Tax Contingencies: Cushioning the blow to earnings?*

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Abstract

This paper studies firms' tax contingencies (aka tax cushion). A recent call for corporate tax reform has highlighted the disparity between financial and income tax reporting. In this paper, we create a broad-based measure of cushion that appears to capture cross-sectional variation in tax aggressiveness. After controlling for tax aggressiveness, we find some evidence that firms appear to be using cushion to smooth earnings. Specifically, tax cushion is used to smooth earnings by firms with larger implicit claims and equity financing. Finally, our findings are consistent with firms asymmetrically reporting good news, providing additional evidence that firms strategically report non-recurring income components (Schrand and Walther 2000). Overall, our findings support the need for FIN48, which attempts to improve conformity in the reporting of tax contingencies.

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1. Introduction

This paper studies firms' tax contingencies (aka cushion). Tax cushion represents a loss contingency as defined in FAS 5 based on the firm's assessment of what its additional tax liability (including any interest and penalties) would be upon audit by the tax authorities. To date, we know very little about firms' tax contingencies since most firms provide no details of their tax reserves in their financial statements (Gleason and Mills 2002). Firms may choose to not discuss their tax contingencies for at least two reasons. First, the tax cushion amounts may be immaterial. Second, firms may believe that any disclosure of their tax contingency would provide an audit road map for the tax authorities. In our sample period, firms may consider both a) the probability of detection by the tax authority and b) the amount that it expects to pay in settlement when establishing its tax contingency. Hence, a firm's tax cushion contains a significant level of discretion both in terms of the timing and the amount and an implicit acknowledgement that the firm has undertaken aggressive tax planning.

We document the existence and change in tax contingencies across a broad sample of firms (S&P 1500). Using private IRS data, Gleason and Mills (2002) were the first to develop a measure of cushion based on firms' U.S. tax reporting positions. We extend their work by providing a measure of tax cushion based on publicly available data that encompasses the global reporting position of the firm.

Next, we investigate several attributes/characteristics of our tax cushion measure. We begin by studying whether cushion is suggestive of aggressive tax behavior. Recent literature posits that the widening gap between earnings reported on the financial statements and the tax returns is attributable to sheltering behavior (Desai 2003). If firms record cushion in accordance with Generally Accepted Accounting Principles ("GAAP"), all else equal, we

anticipate that firms who engage in more aggressive tax planning should be recording more cushion.

We also study the use of tax cushion in order to smooth earnings. Financial statement reporting (GAAP) offers management flexibility in the recognition of the timing and the amount of income and expenses. Proponents of GAAP argue that this subjectivity allows the firm to provide incremental information to the capital markets. Critics, however, believe that flexibility increases opportunistic reporting behavior on the behalf of firm management. Using our measure of income smoothing, tax cushion, across a broad sample of industries, we investigate whether firms appear to be behaving in a manner consistent with extant smoothing theory. Though prior literature has alluded to its use in earnings management (Gleason and Mills 2006; Schmidt 2006; Dhaliwal, Gleason and Mills 2004), we are unaware of any papers that specifically study the smoothing implications of tax cushion over time.[1]

Finally, we investigate some of our sample firms' disclosures of their tax contingency. Income taxes were identified as an area of material weakness by the Public Company Accounting Oversight Board (PCAOB) suggesting that regulators believe that aggressive tax positions have a significant impact on a firm's financial position. The PCAOB's concern ultimately led to the FASB's release of FIN 48 in July 2006. FIN48, Accounting for Uncertainty in Income Taxes, not only decreases firms' discretion in recording cushion, but also makes explicit, detailed requirements for firm disclosures of its tax contingency.[2]

We measure the tax cushion by reconciling amounts recorded in firms' tax accounts. One limitation with using the financial statements to estimate the cushion is that a large de

[1] Gleason and Mills (2002) discuss the disclosure of cushion rather than its use in earnings management.
[2] Specifically, FIN48 has eliminated the ability of the firm to incorporate the "probability of detection" element when assessing the magnitude of the reserve, thereby potentially decreasing the subjective component in measuring the cushion.

facto tax payment, the tax benefit from stock options, is not recorded by Compustat. We have been able to procure the actual tax benefit from stock options recorded by the S&P500 firms for 1997-2004. Using this dataset we have developed a methodology to estimate the tax benefit of stock options using ExecuComp data for a broad sample of firms. Ultimately, we document that adjustments to tax cushion represent 4.3% of the average firms' pre-tax income. In our analysis, we find that changes in cushion are associated with a measure of long-term tax avoidance: the ratio of cash taxes paid to pre-tax income (Dyreng, Hanlon and Maydew 2005). In addition, our evidence suggests that firms with high levels of tax planning using permanent differences undertake relatively lower levels of tax planning using timing differences.

After controlling for tax aggressiveness reasons that determine the cushion activity, we find that cushion shows some cross-sectional variation based on the incentives to smooth earnings. Specifically, tax cushion is used to smooth earnings by firms with larger implicit stakeholder claims from customers and labor. We also find that firms with lower debt-to-assets have larger tax cushion, suggesting that it is the equity financing rather than the debt financing that provides the stronger incentives to smooth earnings. We also provide some evidence that cushion is positively correlated with a measure of discretionary accruals, suggesting that they are used as complements.

Consistent with Gleason and Mills (2002), we find that firms rarely disclose anything regarding their tax contingency other than alluding to its existence. Using two different samples, we find that approximately 75% of the firms that do disclose the current period change in their cushion, report an income increasing amount. Interestingly, the disclosure of the positive impact on income may not be representative of the cumulative change in the

account suggesting that firms opportunistically disclose their tax position. Overall, this result is consistent with firms attempting to mask their contingent tax liability. A question remains as to whether this is to hide the information from the public or the tax authorities. However, under FASB's FIN48 firms will no longer have the choice of not disclosing the details of their tax contingencies.

Our paper makes several contributions to the literature. First, we provide a measure of tax contingency across a broad sample of firms using publicly available data. Unlike prior research, our measure represents the tax position of the entire entity. Second, we show that our measure may be used as a proxy of tax aggressiveness. Third, we also find some evidence that the cushion activity is explained by incentives to smooth earnings. Recognizing that any smoothing behavior may be secondary to tax aggressiveness, our smoothing tests include our proxies for aggressive tax planning. Finally, our finding that firms asymmetrically report good news provides additional evidence that firms strategically report non-recurring income components (Schrand and Walther 2000). Overall, our findings support the need for FIN48, which attempts to improve conformity in the reporting of these contingencies.

The remainder of this paper is organized as follows. Section 2 provides the detailed computation of our cushion measure. Section 3 summarizes our analyses of tax aggressiveness. Section 4 provides tests of the relation between cushion and the incentives to smooth earnings. Section 5 discusses our findings related to the tax contingency disclosures and section 6 concludes.

2. Tax cushion

2.1. Computation

Tax contingencies or cushion include probable tax liabilities related to tax positions that may ultimately be overturned by the tax authorities. FAS 5 requires firms to record a contingent liability when 1) information available prior to the issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements and 2) the amount of the loss can be reasonably estimated (Kieso, Weygandt, and Warfield 2004). The exact date the incremental tax will be paid does not need to be known to record a liability. What must be known is whether it is probable (greater than 50% likely) that a liability has been incurred. During our sample period (pre-FIN48), a firm can consider both the anticipated level of deficiency AND the probability of detection. Hence, a firm does not need to have a deficiency notice in hand from a tax authority to record a tax contingency. However, a notice of deficiency still may not induce a firm to adjust its tax expense if the firm still believes it will prevail upon appeal. Until the firm agrees to a settlement with the tax authority, there is virtually complete discretion in whether the firm records tax cushion.

In general, incremental tax contingency is only required for permanent differences. These are differences where a tax-deductible amount has been created for income tax purposes only.[3] These items will never reduce the income reported on the financial statements. Any aggressive tax position attributable to timing differences is already accrued for as a deferred tax liability, which implies no incremental amount is recorded upon audit. However, interest and potential penalties related to permanent and timing differences are

[3] Tax credits are a common example. Permanent differences also include income that will be recognized for financial reporting purposes but not for income tax purposes such as municipal bond interest.

often reported in cushion during our sample period.[4] If a firm finds that it has not recorded adequate cushion, it is required to book current tax expense to increase the contingent tax liability to the appropriate level.

