 = \beta_5$ :		(0.2564)		(0.2936)	
Pseudo R <sup>2</sup>		0.0613		0.0615	

This table presents the results from estimating equation (1) using ordinary least squares regressions. The dependent variable is either  $BtdDisc_{Full}$  (Panel A),  $BtdDisc_{Fin}$  (Panel B), or  $BtdDisc_{Text}$  (Panel C). These variables equal one for firm-year observations if the firm's fourth quarter earnings announcement (or earnings announcement component) includes BTD-related information and zero otherwise. See Appendix A for all other variable definitions. *p*-values are based on one-tailed test statistics when predictions are made for variables. All *p*-values are based on Huber-White, cluster-adjusted (by firm) standard errors.



Table 11
Effect of BTD Disclosure on the Relationship between the Ratio of Taxable to Book Income and
Analyst Forecast Errors: Propensity Score Matched Sample

		FErr <sub>t+1</sub> (Month 1)			
Variable	Pred.	Coeff.	p-value		
rTax	+	0.0070	(0.0050)		
BtdDisc	?	0.0034	(0.0880)		
MV	+	0.0033	(<0.0001)		
MB	+	0.0008	(<0.0001)		
$\Delta AFol_{t+1}$	+	0.0078	(<0.0001)		
PyFE	+	0.4832	(<0.0001)		
Acc	-	-0.0347	(<0.0001)		
BtdDisc*rTax	-	-0.0062	(0.0275)		
F-test of $\beta_1 + \beta_8 = 0$		0.17 (p = 0.6776)			
Adj R <sup>2</sup>		0.1598			
Ν		5.847			

This table presents the results from estimating equation (3) using a matched sample based on propensity scores. The dependent variable,  $FErr_{i,t+1}$ , equals firm *i*'s actual t+1 earnings minus the month 1 consensus forecast of those earnings, scaled by month 1 stock price. See Appendix A for variable definitions. *p*-values are based on one-tailed test statistics when predictions are made for variables. All *p*-values are based on Huber-White, cluster-adjusted (by firm) standard errors.



Returns on a BTD-based Calendar-time Hedge Portfolio							
Panel A: Press Release Benchmark Sample (1989-2006)							
	$\alpha_p$	$(R_{m,t}-R_{f,t})$	SMB		HML	Ν	Adj R <sup>2</sup>
All Firms	0.0009	-0.0169	-0.0945	**	-0.0142	210	0.022008

 Table 12

 Returns on a BTD-based Calendar-time Hedge Portfolio

## Panel B: Press Release Benchmark Sample (1989-2006), Disclosers vs. Non-Disclosers

	$\alpha_p$		$(R_{m,t}-R_{f,t})$	SMB		HML	Ν	Adj R <sup>2</sup>
Disclosers	-0.0011		0.0790	-0.0975	*	0.0320	203	0.010621
Non-Disclosers	0.0025	*	-0.0421	-0.0982	**	-0.0338	203	0.0218851

In this table, calendar-time hedge portfolios are based on purchasing firms each month in the highest quintiles of the ratio of taxable income to book income (TAX) and selling short firms each month in the lowest quintile. Firms enter the sample four months after fiscal year-end and remain in the sample for twelve months. The portfolio is liquidated on April 30th, 2007. The abnormal portfolio returns are regressed on the Fama and French (1993) three factors in the following regression:  $R_{p,t} = \alpha_p + b_p(R_{m,t} - R_{f,t}) + s_pSMB_t + h_pHML_t + \varepsilon_{p,t}$ . The intercept,  $\alpha_p$ , measures the average monthly abnormal return on the portfolio, which is assumed to be zero under the hypothesis of no abnormal performance. In this framework, the intercept measures mispricing.



Panel A: Full Conference Call Transcript		(1)			(2)		(3)	(4)		
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	
BtdDisc <sub>Full</sub>	?			0.7284	(<0.0001)					
BtdDisc <sub>Fin</sub>	?					0.2083	(0.1000)			
BtdDisc <sub>Text</sub>	?							2.2325	(<0.0001)	
LrgPosDTE	+	0.5010	(0.0005)	0.4745	(0.0015)	0.4913	(0.0010)	0.5127	(0.0010)	
LrgNegDTE	+	0.9366	(<0.0001)	0.8819	(<0.0001)	0.9249	(<0.0001)	0.8004	(<0.0001)	
AbsDA	?	0.1213	(0.2960)	0.1299	(0.2805)	0.1252	(0.2890)	0.1392	(0.2835)	
AbsDA*LrgPosDTE	?	0.1730	(0.5880)	0.2038	(0.5200)	0.1740	(0.5840)	0.1042	(0.3785)	
AbsDA*LrgNegDTE	?	-0.1514	(0.6810)	-0.1511	(0.6850)	-0.1642	(0.6560)	-0.3001	(0.2240)	
CashETR	+	-1.4994	(0.0005)	-1.4517	(0.0005)	-1.4936	(0.0005)	-1.0083	(0.0055)	
NOL	+	0.2730	(0.0175)	0.2780	(0.0165)	0.2758	(0.0170)	0.2037	(0.0635)	
ForOps	+	0.0871	(0.2760)	0.1055	(0.2360)	0.0934	(0.2615)	0.0146	(0.4620)	
DiscOps	+	0.1440	(0.1590)	0.1633	(0.1280)	0.1507	(0.1475)	0.1573	(0.1400)	
M&A	+	-0.0949	(0.2345)	-0.0911	(0.2455)	-0.0946	(0.2360)	-0.0632	(0.3225)	
HighTech	+	-0.2657	(0.1045)	-0.2970	(0.0830)	-0.2756	(0.0970)	-0.2262	(0.1405)	
PyLoss	?	0.3681	(0.0160)	0.3953	(0.0090)	0.3771	(0.0130)	0.2780	(0.0870)	
Age	?	0.0011	(0.7950)	0.0009	(0.8310)	0.0010	(0.8040)	0.0001	(0.9790)	
MB	?	-0.0259	(0.3680)	-0.0252	(0.3880)	-0.0259	(0.3690)	-0.0189	(0.5090)	
MV	?	-0.1019	(0.2270)	-0.0994	(0.2360)	-0.1010	(0.2310)	-0.0886	(0.3140)	
Afol	?	-0.0007	(0.9540)	-0.0021	(0.8570)	-0.0010	(0.9300)	-0.0045	(0.7010)	
RetVol	?	0.0136	(0.9990)	0.3002	(0.9740)	0.3788	(0.9670)	-6.3964	(0.5260)	
EarnAnnLag	?	-0.0028	(0.5850)	-0.0028	(0.6000)	-0.0028	(0.5950)	-0.0026	(0.6440)	
$X^2$ -test of $\beta_2 = \beta_3$ :		4.92 (p	= 0.0266)	4.18 (p	= 0.0408)	4.83 (p	= 0.0279)	2.05 (p	= 0.1523)	
$X^2$ -test of $\beta_5 = \beta_6$ :		0.78 (p	= 0.3769)	0.9 (p =	= 0.3418)	0.84 (p	= 0.3581)	1.05 (p	= 0.3055)	
Pseudo R <sup>2</sup>		0.0	0762	0.0	)905	0.0	)775	0.	1737	
N		3,	,281	3,	281	3,	281	3	,281	