Under SFAS 109, the tax expense computation (the current tax expense plus the deferred tax expense) results from managements' analysis of the change in the income taxes payable (refundable) account and the change in deferred taxes. The deferred portion of the expense is the change in the net deferred tax assets (liabilities) including any change to the valuation allowance. Since cushion is recorded through current tax expense, we focus our reconciliation on the current expense.[5] Firms report current tax expense, cash paid (refund received) for taxes and their income taxes payable account in their financial statements.[6]

One additional reconciling item is the tax benefit from the exercise of stock options. During our sample period, firms were not required to record any compensation expense related to out-of-the-money stock option grants. However, for income tax purposes, firms receive a compensation deduction upon an employee's option exercise for the difference between the exercise and strike price. Since this deduction results in a de facto tax payment, we extrapolate the tax benefit using ExecuComp data.[7] In addition, we recognize that the tax benefit from stock options cannot exceed the current tax provision. Therefore, we set the tax benefit from stock options to be zero when the current tax provision is less than zero. Any

[4] Recent FIN48 guidance requires that firms record any interest assessed as interest expense with a corresponding adjustment to interest payable (rather than the tax cushion).
[5] We will not capture any cushion incorrectly recorded through firms' deferred tax accounts.
[6] Gleason and Mills (2002) estimate the level of cushion attributable to federal income taxes using private IRS data. The authors compare the total taxes paid on the Form 1120 income tax for all open audit years to the total federal current tax expense (Compustat item #63) for the same period. Although this measure suffers from less measurement error in terms of the amount paid for U.S. taxes, it does not represent the firm's global tax position. In addition, the tax benefit from stock options was not removed from federal current tax expense therefore upwardly biasing the measure of tax cushion. Note that Gleason and Mills (2006) adjusts the cushion measure for the tax benefit of stock options.
[7] Appendix I discusses how we measure the tax benefit of stock options. The measure that we incorporate in our analysis is ExTB1.

"limited" tax benefit from options is carried over to be considered for use in subsequent periods.[8]

Our main measure of tax cushion is *ΔCushion* and is calculated as follows:

ΔCushion =(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets

where

Cur_Prov = the current portion of the tax expense (total tax expense (#16) less deferred tax expense (#50))

Cash Paid for Taxes = cash paid for taxes from the SOCF (#317)

Tax Benefit = the estimated tax benefit from stock options using ExecuComp data. We multiply the firm's effective tax rate times the value from exercised options (options exercised times the compensatory element per an option) as determined from ExecuComp. Options exercised in the current period are assumed to be the total options granted to all employees in the current period (number of options granted to executives/percentage of total options granted to executives). The value received per an option (and hence the compensatory element) is the average of that received across all executives exercising options during the year (value received from option exercises/options exercised). If *Cur_Prov* < 0, then 0.

ChITP = change in income taxes payable from the balance sheet (#71 + #161)

Lagged Total Assets = prior year's ending total asset balance (#6).

Note that a positive amount of *ΔCushion* represents a current period decrease in earnings (i.e., an increase in tax expense). See Figure 2 for an example of the estimation of cushion. In addition to our primary measure, *ΔCushion,* we also use several other proxies of cushion. First, we estimate *ΔCushion_socf*, by replacing the change in the income taxes payable account from the balance sheet with the change in income taxes paid reported on the statement of cash flows (#305). Second, we assume that the tax benefit from stock options is zero for all firm year observations, yielding *ΔCushion_all*. Finally, we estimate

[8] This limit impacts 8% of our observations.

ΔCushion_atb and *ΔCushion_atb2,* by replacing the extrapolated stock option tax benefit from ExecuComp with the actual tax benefit (*TAX BENEFIT* from Appendix I) from stock options reported on the statement of cash flows in the measures of *ΔCushion* and *ΔCushion_socf*, respectively.

Note that there are several limitations to the above methodology. First, merger and acquisition activity confounds our computation because the change in the income taxes payable account includes purchase related adjustments. In order to mitigate the concern that *ΔCushion* is biased by purchase accounting, we eliminate any firm year observation in which the absolute value of the change in goodwill was greater than 5% (Richardson et al. 2006). Although *ΔCushion_socf*, does not suffer as much from this issue (e.g., the change in the income taxes payable account from the statement of cash flows is adjusted for purchase accounting), we lose approximately one-third of our sample because the Compustat data item is often missing (#305).

Second, some firms choose to include non-income taxes in the current taxes payable account. Using the Compustat footnote code related to income taxes payable (AFTNT #17), we delete any observations where the current liability for taxes combines income and other taxes.[9] Third, extraordinary items and discontinued operations are reported net of income taxes below total income tax expense on the income statement. To the extent that these items generate current income tax expense, they lead to measurement error in *ΔCushion*. The most common extraordinary item is cumulative accounting methods changes. Since, the taxes related to accounting method changes are timing differences, this category of extraordinary items has no impact on our cushion measure. Discontinued operations (#66), however,

[9] See http://www.ctj.org/pdf/taxon083006.pdf for a discussion suggesting that firms intentionally combine income taxes with non-income taxes in order to obfuscate their actual income tax expense.

represent both current and deferred income taxes. If the absolute value of firms' discontinued operations are in excess of 5% of income before extraordinary items and discontinued operations (#18), we delete that firm year observation from our sample. Our final sample is comprised of 1,446 firms representing 6,343 firm year observations spanning 1999 to 2004.

A final caveat to our measure of cushion, is that it represents a net change in the contingent liability account. It includes both the current accrual for additional aggressive tax positions and the release of cushion attributable to any settlements or prevailing positions. If firms are accruing an amount that is equal to their settlement for tax contingencies in the period that they settle with the tax authorities (i.e., pay the deficiency), our estimate of the change in the cushion would be zero.

2.2. Univariates

Table 1 reports the univariate statistics on each of our estimates of the change in cushion. The mean (median) change in cushion in our sample is a decrease of 0.1% (0%) of assets suggesting that in most periods firms do not accrue more cushion than is necessary to meet their current tax assessments. We also plot the distribution of change in cushion in Figure 1. Panel A of Figure 1 shows that for the 50th percentile of our sample, both mean and median change in both scaled and unscaled cushion is zero. Likewise, the histogram provided in panel B of Figure 1 documents that changes in cushion are clustered around zero with zero change in cushion being the most common. However, the impact of the change in cushion can be considerable as evidenced by the impact of the cushion on the mean firm's ETR – an decrease of 4.3 %. Since mean values of *ΔCushion_socf* and *ΔCushion_atb2* are lower than *ΔCushion* and *ΔCushion_atb*, respectively, the use of the change in the income tax payable

account instead of the change from the statement of cash flows appears to lead to a slight overstatement of the change in cushion. *ΔCushion_all* has the highest mean (median) change in cushion relative to the other cushion measures (0.5% (0.1%) of assets). Since *ΔCushion_all* assumes that the tax benefit from stock options is zero, it should be larger than our other measures since the tax benefit is truncated at zero. *ΔCushion* is our primary measure used in our later tests since it incorporates the tax benefit from stock options while maximizing our sample size. Although we recognize that there is measurement error in *ΔCushion*, we are unaware of any systematic bias in the measure.

3. Tax aggressiveness

There is a debate regarding the value of corporate tax aggressiveness. As stated in Hanlon, Mills and Slemrod (2005) "the windfall gains to those companies that successfully play the tax lottery probably accrue to the shareholders in their role as residual claimants." Although it potentially behooves companies to minimize their tax expense, firms must balance the current decrease in taxes with future shocks to earnings if their tax positions are subsequently disallowed.[10] Under GAAP, firms are required to create a contingency once a loss is probable. Although this probability assessment is subjective, all else equal, a firm who is more aggressive for tax purposes should have a larger tax contingency. Hence, it is an empirical question whether firms' changes in cushion can capture the extent of firms aggressive tax planning.

[10] Concurrent research, Hanlon and Slemrod (2006), investigates the market's response to the announcement of firm involvement in sheltering activity to infer whether sheltering is value enhancing. Results suggest that the market values sheltering activities undertaken by well-governed firms.

We are unaware of any papers that specifically attempt to measure whether firms' contingent liability for income taxes is a proxy for tax aggressiveness.[11] However, we rely on the literature measuring tax avoidance to develop the following model:

$$Abs\_\Delta Cushion = \alpha + \beta_1 CashTax/PTI + \beta_2 FTR + \beta_3 USTR - FTR + \beta_4 ETR + \beta_5 BS\_Deferreds + \beta_6 BTD + \beta_7 Size + \varepsilon$$

where

Abs_ΔCushion = absolute value of *ΔCushion.*

ΔCushion = *(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets* where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Taxbenefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).

CashTax/PTI = income taxes paid in the current period (including the de-facto payment attributable to stock options) as a portion of pre-tax income ((#317+*Tax Benefit)*/#170)

FTR = foreign effective tax rate (#64 divided by #273)

USTR = U.S. effective tax rate (#63 divided by #272)

USTR-FTR = If *FTR* > 0, then *USTR-FTR*; else zero.

ETR = effective tax rate (#16 divided by #170)

BS_Deferreds = Cumulative deferred tax expense (#50) from 1973 to period t-1 scaled by lagged assets (#6) times minus one.

BTD = Estimated current year book-tax differences (#170 – (#16-#50)/0.35) scaled by lagged assets (#6)

Size = natural log of total assets (#6)

[11] Tangentially related, Mills and Gleason (2006) test whether firms have less bias in their tax contingency when the audit and the tax work are done by the same accounting firm. Results suggest improved estimation of cushion (i.e., a closer association between the actual IRS assessment and the Gleason and Mills (2002) measure of cushion) when the auditor does the tax work, too.

To capture variation in firms' cushion recording behavior, we use the absolute value of *ΔCushion* (*Abs_ΔCushion*) in our tests of tax aggressiveness. Large increases and decreases in cushion will result in large changes in the absolute value of the change in cushion. Large decreases in cushion are related to prior tax aggressiveness (i.e., release of previously accrued cushion from favorable settlements with the tax authorities), whereas large increases in cushion represent current tax aggressiveness (i.e., accruals related to current tax planning).