 Table 13

 Determinants of Book-Tax Differences-related Disclosures in Conference Calls



Panel B: Question and Answer											
Component		(1)		(2)		(	(3)		(4)		
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value		
BtdDisc <sub>Full</sub>	?			0.4182	(0.0210)						
BtdDisc <sub>Fin</sub>	?					0.0410	(0.8150)				
BtdDisc <sub>Text</sub>	?							0.9842	(<0.0001)		
LrgPosDTE	+	0.4968	(0.0210)	0.4855	(0.0240)	0.4954	(0.0215)	0.4991	(0.0215)		
LrgNegDTE	+	0.4914	(0.0275)	0.4522	(0.0405)	0.4886	(0.0285)	0.4240	(0.0495)		
AbsDA	+	0.4056	(0.0925)	0.3981	(0.0965)	0.4041	(0.0925)	0.4426	(0.0795)		
AbsDA*LrgPosDTE	?	-0.1601	(0.7240)	-0.1196	(0.7910)	-0.1568	(0.7290)	-0.1888	(0.6800)		
AbsDA*LrgNegDTE	?	0.2227	(0.6660)	0.2333	(0.6530)	0.2219	(0.6680)	0.1304	(0.7950)		
CashETR	+	-1.8669	(0.0015)	-1.8160	(0.0020)	-1.8642	(0.0015)	-1.5984	(0.0040)		
NOL	+	0.3363	(0.0335)	0.3401	(0.0320)	0.3370	(0.0335)	0.3030	(0.0475)		
ForOps	+	0.1341	(0.2485)	0.1416	(0.2360)	0.1349	(0.2475)	0.1209	(0.2750)		
DiscOps	+	0.0036	(0.4930)	0.0140	(0.4730)	0.0049	(0.4905)	0.0127	(0.4755)		
M&A	+	-0.0977	(0.3040)	-0.1065	(0.2890)	-0.0985	(0.3025)	-0.0795	(0.3380)		
HighTech	+	-0.9217	(0.0010)	-0.9476	(0.0005)	-0.9245	(0.0005)	-0.8939	(0.0010)		
PyLoss	?	0.1962	(0.4040)	0.2112	(0.3640)	0.1976	(0.4000)	0.1553	(0.5100)		
Age	?	-0.0003	(0.9530)	-0.0002	(0.9720)	-0.0003	(0.9560)	-0.0002	(0.9650)		
MB	?	-0.0061	(0.8630)	-0.0067	(0.8500)	-0.0062	(0.8610)	-0.0033	(0.9250)		
MV	?	0.0106	(0.9310)	0.0112	(0.9260)	0.0107	(0.9300)	0.0081	(0.9480)		
Afol	?	-0.0078	(0.6170)	-0.0081	(0.6010)	-0.0078	(0.6160)	-0.0083	(0.5990)		
RetVol	?	12.8207	(0.3570)	12.7414	(0.3590)	12.8956	(0.3550)	10.3521	(0.4630)		
EarnAnnLag	?	-0.0083	(0.2400)	-0.0084	(0.2350)	-0.0083	(0.2390)	-0.0085	(0.2340)		
$X^2$ -test of $\beta_2 = \beta_3$ :		0 (p =	0.9857)	0.01 (p =	= 0.9125)	0 (p =	0.9822)	0.06 (p	= 0.8019)		
$X^2$ -test of $\beta_5 = \beta_6$ :		0.46 (p =	= 0.4955)	0.39 (p =	= 0.5343)	0.45 (p	= 0.5011)	0.35 (p	= 0.5558)		
Pseudo R <sup>2</sup>		0.0	823	0.0	865	0.0	0823	0.	0986		
Ν		3,	103	3,	103	3,	103	3	,103		

 Table 13 (continued)