Our primary proxy for tax aggressiveness is the firm's effective cash tax rate. Dyreng et al. (2005) address the limits of GAAP reported tax expense and develop a measure representing a firm's cash effective tax rate (cash paid for taxes (#317) to pre-tax income (#170)) to measure long-term corporate tax avoidance. We make one innovation to their metric by including the tax benefit from stock options in the numerator as a de-facto tax payment (*CashTax/PTI*).[12] Ceteris paribus, firms that pay a lower proportion of their pre-tax income in taxes are more aggressive tax planners.

We include a number of variables to control for reasons why firms would face lower tax burdens. First, we include a measure of the firm's foreign tax burden – its foreign effective tax rate ("*FTR*"). *FTR* captures two dimensions of a firm's international tax position. First, multinational operations can lower a firm's effective tax rate without necessarily being egregious. Merely operating a manufacturing facility in Ireland, where a firm faces a statutory tax rate of 12.5%, is not indicative of an aggressive tax stance. On the other hand, multinational tax planning is a primary method for minimizing a firm's global tax

[12] Dyreng et al (2005) recognize that stock option intensity is not indicative of tax avoidance and include the Black Scholes value of granted stock options in their multivariate analysis.

burden.[13] If firms are shifting income overseas in order to lower the global tax burden, we anticipate a positive relation between *FTR* and cushion activity in the presence of aggressive multinational tax planning (Rego 2003). However, if all firms have some foreign tax burden, then we would expect that firms who face lower foreign tax rates due to international tax planning to have more cushion activity suggesting a negative relation *FTR* and *Abs_ΔCushion*. In order to differentiate between these two stories, we include the difference between a firm's U.S. effective tax rate ("*USTR*") and its *FTR* ("*USTR-FTR"*) as a proxy of the benefit that firms receive by transferring profits overseas. We expect that firms who have higher U.S. tax burdens, relative to their foreign tax burdens, have more to gain by shifting profits overseas. All else equal, a positive relation between *USTR-FTR* suggests multinational tax planning.

Finally, we include the firm's GAAP reported effective tax rate ("*ETR*"). One the one hand, if *ETR* captures aggressive tax planning, we expect a negative relation between *ETR* and *Abs_ΔCushion* (i.e., tax-shelters creating permanent differences lead to lower *ETR*s). On the other hand, if firms aggressively pursue tax planning utilizing deferral techniques, then the *ETR* may capture changes in cushion related to the timing differences, leading to a positive relation. Lastly, *ETR* could be capturing the fact that profitable firms have greater cushion activity.

Lastly, we consider the impact of deferred taxes on *Abs_ΔCushion*. Mills (1998) documents that firms with large book/tax differences have greater IRS adjustments upon audit. Her results are consistent with deferred tax liabilities representing some notion of aggressiveness related to timing differences. We are curious as to whether firms who are

[13] Consider Glaxo's $3.4 billion settlement with the IRS in September, 2006. Although an U.K. firm, the issue at hand concerned intangible related transfer pricing.

aggressive in reporting their deferred taxes are also aggressive in reporting their permanent differences. Ex ante, it isn't clear whether timing and permanent tax planning are substitutes or complements.

Since Compustat does not collect the firm's total net deferred taxes reported on the balance sheet, we estimate cumulative timing differences (*BS_Deferreds*) as the inverse of the sum of deferred tax expense (#50) from 1973 until period t-1.[14] If our sample firms are using aggressive deferral techniques resulting in book tax differences, we expect a negative relation between changes in the tax cushion and deferred taxes (i.e., the greater the deferred tax liability the lower the firm's taxable income relative to its financial reporting income). This relation would hold if firms are accruing interest and penalties related to aggressive timing differences in cushion. In addition, firms that were not aggressive in the past could have recently become more aggressive tax planners. Therefore, we also include the book tax differences (*BTD*) in the current year in our model. We define *BTD* as the difference between pre-tax income (#170) less the current expense for income taxes (#16-#50) grossed up by the maximum statutory tax rate scaled by lagged total assets (#6) (Dyreng et al. 2005, Mills 1998). A positive relation between *BTD* and *ΔCushion* would suggest that firms are aggressive in terms of both timing and permanent differences (i.e., these types of tax planning are complements). A positive (negative) relation between *Abs_ΔCushion* and *BS_Deferreds* (*BTD*) is consistent with timing and permanent difference tax planning serving as substitutes.

[14] Consider the deferred tax assets/liabilities disclosed in IBM's 2005 financial statements. The tax footnote reports that overall IBM has a $1.554 billion net deferred tax asset. However, Compustat data35, Deferred Taxes and Investment Tax Credit, reports a positive $1.879 billion. A detailed analysis shows that the $1.879 billion reported by Compustat is actually the long-term component of the deferred tax liability which is reported as part of other liabilities. Compustat captures neither the $1.765 in current assets nor the $1.832 in long-term assets.

Finally, we include *Size* (natural log of assets) as larger firms have greater economies of scale in terms of tax planning (Rego 2003).

3.1. Analysis

Table 2 presents the univariate statistics on our measures of tax aggressiveness. First, we present information on the absolute value of our change in cushion metric (*Abs_ΔCushion*). The mean *Abs_ΔCushion* is 1% of total assets suggesting that our sample firms have economically meaningful cushion activity. Our sample firms have fairly sizable tax burdens as evidenced by the high *ETR* (29.7%) and *CashTax/PTI* (22%). Overall, our sample carries a deferred tax liability (0.5% of assets) and faces negative *BTD*s suggesting that firms' current period taxable income exceeds its financial reporting income. The univariate correlations show that cushion activity is positively related to *BS_Deferreds*. This implies that firms with greater levels of temporary differences record less cushion.

Table 3 reports the results of the multiple regression analysis. Consistent with cushion measuring aggressive tax planning, *Abs_ΔCushion* is negatively associated with *CashTax/PTI*. This suggests that firms who pay less tax on average have more year-to-year changes in their cushion account. Although not indicative of abusive tax sheltering, this result does imply that firms have more cushion activity when they pay less in taxes. Since cushion is only required when firms face potential tax deficiencies (i.e., taken an aggressive position), this clearly suggests that *CashTax/PTI* is associated with tax planning.

The *FTR* and the difference between a firm's *USTR* and *FTR* are positively associated with *Abs_ΔCushion*. This result suggests cross-border tax minimization by sample firms'. *ETR* is positively associated with our measure *Abs_ΔCushion.* Since we are controlling for

current timing differences in our model, we infer that firms who record more GAAP tax expense undertake more aggressive tax planning. This suggests that one reason we may not find the negative relation between *ETR* and *Abs_ΔCushion* is because we cannot observe what the firm's tax rate would have been in the absence of aggressive tax planning.

We find a positive association between *Abs_ΔCushion* and *BS_Deferreds*. This is consistent with the Gleason and Mills (2002) finding that firms with greater deferred tax liabilities record less in cushion suggesting that firms use permanent and deferred tax planning techniques as substitutes rather than complements. However, the association between *Abs_ΔCushion* and *BTD* is insignificant. Finally, we find that *Size* is inversely related to *Abs_ΔCushion.* Since larger firms are under greater scrutiny by the tax authorities, they either may be apprehensive to record cushion that leaves an audit road-map or they may choose to use more deferral techniques in their tax planning. Note that our results and inferences are robust to each of our four specifications, except for those on *CashTax/PTI* and *FTR,* which become insignificant in model 3.[15]

4. Income smoothing

Our work is related to three categories of papers that investigate the relation between income taxes and earnings management. The first series of related work address the relation between changes in the valuation allowance and earnings manipulation. Although earlier papers failed to find evidence of income smoothing using the valuation allowance (Kumar and Visvanathan 2003, Bauman et al. 2001 and Visvanathan 1998, Miller and Skinner 1998),

[15] When we assume that missing observations for the change in income taxes payable from the SOCF (#305) is zero, we find results qualitatively similar to those described in columns 1, 2 and 4.

more recent work finds an association between changes in the valuation allowance the meeting analysts' consensus forecasts (Frank and Rego 2006, Schrand and Wong 2003).

The next related set of papers study whether changes in firms' effective tax rates are correlated with meeting analysts' forecasts (Schmidt 2006, Dhaliwal et al. 2004 and Myers et al. forthcoming). These papers find evidence consistent with firms managing total tax expense around quarterly earnings targets. The final series of papers investigates whether deferred taxes serve as an indicator of earnings management (e.g., Phillips, Pincus, and Rego 2003; Badertscher, Phillips, Pincus and Rego 2006).

Although prior literature has found some evidence regarding the use of tax accounts in order to manage earnings towards analysts' forecasts, none has found an association between the use of tax accounts and incentives to smooth earnings. Our paper aims to fill this gap by relying on our measure of tax cushion, *Abs_ΔCushion*, an account not as transparent as the valuation allowance. The main prediction in this section is that firms use tax cushion in order to smooth earnings.

We develop a regression model based on the findings of prior income smoothing literature. Our first explanatory variable is long-term debt scaled by total assets ("*LTD*"). This variable proxies for debt covenants, some of which are written as a function of net income. [16] The inclusion of this variable is motivated by Smith and Stulz's (1985) finding that contracts that are written as a function of accounting earnings will provide incentives to management to undertake hedging activities to smooth earnings. Therefore, we expect firms with high leverage to have an incentive to smooth earnings and hence utilize the tax cushion.

[16] For example, see Sweeney (1994) for various accounting-based covenants used in debt contracts, including net income.

Our next explanatory variable is the percentage of total compensation that is granted in form of bonus pay ("*Bonus_IP*"). Lambert (1984), Moses (1987), and Gaver, Gaver, and Austin (1995) show that compensation contracts, more specifically the bonus component of compensation, provide an incentive to smooth earnings. Therefore, we expect that firms that grant a larger amount of bonus as a percentage of total compensation to use the tax cushion to smooth earnings. To evaluate empirically whether option grants also provide an incentive to smooth earnings, we include the proportion of total compensation granted in the form of stock options ("*Option_IP*").

The remaining two explanatory variables, *R&D* and *Labor* are included to capture the implicit claims of firms. Trueman and Titman (1988) argue that a firm would have incentives to smooth earnings if volatility of earnings has a negative effect on the future claimants of the firm. If that is the case, management, through income smoothing, could affect the claimants' evaluation of the volatility of earnings. Hence, we expect firms with large implicit claims to make use of tax cushion to smooth earnings. We rely on Bowen, DuCharme, and Shores (1995) to measure the implicit claims. We use their labor intensity variable to capture the claims by the employees. We also use the *R&D* variable to capture the claims by the customers, since firms with higher R&D are those that generate more unique products. It is difficult for customers of such products to find a substitute for servicing their products, thereby increasing the implicit claims of the customers. As these authors point out, *R&D* can also capture the claims by the employees, since employees at R&D intensive firms are likely to have job-specific skills.

The resulting regression model is as follows and is estimated with OLS using pooled data.

$$Abs\_\Delta Cushion = \alpha + \beta_1 LTD + \beta_2 Bonus\_IP + \beta_3 Option\_IP + \beta_4 R\&D + \beta_5 Labor + \varepsilon$$

where

Abs_ΔCushion = Absolute value of change in tax cushion, where tax cushion is as defined above.

LTD = Long-term debt (#9 divided by lagged #6)

Bonus_IP = Cash incentive pay, calculated as bonus (BONUS) divided by total compensation (TDC1), obtained from ExecuComp.

Option_IP= Option incentive pay, calculated as the Black Scholes value of option grants (BLK_VALU) divided by total compensation (TDC1), obtained from ExecuComp.

R&D = Research and development expense (#46), scaled by lagged assets, proxy for implicit claims by customers and employees.

Labor = Labor intensity, measured as 1 minus gross property, plant, and equipment (#7) divided by lagged total assets, proxy for implicit claims by employees.

We expect our dependent variable, *Abs_ΔCushion*, to be positively associated with the incentives to smooth earnings.

We commence our analyses by examining univariate correlations among our variables of interest. As shown in Table 4, Panel B, pretax income is positively correlated (0.059) with the absolute value of change in the tax cushion (p-value 0.01). All else equal, this is consistent with firms recording (releasing) the tax contingency when earnings are high (low). For example, as income before taxes is increasing, firms increase their tax contingency, only to release it on a rainy day. The absolute value of the change in tax cushion is positively correlated with *R&D* (0.137, p-value 0.01), and *Labor* (0.091, p-value 0.01), and negatively correlated with *LTD* (-.123, p-value 0.01). These correlations provide preliminary evidence that our cushion measures vary cross-sectionally with some of the income smoothing incentives as expected. Finally, the correlation between forward-looking discretionary accruals and absolute value of tax cushion is positive and significant (0.097, p-value 0.01),

whereas the correlation between lagged or modified-Jones) discretionary accruals and absolute value of cushion is insignificant. Therefore, there is only weak evidence that when firms smooth earnings via discretionary accruals, they also utilize the tax cushion.

The results of the estimation of different versions of the above regression model are presented in Table 5. The reported t-statistics are based on heteroscedasticity-corrected standard errors that are clustered by firm. Our first model uses *Abs_*Δ*Cushion* as the dependent variable and does not include any industry controls. We find that the two proxies of implicit claims, *R&D* and *Labor*, are positively associated with *Abs_*Δ*Cushion* (0.021 and 0.004, t-statistics 3.96 and 3.03, respectively). Contrary to our expectations, *LTD* is negatively associated with *Abs_*Δ*Cushion* (-0.007, t-statistic -6.7). This may indicate that equity financing provides stronger incentives to smooth earnings than debt financing. *Bonus_IP* and *Option_IP* are insignificant.

Our second model uses the same dependent variable, *Abs_*Δ*Cushion*, and the same set of independent variables. In this model, we also include industry controls. The results are consistent with the results of the first model. *LTD* is negatively, whereas *R&D*, and *Labor* are positively associated with *Abs_*Δ*Cushion*. *Bonus_IP* and *Option_*are still insignificant in this model.

Our third model uses *Abs_*Δ*Cushion* as the dependent variable and includes the same set of income smoothing incentive variables as the previous model and incorporates industry controls. We further incorporate the explanatory variables for tax aggressiveness. In a sense, this model controls for the primary determinants of the need to record a tax contingency (i.e. tax aggressiveness), and then examines whether the change in the tax cushion above and beyond tax aggressiveness reasons are related to income smoothing incentives. The results on

tax aggressiveness variables are consistent with those reported in Table 3. *FTR, USTR-FTR*, *ETR* and *BS_Deferreds* are positively associated while *Abs_*Δ*Cushion*, CashTax*/PTI* and *Size* are negatively associated with *Abs_*Δ*Cushion,* whereas *BTD* is insignificant. Including the tax aggressiveness variables does not alter the results for the income smoothing incentives: *R&D*, and *Labor* are positively and *LTD* is negatively associated with *Abs_*Δ*Cushion*. As before, *Option_IP* and *Bonus_IP* are not significantly associated with *Abs_*Δ*Cushion*.

Our final model is the same as our third model except that it uses *Abs_*Δ*Cushion_all* as the dependent variable. By ignoring the effect of the tax benefit of options on the computation of the cushion, we are able to expand our sample to 9,638 firm-year observations. Among the income smoothing incentive variables, *R&D*, and *Labor* are positively, *LTD* is negatively associated with *Abs_*Δ*Cushion_all.* The results on the tax aggressiveness variables are mostly consistent with the results of our third model. *FTR*, *USTR-FTR, ETR* and *BS_Deferreds* are positively associated with *Abs_*Δ*Cushion_all*, whereas *Size* and *CashTax/PTI* are negatively associated with *Abs_*Δ*Cushion_all*. *BTD* becomes positive and significant.

Overall, our findings suggest that, income smoothing incentives play some role in the use of tax cushion incremental to tax aggressiveness reasons to use the tax cushion. Out of the income smoothing incentives we considered, incentives provided by implicit claims of customers and labor are associated with the cushion activity in the predicted direction. Opposite to our expectation, *LTD* is negatively associated with the cushion activity, potentially suggesting that it is the equity financing, not the covenants that are provided by debt financing, that provide the incentives to smooth earnings.

5. Cushion disclosure

Gleason and Mills (2002) investigate whether firms disclose their tax contingency. Studying the proposed adjustments for firms under audit, the authors find that only about 25% of their sample of 100 firms disclosed the existence of a tax contingency. Since their results suggest that firms are hesitant/resistant to disclose their tax cushion, we believe that this is prima facie evidence that tax cushion measures aggressive tax positions and/or is used to manipulate earnings. We investigated the disclosure behavior of two samples of firms. The first represents a subsample of the 1,446 firms included in our analyses above. The second is a broad sample identified using a text search.

5.1. Our subsample

Our subsample is composed of two components: a random selection of 25 firms (Random sample) and a random selection of 25 firms with large changes in their cushion measure (Extreme sample). We then reviewed the 10-Ks for these 50 firms for 1999 to 2004 (our sample period) resulting in 256 firm year observations. Of the 114 firm year observations from the Random sample, only 11 (9.6%) referred (or alluded) to the existence of a tax contingency. Of these observations, eight provided some information regarding the direction of the change in the tax contingency on the tax provision. Our estimated change in the tax cushion was in the same direction for six of the observations. In the Extreme sample, 22 (15.5%) 10-Ks incorporated language suggesting the existence of a tax contingency. Twenty of these observations provided information regarding the direction of the change in the cushion. Our estimated change in the cushion was in the same direction for 13 of these observations.

The fact that the Extreme sample discloses more often than the Random sample suggests that our measure of the change in tax cushion is capturing the activity it is intended to measure. However, we are somewhat disconcerted that the direction of our measure seems to vary substantially from the direction of the disclosed change in cushion. Upon further review, we find that 79% of the disclosures mention an income increasing change to cushion. For firm year observations where we estimate a different direction in the change in cushion relative to the disclosure, seven represent observations where we find the change to be income decreasing but the firms reports an income increasing change. These results suggest that firms are somewhat opportunistic in their reporting. Although preliminary, these findings are consistent with Schrand and Walther (2000) who find that firms strategically select to highlight good news rather than bad news.