 Determinants of Book-Tax Differences-related Disclosures in Conference Calls



Panel C: Management Disc	ussion										
Component			(1)		2)		(3)		(3)		(4)
Variable	Pred.	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value		
BtdDisc <sub>Full</sub>	?			0.8449	(<0.0001)						
BtdDisc <sub>Fin</sub>	?					0.1880	(0.2060)				
BtdDisc <sub>Text</sub>	?							2.6816	(<0.0001)		
LrgPosDTE	+	0.4559	(0.0075)	0.4196	(0.0290)	0.4456	(0.0095)	0.4446	(0.0155)		
LrgNegDTE	+	1.0395	(<0.0001)	0.9675	(<0.0001)	1.0267	(<0.0001)	0.8543	(<0.0001)		
AbsDA	-	-0.0123	(0.4820)	0.0082	(0.9750)	-0.0031	(0.4955)	-0.0791	(0.3920)		
AbsDA*LrgPosDTE	?	0.1849	(0.6110)	0.2022	(0.5760)	0.1793	(0.6200)	0.1042	(0.7920)		
AbsDA*LrgNegDTE	?	-0.0380	(0.9280)	-0.0387	(0.9260)	-0.0519	(0.9010)	-0.1917	(0.6760)		
CashETR	+	-1.4260	(0.0030)	-1.3418	(0.0080)	-1.4163	(0.0030)	-0.7316	(0.0440)		
NOL	+	0.2463	(0.0540)	0.2530	(0.1030)	0.2484	(0.0530)	0.1476	(0.1825)		
ForOps	+	0.0674	(0.3490)	0.0866	(0.6190)	0.0728	(0.3375)	-0.0371	(0.4210)		
DiscOps	+	0.2005	(0.1150)	0.2196	(0.1890)	0.2058	(0.1085)	0.2321	(0.0920)		
M&A	+	-0.1685	(0.1460)	-0.1575	(0.3280)	-0.1670	(0.1485)	-0.1347	(0.2145)		
HighTech	+	0.0169	(0.4720)	-0.0074	(0.9760)	0.0108	(0.4820)	0.1120	(0.3285)		
PyLoss	?	0.4396	(0.0100)	0.4679	(0.0060)	0.4475	(0.0080)	0.3173	(0.0770)		
Age	?	0.0006	(0.9050)	0.0003	(0.9590)	0.0005	(0.9190)	-0.0010	(0.8490)		
MB	?	-0.0273	(0.4120)	-0.0232	(0.5030)	-0.0267	(0.4270)	-0.0159	(0.6180)		
MV	?	-0.1331	(0.1840)	-0.1364	(0.1740)	-0.1335	(0.1830)	-0.1162	(0.2780)		
Afol	?	-0.0008	(0.9500)	-0.0022	(0.8690)	-0.0011	(0.9330)	-0.0068	(0.6270)		
RetVol	?	-8.1425	(0.4230)	-7.3409	(0.4720)	-7.7634	(0.4440)	-17.9113	(0.1200)		
EarnAnnLag	?	-0.0016	(0.7910)	-0.0015	(0.8110)	-0.0015	(0.8060)	-0.0009	(0.8930)		
$X^2$ -test of $\beta_2 = \beta_3$ :		6.66 (p	= 0.0099)	5.72 (p	= 0.0168)	6.55 (p	= 0.0105)	2.99 (p	= 0.0837)		
$X^2$ -test of $\beta_5 = \beta_6$ :		0.3 (p =	= 0.5813)	0.35 (p	= 0.5515)	0.33 (p	= 0.5661)	0.47 (p	= 0.4909)		
Pseudo R <sup>2</sup>		0.0	0876	0.	1045	0.1	2576	0.2	2576		
Ν		3,	170	3	170	3	,170	3,	170		

 Table 13 (continued)

 Determinants of Book-Tax Differences-related Disclosures in Conference Calls





Figure 1 Trends in Press Release Disclosures



Figure 2 Trends in Press Release Disclosures







Figure 4 Cash Tax Information in Press Releases







Figure 5 BTD, Tax Avoidance, and Rate Reconciliation Information in Press

Figure 6 Domestic and Foreign Operations and Tax Information in Earnings







Figure 8 Secondary Deferred Tax Information in Earnings Releases









Appendix A	
Variable Definitions and Construction	

Panel A: Equation (1)	<i>V</i> ariables
Variables	Definition
BtdDisc DTE	one if firm <i>i</i> 's fourth quarter earnings announcement at the end of year <i>t</i> includes BTD-related information and zero otherwise. See Appendix B for a list primary deferred tax terms used to form this variable. This variable is also created for the full earnings release, the financial statement component of the release, and the text component of the release. firm <i>i</i> 's deferred tax expense in the year <i>t</i> grossed up by the statutory tax rate and scaled by average total assets. [(#269 + $#270$ )/.35]/[(#6 + lagged #6)/2]; if (#269 + $#270$ ) is missing, it is replaced with #50
LrgPosDTE LrgNegDTE AbsDA	one if firm <i>i</i> 's DTE is in the highest quintile of all firm DTEs in year <i>t</i> . one if firm <i>i</i> 's DTE is in the lowest quintile of all firm DTEs in year <i>t</i> . one of two earnings quality measures. The first ( <i>AbsDA</i> ) is the absolute value of firm <i>i</i> 's discretionary accruals at the end of year <i>t</i> , estimating using a modified Jones' model (DeFond and Subramayan 1998). The second ( <i>HighAbsDA</i> ) equals one if firm <i>i</i> 's <i>AbsDA</i> is in the highest quintile of all firm <i>AbsDA</i> in year <i>t</i> .
CashETR LowCashETR NOL ForOps DiscOps M&A HighTech	firm <i>i</i> 's ratio of cash taxes paid to pretax income at the end of year <i>t</i> . #317/(#170 - #17) one if firm i's cash ETR is in the lowest quintile of all firm cash ETRs in year t. one if firm <i>i</i> reports a net operating loss carryforward (#52) at the end of year <i>t</i> and zero otherwise. one if firm <i>i</i> reports non-zero foreign operations (#273) in year <i>t</i> and zero otherwise. one if firm <i>i</i> reports discontinued operations (#66) in year <i>t</i> and zero otherwise. one if firm <i>i</i> reports merger and acquisition activity (aftnt#37) during the current year and zero otherwise. one if the firm <i>i</i> 's SIC in year <i>t</i> is in 2833-2836 (drugs), 8731-8734 (R&D services), 7371-7379 (programming), 3570-3577 (computers), 3600-3674 (electronics), or 3810-3845 (precise measurement instruments) and zero otherwise.
PyLoss Age MB MV AFol RetVol	one if firm <i>i</i> reported a loss (#18) in year <i>t</i> -1 and zero otherwise. the current year minus the first year firm <i>i</i> is publicly traded (according to the CRSP database). firm <i>i</i> 's ratio of market capitalization (#25 + #199) to book value of equity (#60) at the end of year <i>t</i> . the natural log of firm <i>i</i> 's market value (#25*#199) at the end of year <i>t</i> . the number of unique analysts following firm <i>i</i> (per I/B/E/S) in year <i>t</i> . the standard deviation of firm <i>i</i> 's stock returns over the 250 days prior to the earnings announcement date (where at least 100 days of stock returns are required for inclusion in the sample).
AbsFErr EarnAnnLag	one if the absolute value of the firm <i>i</i> 's forecast error (defined as reported earnings minus the most recent consensus mean analysts' forecast from the I/B/E/S database) is larger than one cent during the current year and zero otherwise. the number of days between the fiscal year-end date and the earnings announcement