5.2. Broad Sample

We searched 10-Ks between 1993 and 2005 for firm disclosures of tax contingencies using the search term (TAX CONTING!) and form (10-k) and filing-date > 1992. Ultimately, the search term identified 5,259 firm year observations. We focus our analysis on the 1,033 firm year observations that had a Compustat identifier (GVKEY). Of these 1,033 observations, 532 disclosed only that they had a tax contingency. Another 192 firms provided some information regarding the change in their contingency. 41 firms disclosed the level of their tax contingency and 21 reported both the change and the level. The disclosures of the remaining 247 observations did not provide any conclusive evidence about whether or not the firm had a tax contingency.

Of the firm year observations that provide some quantitative data on the cushion, 197 firm year observations overlap with our sample. Of the 197, 58 have information regarding the change in their cushion account. An interesting pattern emerges in a review of the cushion disclosures. Of the observations that disclose a change, 74.1% represent income increasing changes in the cushion measure. Whereas, we find that $\Delta Cushion$ represents income increasing adjustments for only 44.8% of the firm year observations. Overall, 47.8% of our sample observations represent income increasing changes. A similar pattern emerges in the sample of all 1,033 disclosures. Of the 213 firms (192 who disclose only the change and the 21 who disclose both the change and the level) that disclose the change in their tax contingency, 168 (78.9%) disclose income-increasing adjustments. Once again, our results suggest that firms are somewhat opportunistic in their reporting.

To compare our measure of the change in the cushion, we correlate our measure ($\Delta Cushion$) with the disclosed amount. Untabulated results indicate that the correlation between our measure and the disclosed measure is only 40%. For the sample of firms that disclosed information regarding the change in their cushion account (58 firms), the mean $\Delta Cushion$ is 0.900% of total assets, whereas the mean disclosed change is -1.013% of total assets. However, consistent with some asymmetry in reporting, for the 15 firms that disclose an income decreasing change to their tax cushion, we estimate that the change in cushion was 0.825% of total assets, whereas their reported amount is 0.887% of total assets.

Finally, consider the following detailed analysis of Microsoft's tax cushion. Figure 3 outlines our estimate of the change in Microsoft's tax contingency as well as Microsoft's self-reported change. In Panel A note that each of Microsoft's disclosures reflects an increase in bottom line earnings. Panel B presents our estimate of the change in the tax contingency

(column 5) along with Microsoft's disclosed amount (column 7). Fiscal year ending 6/30/2005 is of particular interest. In this period, we estimate a $954 million increase in the tax cushion (i.e., income decreasing adjustments). However, Microsoft discloses that their net income was increased by $776 million related to a change in tax contingency. Yet, a closer inspection reveals that Microsoft's change in their tax contingency was an increase of $1,038 million (i.e., income decreasing) which is far closer to our estimated change of $954 million versus the disclosed -$776 million. In the financial statements for the period ended 6/30/2006 Microsoft made no mention of any change in the tax contingency account, but an analysis of the change of the reported liability suggests a $1,128 million increase (decrease) in the tax contingency (net income). We estimate an increase in the contingency of $1,028 million. The difference between our estimate and the reported amount only constitutes 0.1% of total assets.

In our sample period, disclosures, like Microsoft's are rare. However, the asymmetry in terms of the cushion disclosure implies a need for some conformity in the reporting of changes in tax contingencies. We anticipate that FIN48 should help mitigate this reporting disparity/bias.

6. Conclusion

In this paper we study firms' tax contingencies (cushion). Our paper extends Gleason and Mills (2002) by providing a measure of tax cushion based on publicly available data using reconciling amounts recorded in current tax expense that encompasses the global reporting position of the firm.

Using this measure of tax cushion, we first investigate whether cushion is suggestive of aggressive tax behavior. We find that changes in cushion are associated with the ratio of cash taxes paid to pre-tax income, consistent with tax avoidance (Dyreng, Hanlon and Maydew 2005). In addition, our evidence suggests tax planning using permanent differences is complementary to tax planning using timing differences.

We next study whether firms use cushion in order to smooth earnings. After controlling for tax aggressiveness related cushion activity, we find that incentives to smooth earnings explain some of the cross-sectional variation in the change in cushion. Specifically, tax cushion is used to smooth earnings by firms with larger option grants as a percentage of total compensation and with larger implicit stakeholder claims from customers and labor. We also provide some evidence that cushion is positively correlated with one measure of discretionary accruals, suggesting that they are used as complements.

Finally, we investigate some of our sample firms' disclosures of tax cushion. Consistent with Gleason and Mills (2002), we find that disclosure of tax cushion is rare. Of the firms that disclose the current period change in cushion in their 10-Ks, approximately 75% report an income increasing amount. Interestingly, the disclosure of the positive impact on income may not be representative of the cumulative change in the account suggesting that firms opportunistically disclose their tax position and attempt to mask their contingent tax liability.

Our results are subject to some limitations. First, because of data limitations, our sample covers only 679 firms over 1997-2004 period, hence our results may not be generalizable to other firms and sample periods. Our cushion measure hinges on estimates of the tax benefits of the options, and, to the extent that these estimates are biased, our results

should be interpreted with caution. However, our cushion measure is correlated significantly with a measure of tax cushion that incorporates the actual tax benefits in a smaller sample for which we were able to obtain the actual tax benefits. Needless to say, the quality of our results on tax aggressiveness and income smoothing are contingent on the quality of the tax aggressiveness and income smoothing proxies we use in our analyses.

Despite these limitations, our paper makes several contributions to the literature. First, we provide a measure of tax cushion across a broad sample of firms using publicly available data. Unlike prior research that focuses on federal taxes, our measure represents the tax position of the entire entity. Second, we show that our measure may be used as a proxy for tax aggressiveness. Third, we also find some evidence that the cushion activity is explained by incentives to smooth earnings over and beyond tax aggressiveness proxies. Finally, we provide additional evidence that firms asymmetrically disclose good news and contribute to the literature that documents that firms strategically highlight non-recurring income components to highlight good news (Schrand and Walther 2000). Overall, our findings support the need for FIN48, which was adopted to improve conformity in the reporting of these contingencies.

Appendix I – Estimating the Tax Benefit of Stock Options

By detailing how the compensation expense generated from stock options is omitted from the tax accrual, Hanlon and Shevlin (2002) describe why the tax expense does not represent the true economics of a firm's tax situation. Since the tax benefit for options is recorded through equity, options do not affect the income statement and therefore have largely been ignored in the earnings smoothing studies. However, the option benefit is critical to studies that investigate smoothing through the valuation allowance and tax cushion.

Until 2001 there was no conformity in the reporting of the tax benefit. As such, a firm could disclose it either on its statement of cash flows, statement of stockholder's equity or in its tax footnote. For years beginning in 2001, a firm must report any material tax benefit from stock options as an increase to operating cash flows. Currently, researchers who are interested in the tax benefit from stock options must hand collect the information from the statement of cash flows. Since researchers have documented that grants of new options and exercises of existing options are highly correlated, we attempt to determine whether we can use information gathered from 10-Ks and ExecuComp data to estimate the benefit for large sample studies.

Methodology

We have stock option exercises, weighted average exercise price, weighted average grant price and the tax benefit realized from the exercise of stock options for seven years for all firms in the S&P 500. We supplemented this data with ExecuComp data on the option grant and exercises of the five officers disclosed in the proxy statement. In general, firms are allowed a compensation deduction on the exercise of non-qualified stock options of the difference between the price at exercise and the strike price.

Various Measures

First, we compared the actual tax benefit reported on the financial statements (TAX BENEFIT, found either in the tax footnote, on the statement of cash flows or on the statement of stock holders equity) to the estimate of the tax benefit using the information from the 10-K. We then developed two measures – estimated tax benefit (ETB) and statutory estimated tax benefit (SETB) – that use information available in the option footnote.

ETB – Estimated tax benefit - The effective tax rate times the value from exercised options. The value from exercised options in the total options exercised times the difference between the current year's weighted average grant price on granted options and the weighted average exercise price on exercised options as reported in the equity compensation footnote in the 10-K.

SETB – Statutory estimated tax benefit – The statutory tax rate times the value from exercised options. The value from exercised options in the total options exercised times the difference between the current year's weighted average grant price on granted options and the weighted average exercise price on exercised options as reported in the equity compensation footnote in the 10-K.

Second, we compared the actual tax benefit to several measures using ExecuComp data. The issue with using ExecuComp is that we don't know how many shares employees exercise. Although the proportion of executive grants to all employee grants is reported, only total options exercises by executives (including the gain inherent in the exercises) are reported. Therefore, we used a number of techniques to proxy for shares exercised, the weighted average exercise price (i.e., the strike price) and the weighted average price at exercise. Finally, if we find that the strike price is greater than the price at exercise (i.e., the stock has depreciated over the vesting period), we carryover the vested options to subsequent periods. When the estimated exercise price exceeds the strike price, we assume that the options are exercised. Options are assumed to have a 10-year life and a five-year vesting period.