## Appendix A (continued) Variable Definitions and Construction

Panel B: Additional Equation (2) and (3) Variables			
Variables	Definition		
FErr <sub>t+1</sub>	firm <i>i</i> 's actual $t+1$ earnings minus the median individual forecast made during month 1 (or month 5), scaled by month 1 stock price. Month 1 is based on the 30-day forecasting period following the release of year <i>t</i> 's earnings information. If an analyst makes more than one forecast during that window, only the most recent forecast is retained. To mitigate the influence of data coding-errors and extreme observations, prior to computing the median individual forecast, any individual forecast in the highest and lowest 1% of the distribution of price-scaled forecast errors is eliminated.		
rTax	firm <i>i</i> 's decile ranking based on the ratio of estimated taxable income $[(\#63 + \#64)/.35*(165)]$ to book income (#18) in year <i>t</i> , scaled to a [0,1] range. If (#63 + #64) is missing, it is replaced with (#16 - #50).		
$\Delta AFol_{t^{+1}}$	the change in the number of unique analysts making earnings forecasts for firm i from year t to $t+1$ , scaled by the number of year t analysts.		
PyFE	firm <i>i</i> 's actual year <i>t</i> earnings minus the median individual forecast of those earnings from midyear (month 6) of year <i>t</i> , scaled by stock price (Teoh and Wong 2002).		
Acc	the ratio of firm <i>i</i> 's total accruals to total assets at the end of year <i>t</i> . Accruals are measure as as ( $\Delta$ Current assets - $\Delta$ Cash) - ( $\Delta$ Current liabilities - $\Delta$ Debt included in current liabilities) - $\Delta$ Deferred tax liability - Depreciation. ( $\Delta$ #4 - $\Delta$ 1) - ( $\Delta$ #5 - $\Delta$ #34) - $\Delta$ #35 - #14		
Panel C: Additional Equation (4) and (5) Variables			
Variables	Definition		
SAR <sub>t+1</sub>	firm <i>i</i> 's size-adjusted annual buy-hold return starting four months after the end of fiscal year t, calculated as the raw annual return minus the return on the corresponding size decile portfolio from the CRSP database.		
Beta	firm <i>i</i> 's measure of systematic risk estimated using monthly stock return and CRSP value-weighted index returns (including distributions) during the five years that end in the fourth month of year $t+1$ (Fama and French 1992).		
EP	firm <i>i</i> 's ratio of earnings before extraordinary items to market value of common equity at the end of year <i>t</i> (Basu 1977).		
Panel D: Additional Equation (6) and (7) Variables			
Variables	Definition		
$\alpha_{\rm p}$	the average monthly abnormal return to a BTD-based hedge portfolio		
R <sub>p,t</sub>	the return on a calendar-time hedge portfolio based on purchasing (selling short) firms in the highest (lowest) TAX quintile each month.		
$R_{m,t}$ - $R_{f,t}$	the Fama and French (1993) factor representing the monthly excess return of the market		
SMB	the Fama and French (1993) factor representing the monthly return difference between a portfolio of small and big stocks		
HML	the Fama and French (1993) factor representing the monthly return difference between high and low book-to-market stocks		
CcDisc	one if firm <i>i</i> 's fourth quarter conference call at the end of year <i>t</i> includes BTD-related information and zero otherwise. This variable is created for the full call, the Q&A component of the call, and the management discussion component of the call.		



#### Appendix B Search Terms and Classifications

## Category: Book-Tax Differences

book-tax diff book tax diff book-tax gap book tax gap book tax book-tax tax gap BTD

#### Category: Primary Deferred Tax Terms

deferred in come tax deferred tax income taxes (deferred) income taxes - deferred *income taxes-deferred income tax (deferred)* income tax - deferred deferred tax expense deferred tax revenue deferred tax asset deferred tax liability Tax deferral Tax defer deferred in come tax asset deferred in come tax liablity income taxes deferred tax - deferred tax (deferred) tax deferred taxes - deferred taxes (deferred) taxes deferred

## Category: Secondary Deferred Tax Terms

valuation allowance contingent tax tax contingen tax cushion tax reserve permanently reinvest indefinitely reinvest current tax current tax expense

## **Category: Effective Tax Rate** effective tax ETR book tax rate book-tax rate

Category: Cash Tax Rate cash tax cash effective tax effective cash tax cash ETR taxes paid tax paid

#### Category: Marginal Tax Rate

marginal tax MTR

#### **Category: General Tax Terms**

income tax asset income tax liability tax asset taxable income tax rate average tax income taxes payable income tax reorg AMT Alternative minimum tax Minimum tax current tax asset tax expense total tax total tax expense

#### **Category: Ambiguous General Tax Terms**

tax after-tax after tax post-tax posttax pre-tax pretax net of tax taxes tax post tax