Below, we describe the various techniques used to estimate the tax benefit of stock options using only ExecuComp data.

ExTB1 – Extrapolated Tax Benefit 1 is the firm's statutory tax rate times the value from exercised options (options exercised times the compensatory element per an option) as determined from ExecuComp. Options exercised in the current period are assumed to be the total options granted to all employees in the current period (number of options granted to executives/percentage of total options granted to executives). The value received per an option (and hence the compensatory element) is the average of that received across all executives exercising options during the year (value received from option exercises/options exercised).

ExTB2 – Extrapolated Tax Benefit 2 is the firm's statutory tax rate times the value from exercised options (options exercised times the compensatory element per an option) as determined from ExecuComp. Options exercised in the current period are assumed to be the total options granted to all employees in the current period (number of options granted to executives/percentage of total options granted to executives). The value received per an option (and hence the compensatory element) is the spread between the weighted average price of the stock in the current year (estimated using CRSP) less the average exercise price of executive options exercised in the current period. The average exercise price of executive options exercised is estimated by taking the difference between the exercise price of options granted to executives during the year less the value received per exercised option (value received from option exercises/options exercised).

ExTB3 - Extrapolated Tax Benefit 3 is the firm's statutory tax rate times the value from exercised options (options exercised times the compensatory element per an option) as determined from ExecuComp. Options exercised are assumed to be the total options granted to all employees (number of options granted to executives/percentage of total options granted to executives). The value received per an option (and hence the compensatory element) is the spread between the weighted average price of the stock in the current year (estimated using CRSP) less the weighted average stock price over the prior three years (estimated using CRSP).

ExTB4 - Extrapolated Tax Benefit 4 is the firm's statutory tax rate times the value from exercised options (options exercised times the compensatory element per an option) as determined from ExecuComp. Options exercised in the current period are assumed to be the total options granted to all employees (number of options granted to executives/percentage of total options granted to executives) five years prior to the current period. The value received per an option (and hence the compensatory element) is the spread between the weighted average price of the stock in the current year (estimated using CRSP) less the average exercise price of stock options granted to executives fifth preceding year.

ExTB5 - Extrapolated Tax Benefit 5 is the firm's statutory tax rate times the value from exercised options (options exercised times the compensatory element per an option) as determined from ExecuComp. Options exercised in the current period are assumed to be the average of options granted to all employees (number of options granted to executives/percentage of total options granted to executives) over the five preceding years. The value received per an option (and hence the compensatory element) is the spread between the average exercise price of options granted to executives in the current year less the weighted average exercise price of options granted to executives over the preceding five years.

ExTB6 – Extrapolated Tax Benefit 6 is the statutory tax rate times the value from exercised options (options exercised times the compensatory element per an option) as determined from ExecuComp. Options exercised in the current period are assumed to be the total options granted to all employees (number of options granted to executives/percentage of total options granted to executives) five years prior to the current period. The value received per an option (and hence the compensatory element) is the spread between the average exercise price of options granted to executives in the current year less the average exercise price of stock options granted to executives fifth preceding year.

Univariates

Ultimately, we compared the actual tax benefit (TAX BENEFIT) reported to each of our estimates of total tax (ETB, SETB, ExTB1-ExTB6). The table below outlines the means, medians and standard deviations for each of our nine measures:

	N	Mean	Median	Std Dev
TAX BENEFIT	1,136	54.39	15.27	160.10
ETB	1,136	60.73	19.77	150.95
SETB	1,136	57.34	17.16	159.57
ExTB1	1,136	54.75	12.96	182.35
ExTB2	1,136	43.20	7.12	153.88
ExTB3	1,136	112.39	36.23	257.65
ExTB4	1,136	63.62	15.70	193.71
ExTB5	1,136	47.64	10.47	161.35
ExTB6	1,136	119.50	42.21	262.39

Pearson Correlations (All correlations are significant at the <0.0001 level)

	ETB	SETB	ExTB1	ExTB2	ExTB3	ExTB4	ExTB5	ExTB6
TAX BENEFIT	0.916	0.914	0.801	0.759	0.822	0.638	0.611	0.709
ETB		0.987	0.905	0.867	0.868	0.691	0.680	0.716
SETB			0.895	0.864	0.878	0.691	0.677	0.734
ExTB1				0.975	0.896	0.738	0.719	0.713
ExTB2					0.868	0.701	0.706	0.676
ExTB3						0.667	0.634	0.829
ExTB4							0.972	0.886
ExTB5								0.851

The correlation between ETB and SETB is 98.7%. The correlation between ETB (SETB) and TAX BENEFIT is 91.6 (91.4)%. This suggests that the estimates of the stock option tax benefit using data found in the stock option footnote closely approximates the true tax benefit.[17] However, our goal was to find some methodology to estimate the tax benefit of a broad sample of firms using ExecuComp data. As such, we compared the measures of tax benefit and ETB and SETB to our extrapolated measures. ExTB1 and ExTB3 provide the highest correlations between the reported tax benefit, ETB and SETB. However, since ExTB1 appears to provide the closest mean and median to the tax benefit, ETB and SETB, we rely on this measure as our estimate of the cash tax benefit from stock option exercises.

[17] This assumes that the tax benefit reported in the financial statements is the true tax benefit. To the extent that the financial statement tax benefit is incorrect due to adjustments to goodwill and the valuation allowance (see Hanlon and Shevlin 2002), the tax benefits estimated using the stock option benefit may be a closer approximation of the true benefit.

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Table 1
Descriptive Statistics – Measure of Cushion
This table provides descriptive statistics on various cushion measures.

Variable Name	N	Mean	Q1	Median	Q3	Std. Dev.
ΔCushion	6343	0.001	-0.004	0.000	0.005	0.019
ΔCushion_socf	4753	0.000	-0.004	0.000	0.003	0.022
ΔCushion_all	13533	0.005	-0.001	0.001	0.008	0.022
ΔCushion_atb	1750	-0.002	-0.004	0.000	0.004	0.031
ΔCushion_atb2	1274	-0.005	-0.006	0.000	0.003	0.037

Variable Name	N	Mean	Q1	Median	Q3	Std. Dev.
ΔCushion	4326	0.002	-0.004	0.000	0.005	0.020
ΔCushion_socf	4326	0.001	-0.004	0.000	0.003	0.022
ΔCushion_atb	1171	-0.003	-0.005	0.000	0.004	0.036
ΔCushion_atb2	1171	-0.005	-0.006	0.000	0.003	0.038

Balanced:

Variable Name	N	Mean	Q1	Median	Q3	Std. Dev.
ΔCushion	6343	0.001	-0.004	0.000	0.005	0.019
ΔCushion_all	6343	0.006	-0.001	0.002	0.008	0.025
US_ΔCushion	6343	6.861	-3.369	0.000	5.151	146.092
US_ΔCushion_all	6343	17.711	-0.925	1.043	9.775	174.039
ETR	6343	0.297	0.223	0.342	0.382	0.179
Cur_Prov	6343	107.858	1.600	15.880	58.218	494.556
Cushion/PTI	6343	-0.043	-0.035	0.002	0.058	4.086

ΔCushion =(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Tax Benefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1 – see Appendix I), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).

ΔCushion_socf =(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Tax Benefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1 – see Appendix I), *ChITP* = change in income taxes payable from the SOCF (#305).

ΔCushion_all =(Cur_Prov – Cash Paid for Taxes –ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *ChITP* = in income taxes payable from the balance sheet (#71 + #161).

ΔCushion_atb =(Cur_Prov – Cash Paid for Taxes – TAX BENEFITt –ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *TAX BENEFIT* = the tax benefit from stock options reported in the financial statements, *ChITP* = in income taxes payable from the balance sheet (#71 + #161).

ΔCushion_atb2 =(Cur_Prov – Cash Paid for Taxes – TAX BENEFITt –ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), TAX BENEFIT = the tax benefit from stock options reported in the financial statements, *ChITP* = change in income taxes payable from the SOCF (#305).

US_ΔCushion = unscaled *ΔCushion*
US_ΔCushion_all = unscaled *ΔCushion_all*
ETR = effective tax rate (#16 divided by #170)
Cur_Prov = the current portion of the tax expense (total tax expense (#16) less deferred tax expense (#50)).
Cushion/PTI = US_ΔCushion divided by pretax income (#170).

Table 2
Univariate Statistics – Tax Aggressiveness
This table provides descriptive statistics on various firm-level proxies for tax aggressiveness.