## **Category: Ambiguous Tax Variables** carry forward conform nonconform



Appendix B (continued) Search Terms and Classifications

Category: Tax Planning/Avoidance	Category: Tax Shelter (continued)
tax plan	Notice 2001 17
tax manage	Notice 200117
tax shield	Notice 2001/17
tax sav	section 351
tax haven	351 contingent
	Notice 2001-45
Category: Tax Shelter	Notice 2001 45
listed transaction	Notice 200145
tax shelter	Notice 2001/45
shelter tax	basis-shifting
IRS notice	basis shifting
Internal Revenue Service notice	section 302
abusive transaction	Notice 2002-21
Revenue Ruling 90-105	Notice 2002 21
Revenue Ruling 90 105	Notice 200221
Revenue Ruling 90105	Notice 2002/21
Revenue Ruling 90/105	CARDS Transaction
accelerated deductions for contribution	inflated basis transaction
ASA investering	Notice 2002-35
ACM partnership	Notice 2002 35
1.643	Notice 200235
corporate distributions of encumbered	Notice 2002/35
corporate distribution of encumbered	Notional principal contract
distributions of encumbered property	Common trust fund straddle
distribution of encumbered property	pass through entity straddle
step-down preferred	pass-through entity straddle
step down preferred	Revenue Ruling 2002-69
fast pay stock	Revenue Ruling 2002 69
1.7701	Revenue Ruling 200269
Revenue Ruling 2000-12	Revenue Ruling 2002/69
Revenue Ruling 2000 12	LILO
Revenue Ruling 200012	Revenue Ruling 2003-6
Revenue Ruling 2000/12	Revenue Ruling 2003 6
Notice 2000-44	Revenue Ruling 20036
Notice 2 000 44	Revenue Ruling 2003/6
Notice 200044	Notice 2003-22
Notice 2000/44	Notice 2003 22
Partnership basis transaction	Notice 200322
son of boss	Notice 2003/22
Notice 2000-61	offshore deferred compensation
Notice 2 000 61	Notice 2003-24
Notice 2 00061	Notice 2003 24
Notice 2 000/6 1	Notice 200324
guam trust	Notice 2003/24
Notice 2001-16	collectively bargained welfare
Notice 2001 16	419A
Notice 200116	transfers of compensatory stock options
Notice 2001/16	Notice 2003-55
Nouce 2001-17	Notice 2003 55



Appendix B (continued) Search Terms and Classifications

Category: Tax Shelter (continued)	Category: Tax Shelter (continued)
Notice 200355	Notice 200430
Notice 2003/55	Notice 2004/30
Accounting for lease strips	shelter involving shifting income
lease strips transaction	shifting income to a tax exempt
lease strip transaction	Notice 2004-31
other stripping transaction	Notice 2004 31
Notice 2003-77	Notice 200431
Notice 2003 77	Notice 2004/31
Notice 200377	Notice 2005-13
Notice 2003/77	Notice 2005 13
improper use of contested liabilit	Notice 200513
contested liability trust	Notice 2005/13
accelerate deductions for contested liabilit	lease-out
major/minor tax	Sale in lease
major minor tax	sale-in lease
minor/major tax	sale-in-lease
minor major tax	SILO
major-minor tax	Notice 2007-57
minor-major tax	Notice 2007 57
tax avoidance using offsetting	Notice 200757
offsetting foreign currency option contract	Notice 2007/57
Notice 2004-8	Loss Importation
Notice 2004 8	Importation Transaction
Notice 20048	Notice 2007-83
Notice 2004/8	Notice 2007 83
Abusive Roth	Notice 200783
Abusive IRA	Notice 2007/83
Revenue Ruling 2004-20	Abusive Trust Arrangement
Revenue Ruling 2004 20	Notice 2008-34
Revenue Ruling 200420	Notice 2008 34
Revenue Ruling 2004/20	Notice 200834
Abusive transactions involving insurance	Notice 2008/34
insurance policies in IRC	DAT Transaction
IRC 412	Distressed Asset Trust
412i	COLI
412-i	
412(i)	Category: Ambiguous Tax Shelter Terms
Insurance Policies in Retirement Plan	Revenue ruling
Notice 2 004-20	qualified cash
Notice 2 004 20	deferred arrangement
Notice 200420	matching contribution
Notice 2004/20	defined contribution plan
Abusive foreign tax credit	voluntary employee beneficiary
Abusive FTC	employee beneficiary
Abusive foreign tax	beneficiary association
Abusive foreign transactions	treasury reg
Abusive tax	distributions from charitable remainder
Notice 2004-30	distribution from charitable remainder
Notice 2004 30	charitable remainder



#### Appendix B (continued) Search Terms and Classifications

Category: Ambiguous Tax Shelter Terms	Category: Net Operating Losses
remainder trust	net operating loss
BOSS	NOL
encumbered	NOLs
distribution	loss carryforward
debt straddle	loss carry forward
Inflated partnership basis	-
Stock Compensation Transaction	Category: Rate Reconciliation
intermediary transaction	rate differential
contigent liability	rate reconciliation
transaction	
inflated basis	Category: U.S. Taxes
CARDS	income taxes - domestic
S Corp	income taxes - U.S.
Lease in	income taxes - US
lease out	income tax - U.S.
Abuses associated	income tax - US
S Corp ESOP	domestic income tax
S Corporation ESOP	domestic tax
S-Corp	domestic tax rate
ESOP	U.S. income tax
Abuse	U.S. tax
deferred compensation arrangement	U.S. tax rate
certain trust arrangement	US income tax
exception	US tax
compensatory stock	US tax rate
compensatory option	
related person	Category: Foreign Taxes
contested liabilit	income tax (foreign)
deduct	income taxes - foreign
offsetting foreign currenc	income tax - foreign
tax avoidance	foreign income tax
S-Corp ESOP	foreign tax
Employee Stock Option Plan	for eign tax rate
income shifting	international tax
shifting income	international tax rate
tax exempt	
	Category: Statement of Financial Accounting
inter company financing through partnerships	Standards No. 109
financing through partnerships	FAS 109
sale in	FAS109
sale-in	Standard 109
LIT	Number 109
Cash Value of Life Insurance Polic	No. 109
Purportedly to Provide Welfare Benefit	APB 23
DAT	APB23
Corporate owned life insurance	Bulletin 23
Corporate-owned life insurance	SFAS 109
owned life insurance	


Category: Financial Interpretation Number 48	Category: Internal Revenue Service
FIN 48	internal revenue service
FIN48	tax penalty
Number 48	tax return
No. 48	examination
No.48	transfer pric
Uncertain tax	closed year return
Uncertain tax benefit	closed-year return
Uncertain tax position	open year return
Undetermined tax	open-year return
UTB	tax settlement
Unrecognized tax	IRS settlement
Unrecognized tax benefit	Internal revenue service settlement
C C C C C C C C C C C C C C C C C C C	tax court
Category: Jobs Growth and Tax Relief	
Reconciliation Act of 2003	tax case
JGTRRA	audit settlement
Jobs growth and tax	IRS
Tax relief reconciliation	statute of limitation
Category: American Jobs Creation Act of 2004	Category: Permanent vs. Temporary
domestic manufacturing deduct	temporary diff
DMD	permanent diff
domestic production deduct	Permanent tax
section 199	permanent
extraterritorial income	transitory
ETI	temporary
american jobs creation	sustain
jobs creation	
AJCA	Category: Non-Taxable
repatriat	non-taxable
domestic activit	nontaxable
domestic reinvest	
export sales benefit	Category: Special Entitites
export sales incentive	off-balance sheet
export sales tax	off balance sheet
export tax incentive	special purpose entit
manufacturing deduct	· · ·
production deduct	Category: Tax Credits
reinvestment plan	credit carryforward
FSC	tax credit
	credit carry forward
Category: Tax Law	-
tax law	<b>Category: Domestic Operations</b>
law change	domestic income
-	U.S. income
	US income



	Category: Share-Based Compensation/Option
Category: Foreign Operations	Valuation
foreign income	SFAS 123
foreign activit	standard 123
foreign earnings	No. 123
foreign operations	Number 123
foreign ops	lattice
foreign sales corp	binomial
	trinomial
Category: Discontinued Operations	monte carlo
discontinued operations	black-scholes
discontinued ops	black scholes
	valuation model
Category: Fraud/Restatements	model input
Fraud	option value
Enron	option fair value
Worldcom	fair value
Healthsouth	true value
restatement	stock option
restate	restricted stock
misallocat	share-based
misappropr	share based
mappiopi	stock-based
Category: Bonchmarks	stock based
earnings target	vest
earnings forecast	accelerated west
forceast	
Miss corrings	dividend viold
Missed earnings	avpacted life
Concensus	expected file
Consensus forcesst	risk free rete
Consensus corrings	risk free rete
Den almarka	riskless rote
Meet coming	for fortune
Dest semina	
Met coming	
Mede coming	early exercise
Nade canning	
Net loss	non-transferability
Earnings loss	
	Skew
Last quarter	discount rate
Last year Drier questor	123 K lattice model
Prior quarter	lattice model
Prior year	nontransferability
Category: Share-Based Compensation/Option	
Valuation	
123K	
123-K	



123(R)

Category: Payout policy	Category: Financial Regulation Terms (continued)	
shareholder payout	Accounting for certain investments	
pavout	SFAS 121	
share repurchase	Standard 121	
repurchase share	No. 121	
dividend	Number 121	
	Accounting for the impairment	
Category: Other Interesting Terms	SFAS 142	
bankrupt	Standard 142	
accrual	No. 142	
governance	Number 142	
conservative	Goodwill and other intangible	
conservatism	SFAS 144	
safe	Standard 144	
safe estimate	No. 144	
estimate	Number 144	
aggressive	Impairment or disposal	
economic effect	Disposal of long	
economic impact	SFAS 114	
economic earnings	Standard 114	
significant effect	No. 114	
significant impact	Number 114	
comment letter	Accounting by Creditors for Impairment of a Loan	
industry	SFAS 125	
competitor	Standard 125	
Target	No. 125	
accru	Number 125	
	Accounting for Transfers and Servicing of Financial	
book income	Assets and Extinguishments of Liabilities	
subprime	Servicing of Financial Assets	
credit default swap	Extinguishments of liabilities	
	SFAS 134	
Category: Mergers and Acquisitions	Standard 134	
merger	No. 134	
acquisition	Number 134	
	Accounting for Mortgage-Backed Securities Retained	
	after the Securitization of Mortgage Loans Held for Sale	
	by a Mortgage Banking Enterprise	
Category: Financial Regulation Terms	SFAS 140	
SFAS 106	Standard 140	
Standard 106	No. 140	
No. 106	Number 140	
	Accounting for Transfers and Servicing of Financial	
N. 1. 107	Assets and Extinguishments of Liabilities – a	
Number 106	replacement of FASB Statement No. 125	
Employers' accounting for post	SFAS 112	
SFAS 115 Step lend 115	Standard 112	
Standard 115	No. 112	
No. 115	Number 112	
Number 115	Accounting for Postemployment Benefits	



Category: Financial Statements (continued)	Category: Miscellaneous Terms		
Statement of Operation	de fer red		
Statement of Income	income-deferred		
Statement of Earning	income - deferred		
Statements of Operation	income (deferred)		
Statements of Income	cushion		
Statements of Earning	reserve		
Income Statement	shelter		
Earnings statement	credit		
Cash Flow Statement	FIFO		
Statement of Cash Flow	LIFO		
Statements of Cash	carryforward		
Statement of Cash	deferred income		
Condensed Balance			
Condensed Income			
Condensed Earning			
Condensed Cash			

#### **Category: Financial Statement Components**

current asset cash current liabilities short-term debt current debt depreciation total assets total liabilities Cash forecast

#### Category: Internal Control Weaknesses

control weakness internal control internal control weakness material weakness significant deficiency

### **Category: Auditor Change**

auditor change auditor resign

This study relies on textual analysis to identify firms that disclose BTD information in earnings releases. Firm-year observations are classified as "disclosers" when earnings releases contain one or more of the primary deferred tax terms. Firm-year observations without any primary deferred tax terms are classified as "non-disclosers."