Panel A – Descriptive Statistics

Variable Name	N	Mean	Q1	Median	Q3	Std. Dev.
Abs_ΔCushion	6343	0.010	0.001	0.004	0.011	0.017
ETR	6343	0.297	0.223	0.342	0.382	0.179
FTR	6343	0.141	0.000	0.000	0.253	0.228
USTR	6343	0.101	0.000	0.000	0.162	0.193
BS_Deferreds	6343	-0.005	-0.028	0.000	0.019	0.068
BTD	6343	-0.043	-0.036	0.002	0.030	0.685
CashTax/PTI	6343	0.220	0.000	0.198	0.343	0.228
Size	6343	6.958	5.847	6.811	7.924	1.611

Panel B: Correlations

	Abs_ ΔCushion	ETR	FTR	USTR	BS_ Deferreds	BTD	Cash/ PTI	Size
Abs_ ΔCushion		0.054a	0.017	0.033a	0.089a	-0.018	-0.002	-0.148a
ETR			0.061a	0.141a	-0.098a	0.105a	0.378a	0.128a
FTR				0.320a	0.024c	0.024c	0.094a	0.151a
USTR					0.016	0.029b	0.198a	0.112a
BS_ Deferreds						-0.024c	0.008	-0.173a
BTD							0.055a	0.099a
CashTax /PTI								0.049a
Size								

Pearson correlations are presented. Correlations marked with [a], [b], and [c] are significant at 0.01, 0.05, and 0.10 level respectively.

Abs_ΔCushion = absolute value of ΔCushion

ΔCushion =(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Taxbenefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1 – see Appendix I), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).

ETR = effective tax rate (#16 divided by #170)
FTR = foreign effective tax rate (#64 divided by #273)
USTR = U.S. effective tax rate (#63 divided by #272)
BS_Deferreds = Cumulative deferred tax expense (#50) from 1973 to period t-1 scaled by lagged assets (#6) times minus one
BTD = Estimated current year book-tax differences (#170 – (#16-#50)/0.35) scaled by lagged assets (#6)
CashTax/PTI = income taxes paid in the current period as a portion of pre-tax income ((#317+*Tax Benefit)*/#170)
Size = natural log of total assets (#6)

Table 3
Regression Analysis – Tax Aggressiveness
This table provides evidence on the associated between changes in tax cushion and proxies for tax aggressiveness.

$$Abs\_\Delta Cushion = \alpha + \beta_1 CashTax/PTI + \beta_2 FTR + \beta_3 USTR - FTR + \beta_4 ETR + \beta_5 BS\_Deferreds + \beta_6 BTD + \beta_7 Size + \varepsilon$$

Dependent Variable	Abs_ΔCushion		Abs_ΔCushion		Abs_ ΔCushion_socf		Abs_ ΔCushion_all	
	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic
Intercept	0.018	12.13	0.016	8.12	0.016	6.82	0.011	6.38
CashTax/PTI	-0.003	-2.17	-0.003	-1.97	-0.003	-1.51	-0.006	-4.90
FTR	0.005	2.93	0.004	2.22	0.002	1.16	0.005	3.19
USTR-FTR	0.003	2.50	0.003	2.14	0.004	2.40	0.005	3.33
ETR	0.009	5.42	0.009	5.82	0.010	4.37	0.015	9.77
BS_Deferreds	0.018	2.47	0.015	2.37	0.010	1.74	0.024	3.44
BTD	0.000	-0.53	0.000	-0.34	0.000	-0.58	0.000	-0.33
Size	-0.002	-7.72	-0.001	-6.65	-0.002	-5.27	-0.001	-7.14
Industry Controls	No		Yes		Yes		Yes	
N	6343		6343		4753		13533	
Adj. R^2	0.034		0.047		0.049		0.076	

All t-statistics are based on heteroscedasticity-corrected standard errors that are clustered by firm. Industry controls are defined as in Barth, Beaver and Landsman (1998).

Abs_ΔCushion = absolute value of ΔCushion
ΔCushion =(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Taxbenefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1 – see Appendix I), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).
CashTax/PTI = income taxes paid in the current period as a portion of pre-tax income ((#317+*Tax Benefit)*/#170)
FTR = foreign effective tax rate (#64 divided by #273)
USTR = U.S. effective tax rate (#63 divided by #272)
USTR-FTR = If *FTR* > 0, then *USTR-FTR*; else zero
ETR = effective tax rate (#16 divided by #170)

BS_Deferreds = Cumulative deferred tax expense (#50) from 1973 to period t-1 scaled by lagged assets (#6) times minus one
BTD = Estimated current year book-tax differences (#170 – (#16-#50)/0.35) scaled by lagged assets (#6)
Size = natural log of total assets (#6)

Table 4
Univariate Statistics – Smoothing
This table provides descriptive statistics on various firm characteristics associated with earnings smoothing.

Panel A – Descriptive Statistics

Variable Name	N	Mean	Q1	Median	Q3	Std. Dev.
Net Income	6343	157.083	-1.442	33.931	124.387	1541.330
Pretax Income	6343	0.045	0.006	0.070	0.145	0.696
Abs_FWD	3825	0.055	0.017	0.037	0.070	0.063
Abs_Modified	3827	0.107	0.021	0.045	0.086	0.416
Abs_Lagged	3827	0.098	0.018	0.039	0.076	0.382
LTD	6343	0.252	0.040	0.219	0.363	0.273
Bonus_IP	6343	0.175	0.047	0.139	0.246	0.354
Option_IP	6343	0.464	0.148	0.388	0.617	2.736
RD	6343	0.046	0.000	0.003	0.057	0.104
Labor	6343	0.575	0.425	0.605	0.766	0.251

Variable descriptions on page following Panel B.

Panel B: Correlations

	Abs_ ΔCushion	Net Income	Pretax Income	Abs_FWD	Abs_Modified	Abs_Lagged	LTD	Option_IP	Bonus_IP	RD	Labor
Abs_ΔCushion		-0.002	0.059 a	0.097 a	0.015	0.022	-0.123 a	0.003	-0.016	0.137 a	0.091 a
Net Income			0.135 a	-0.099 a	0.013	-0.005	-0.011	0.008	0.015	-0.018	-0.037 a
Pretax Income				-0.312 a	-0.062a	-0.061 a	-0.120 a	-0.056 a	0.031 b	-0.260 a	0.021 c
Abs_FWD					0.102 a	0.141 a	0.014	0.011	-0.069 a	0.240 a	0.151 a
Abs_Modified						0.924 a	-0.014	-0.036 b	-0.012	0.059	0.067 a
Abs_Lagged							-0.014	-0.033 b	-0.010	0.059a	0.053 a
LTD								0.001	0.022 c	0.004	-0.210 a
Option_IP									-0.023 c	0.074 a	-0.021 c
Bonus_IP										-0.071 a	0.023 c
RD											0.112 a
Labor											

Pearson correlations are presented. Correlations marked with [a], [b], and [c] are significant at 0.01, 0.05, and 0.10 level respectively.

Variable definitions on the next page.

Abs_ΔCushion = absolute value of ΔCushion
Abs_ΔCushion = (Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets
where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Taxbenefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1 – see Appendix I), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).
Net Income = net income (#172)
PreTax Income = income before taxes (#170 divided by lagged #6)
Fwd = forward-looking discretionary accruals computed as the residuals from the regression model I below as in Dechow, Richardson, and Tuna (2003).
Lagged = Lagged discretionary accruals computed as the residuals from the regression model II below as in Dechow, Richardson, and Tuna (2003).
Mod = modified Jones discretionary accruals computed as the residuals from the regression model III below as in Defond and Subramanyam (1998).

$$TA = \alpha+\beta_1((1+k)\ \Delta Sales-\Delta Rec)+ \beta_2 PPE+ \beta_3 LagTA+ \beta_4 GR\_Sales+\varepsilon \quad (I)$$
$$TA = \alpha+\beta_1((1+k)\ \Delta Sales-\Delta Rec)+ \beta_2 PPE+ \beta_3 LagTA +\varepsilon \quad (II)$$
$$TA = \alpha+\beta_1(\Delta Sales-\Delta Rec)+ \beta_2 PPE+ \varepsilon \quad (III)$$

where TA = operating cash flows (#308) minus income before extraordinary items (#123), scaled by average total assets (#6).
LagTA = lagged value of TA.
ΔSales = change in sales (#12), scaled by average total assets (#6).
ΔRec = change in receivables (#302), scaled by average total assets (#6).
PPE = gross amount of property, plant, and equipment (#7), scaled by average total assets (#6).
GR_Sales = change in sales for the next year, scaled by current sales (#12).
k = coefficient on ΔSales in the following regression, estimated for each two-digit SIC, and is restricted to be between 0 and 1.
$\Delta Rec = \alpha = k\Delta Sales+ \varepsilon$

LTD = Long-term debt (#9 + #34 divided by #6)
Bonus_IP = Cash incentive pay, calculated as bonus (BONUS) divided by total compensation (TDC1), obtained from Execucomp.
Option_IP = Option incentive pay, calculated as the Black Scholes value of option grants (BLK_VALU) divided by total (TDC1), obtained from Execucomp.
R&D = Research and development expense (#46), scaled by lagged assets.
Labor = Labor intensity, measured as 1 minus gross property, plant, and equipment (#7) divided by lagged total assets

Table 5
Regression Analysis

This table provides evidence on the cross-sectional determinants of tax cushion usage in order to smooth earnings.