# Appendix C The Wall Street Journal Excerpts Highlighting Deferred Tax Information

The following excerpts are examples of media articles that highlight the effects of deferred taxes on firms' reported financial information. In the first except, the author highlights that Freddie Mac's net worth was overstated due to deferred tax assets of questionable value. In the second and third articles, the authors discuss how deferred taxes significantly impacted reported earnings.

# Example 1

Heard on the Street **Time for Fannie, Freddie? --- Prices Look Cheap, But Danger Lurks In Common Equity** By Peter Eavis 8 July 2008 The Wall Street Journal (Copyright (c) 2008, Dow Jones & Company, Inc.)

Fannie Mae and Freddie Mac took another beating Monday, and investors may be wondering if it is time to buy shares in the government-sponsored mortgage buyers.

But perhaps the right question is whether the common equity in Fannie and Freddie will have any value left once the housing crisis is done.

Fannie closed down 16% Monday, while Freddie dropped 18%. Both companies' share prices already had been more than halved this year.

How bad could it get? The best worst-case scenario looks to be large capital raises in which millions of new common shares are issued, diluting the holdings of existing shareholders. FBR Capital Markets analyst Paul Miller believes each company needs to raise an extra \$15 billion in common equity.

Not easy to do. Fannie, for instance, has a current market value of about \$15 billion. That means that at its current stock price it would have to roughly double its shares outstanding to raise \$15 billion.

And it isn't clear just how much new capital Fannie and Freddie need. Mr. Miller's \$15 billion could prove optimistic. Each quarter, Fannie and Freddie release an estimate of the market value of their balance sheets and net worth. At the end of March, Freddie's net worth available to common shareholders was negative to the tune of \$16.9 billion.

But even that number was inflated by a \$16.6 billion deferred-tax asset, which has a questionable value. In other words, Freddie would have to issue more than \$30 billion of stock to cover the \$16.9 billion market-value deficit and the deferred-tax asset (emphasis added).



# Example 2

Business Brief -- Aflac Inc.: Net Profit Declines by 11% In Absence of Tax Benefit Dow Jones Newswires 31 January 2006 The Wall Street Journal (Copyright (c) 2006, Dow Jones & Company, Inc.)

Aflac Inc.'s fourth-quarter profit fell 11% from a year earlier, when the company benefited from a tax-related gain. The Columbus, Ga., provider of supplemental health insurance reported fourth-quarter net income of \$364 million, or 72 cents a share, down from \$410 million, or 80 cents a share, in the year-earlier period.

The latest quarter included realized investment gains of \$68 million, *while the year-earlier period benefited by \$128 million from the release of a valuation allowance for deferred tax assets resulting from the American Jobs Creation Act* (emphasis added). Revenue rose 3.5% to \$3.57 billion. Aflac said it plans to lift its quarterly dividend 18% to 13 cents a share. If approved by the company's board, the dividend would be paid March 1 to shareholders of record on Feb. 17.

## Example 3

Business Brief -- COBRA ELECTRONICS CORP.: One-Time Tax Gain Helps Profit Soar to \$12 Million 26 February 1999 The Wall Street Journal (Copyright (c) 1999, Dow Jones & Company, Inc.)

Cobra Electronics Corp.'s *fourth-quarter earnings soared because of a one-time tax benefit* (emphasis added). Net income for the maker of consumer electronics totaled \$12 million, or \$1.92 a diluted share, up dramatically from year-earlier net of \$725,000, or 11 cents a share. *The latest quarter's net was swollen by a \$10.4 million tax benefit related to certain deferred-tax assets* (emphasis added). Without the gain, the company said, net would have totaled \$1.6 million, or 15 cents a share. Sales climbed 32% to \$33.6 million from \$25.4 million. The company said the solid sales increase, and the wider profit margins, reflect in part a positive market response to new two-way radio products it recently introduced. In Nasdaq Stock Market trading, Cobra rose 50 cents, or 13%, to \$4.375.



## Appendix D Press Release Excerpts Including Disclosures of Book-Tax Differences Information

The following excerpts are examples of disclosures of deferred tax information from earnings releases. In the first example, Green Mountain Coffee Roasters, Inc. discloses deferred tax information in its balance sheet and income statement. In the second example, FastenTech, Inc. discloses deferred tax information in its cash flow statement. In the final example, American Pacific discloses deferred tax information in the text of the press release.

## **Example 1: Balance Sheet and Income Statement Excerpts** Green Mountain Coffee Roasters Reports Fiscal 2006 Strong Fourth Quarter and Full Year Results

GREEN Conso (Dollars :	MC Lid in	UNTAIN CON lated State thousands	FFEE emer exc	E ROASTERS nts of Ope cept per s	3, era	INC. ations are data)		
	T Se	Phirteen weeks ended ptember 30, 2006	T wee Sep 2	Twelve eks ended otember 24, 2005	F: Se	ifty three weeks ended eptember 30, 2006	Fift v Sept 24	y two weeks ended cember 1, 2005
Net sales Cost of sales	\$	66,875 41,724	\$	36,404 23,886	\$	225,323 143,289	\$ 1 1	161,536 104,561
Gross profit		25,151		12,518	_	82,034		56 <b>,</b> 975
Selling and operating expenses General and administrative		14,350		6 <b>,</b> 780		46,808		31 <b>,</b> 517
expenses		6,380		1,954		17,112		9,554
Operating income		4,421		3,784		18,114		15,904
Other income Interest expense		(24) (1,816)		69 (41)	_	202 (2,261)		163 (498)
Income before income taxes		2,581		3,812		16 <b>,</b> 055		15,569
Income tax expense		(1,047)		(1,437)		(6,649)		(6,121)
Income before equity in earnings of Keurig, Incorporated, net of taxes Equity in earnings of Keurig,		1,534		2,375		9,406		9,448



Incorporated, net of taxes	_	60	(963)	(492)
Net income	 \$ 1 534	 \$ 2 435	 \$ 8 443	 \$ 8 956
Net Income	========	============	==========	==========
Basic income per share: Weighted average				
shares	7 5/3 728	7 397 315	7 505 567	7 192 /31
Net income	\$ 0.20	\$ 0.33	\$ 1.12	\$ 1.25
Diluted income per share: Weighted average shares				
outstanding	7,937,019 \$ 0.19	7,860,450 \$ 0.31	7,909,116 \$ 1.07	7,666,832 \$ 1.17
GREE	N MOUNTAIN C Consolidated	OFFEE ROASTE Balance She	RS, INC. ets	
	(DOTTATS )		, Septemb 30, 20	er September 06 24, 2005
Assets Current assets:	] + -		¢1 0.0	C C 247
Restricted cash and Receivables, less al	cash equival lowances of	ents \$1,021 and \$	20 544 at	18 203
September 30, 2006,	and Septemb	er 24, 2005,	30 07	1 16 548
Inventories			31,79	14,072
Other current asse	ts		2,81	.6 1,274
Deferred income ta	xes, net		1,38	
Total current ass	0+ 9		67 95	
			01,00	5 57,050
Fixed assets, net Investment in Keurig,	Inc.		49,80	0 39,507 - 9,765
Intangibles			39,01 75,30	.9 –
Other long-term asset	S		2,91	2 739
			\$234,99	95 \$91,147
			======	== ==========
Liabilities	and Stockho	lders' Equit	У	
Current portion of	long-term d	ebt	\$ 9	\$3,530
Accounts payable			24,11	3 11,228
Accrued compensati Accrued expenses	ON COSTS		5,60 9,10	ο 1,929 18 5,054
Other short-term 1	iabilities		87	4 60



Income tax payable	_	717
Total current liabilities	39,798	22,518
Long-term revolving line of credit	102,800	_
Long-term debt	71	5,218
Deferred income taxes	17 <b>,</b> 386	3,019
Commitments and contingencies Stockholders' equity: Common stock, \$0.10 par value: Authorized - 20,000,000 shares; Issued - 8,786,505 and 8,638,281 shares at September 30, 2006 and September 24, 2005, respectively Additional paid-in capital Retained earnings Accumulated other comprehensive (loss) ESOP unallocated shares, at cost - 15,205 shares Treasury shares, at cost - 1,157,554 shares	879 36,070 46,138 (548) (263) (7,336)	864 29,651 37,695 (72) (410) (7,336)
Total stockholders' equity	74,940	60,392
	\$234 <b>,</b> 995	\$91 <b>,</b> 147

# **Example 2: Cash Flow Statement Excerpt** FastenTech, Inc. Reports Fiscal 2006 Fourth Quarter and Full Year Results

### FastenTech, Inc. and Subsidiaries Condensed Consolidated Statement of Cash Flows (Amounts in Thousands) (Unaudited)

	Twelve Months ended September 30,		
	2006	2005	
Cash flows from operating activities			
Net income	\$3,265	\$6 <b>,</b> 398	
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation	14,593	10,995	
Amortization	5,382	2,340	
Noncash interest expense-long term debt	1,453	1,444	
Noncash interest expense-redeemable preferred			
stock	2,894	3,454	
Gain on repurchase of redeemable preferred			
stock	(2,210)	(4,035)	
Deferred income taxes	2,429	(255)	
Loss on sale of discontinued product line Loss on write-off of property, plant and	2,284	-	

المنسارات

equipment	-	1,597
Changes in operating assets and liabilities:		
Accounts receivable	(3,147)	(2, 755)
Other current assets	(217)	(13,240)
Accounts pavable	4.312	(2, 102)
Accrued interest	479	(200)
Income taxes	1,100	(3,864)
Other liabilities	(4,719)	(6,684)
Other	(169)	371
Net cash provided by (used in) operating		
activities	28,777	(6,616)
Cash flows from investing activities		
Cash used for acquisitions, net of cash acquired	(20,956)	(85 <b>,</b> 595)
Additions to property, plant and equipment	(10,057)	(14,480)
Net cash used in investing activities	(31,013)	(100,075)
Cash flows from financing activities		
Net borrowings (repayments) under revolver	13,000	99,000
Payment of subordinated notes	(3,500)	-
Repurchase of senior subordinated notes	(1,000)	-
Proceeds from debt agreement, net	3,697	-
Dept issuance costs	- (0.255)	(1, 363)
Other	(8,355)	(8,485)
other		
Net cash provided by financing activities	4,180	89,178
Effect of exchange rate fluctuations on cash	110	21
Net (decrease) increase in cash and cash		
equivalents	2,054	(17,492)
Cash and cash equivalents at beginning of period	11,730	29,222
Cash and cash equivalents at end of period	\$13 <b>,</b> 784	\$11,730

### **Example 3: Text Excerpt** American Pacific Reports Fourth Quarter and Year-End Results

Operating Activities. The Company reported an increase in sales of \$7.9 million, or 60%, in the fourth quarter compared to last year's fourth quarter. Sales were \$21.0 million in the fourth quarter compared to sales of \$13.1 million during the same quarter in fiscal 2000. Net income was \$4.7 million, or \$0.67 diluted per share, compared to \$6.2 million, or \$0.88 diluted per share during the fourth quarter of fiscal 2000. Net income during the fourth quarter of fiscal 2000 included a pre-tax impairment charge of \$9.1 million and the recognition of net **deferred tax** assets of \$15.1 million.



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