$$Abs\_\Delta Cushion = \alpha + \beta_1 LTD + \beta_2 Bonus\_IP + \beta_3 Option\_IP + \beta_4 R\&D + \beta_5 Labor + \varepsilon$$

$$Abs\_\Delta Cushion = \alpha + \beta_1 LTD + \beta_2 Bonus\_IP + \beta_3 Option\_IP + \beta_4 R\&D + \beta_5 Labor + \phi_1 CashTax/PTI + \phi_2 FTR + \phi_3 USTR - FTR + \phi_4 ETR + \phi_5 BS\_Deferreds + \phi_6 BTD + \phi_7 Size + \varepsilon$$

Dependent Variable	*Abs_ ΔCushion*		*Abs_ ΔCushion*		*Abs_ ΔCushion*		*Abs_ ΔCushion_all*	
	Coefficient	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
Intercept	0.008	10.66	0.009	6.75	0.013	6.76	0.007	3.74
LTD	-0.007	-6.7	-0.006	-5.76	-0.005	-4.9	-0.001	-1.51
Bonus_IP	0.000	-0.72	0.000	-0.27	0.000	0.03	0.000	0.41
Option_IP	0.000	-0.58	0.000	-0.76	0.000	-0.69	0.000	0.92
R&D	0.021	3.96	0.023	3.63	0.021	3.20	0.022	3.83
Labor	0.004	3.03	0.003	2.57	0.004	2.68	0.005	4.27
CashTax/PTI					-0.003	-2.07	-0.006	-4.76
FTR					0.003	1.74	0.004	2.61
USTR-FTR					0.002	1.79	0.004	3.16
ETR					0.010	6.24	0.017	10.37
BS_Deferreds					0.013	2.22	0.021	3.37
BTD					0.000	0.7	0.002	2.36
Size					-0.001	-5.51	-0.001	-4.99
Industry Controls	No		Yes		Yes		Yes	
N	6343		6343		6343		13533	
Adj. R^2	0.007		0.021		0.064		0.092	

All t-statistics are based on heteroscedasticity-corrected standard errors that are clustered by firm. Industry controls are defined as in Barth, Beaver and Landsman (1998).
Variable definitions on next page.

Abs_ΔCushion= *absolute value of ΔCushion.*

ΔCushion = *(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets* where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Taxbenefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1 – see Appendix I), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).

Abs_ΔCushion_all = *absolute value of ΔCushion_all*

ΔCushion_all = *(Cur_Prov – Cash Paid for Taxes – ChITP)/Lagged Total Assets* where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).

LTD = Long-term debt (#9 + #34 divided by #6)

Bonus_IP = Cash incentive pay, calculated as bonus (BONUS) divided by total compensation (TDC1), obtained from Execucomp.

Option_IP = Option incentive pay, calculated as the Black Scholes value of option grants (BLK_VALU) divided by total compensation (TDC1), obtained from Execucomp.

R&D = Research and development expense (#46), scaled by lagged assets.

Labor = Labor intensity, measured as 1 minus gross property, plant, and equipment (#7) divided by lagged total assets.

CashTax/PTI = income taxes paid in the current period as a portion of pre-tax income ((#317+*Tax Benefit)*/#170)

FTR = foreign effective tax rate (#64 divided by #273)

USTR = U.S. effective tax rate (#63 divided by #272)

USTR-FTR = If *FTR* > 0, then *USTR-FTR*; else zero

ETR = effective tax rate (#16 divided by #170)

BS_Deferreds = Cumulative deferred tax expense (#50) from 1973 to period t-1 scaled by lagged assets (#6) times minus one

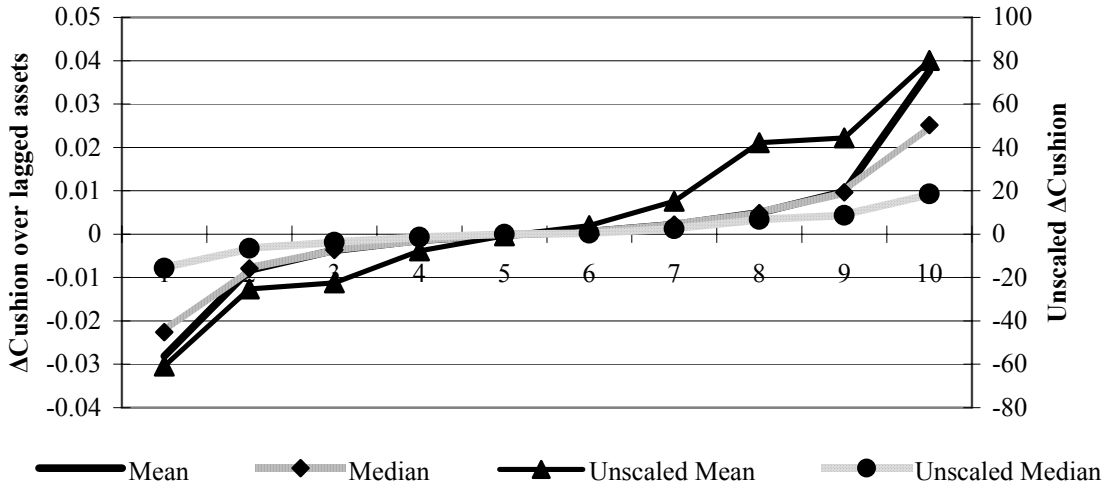
BTD = Estimated current year book-tax differences (#170 – (#16-#50)/0.35) scaled by lagged assets (#6)

Size = natural log of total assets (#6)

Figure 1
Distribution of Cushion

Panel A

This chart plots the mean (median) scaled and mean (median) unscaled cushion by decile. *ΔCushion* is *(Cur_Prov – Cash Paid for Taxes – Tax Benefit - ChITP)/Lagged Total Assets* where *Cur_Prov* = the current portion of the tax expense (total tax expense (Compustat item #16) less deferred tax expense (Compustat item #50)), *Cash Paid for Taxes* = cash paid for taxes from the SOCF (#317), *Taxbenefit* = the estimated tax benefit from stock options using ExecuComp data (ExTB1 – see Appendix I), *ChITP* = change in income taxes payable from the balance sheet (#71 + #161).



Panel B

This histogram shows the distribution of *ΔCushion*. *ΔCushion* is defined as described in Panel A.

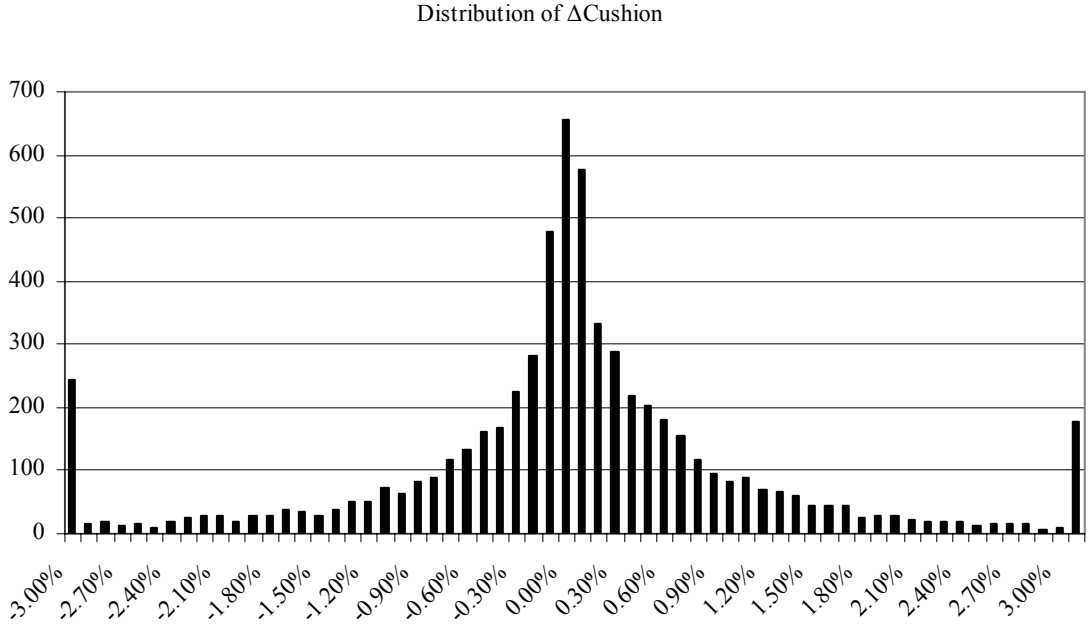


Figure 2
Tax Cushion Calculation: Example
Scientific Atlanta 2000

The following details how we estimate tax cushion using data from Scientific Atlanta's 2000 10-K.

Using data from Scientific Atlanta:

Consolidated Balance Sheet

	In Thousands	
	2000	1999
Liabilities and Stockholders' Equity		
Current liabilities		
Income taxes currently payable	18,264	5,211

Consolidated Statements of Stockholders' Equity and Comprehensive Income

	2000	1999	1998
Additional Paid-in Capital			
Tax benefit related to the exercise of stock options	45,867	15,317	5,719

Tax Footnote

10. Income Taxes

Income tax provision (benefit) includes the following:

	2000	1999	1998
Current tax provision			
Federal	$ 70,760	$ 46,638	$ 7,306
State	4,009	7,708	251
Foreign	10,748	5,107	18,783
	85,517	59,453	26,340
Deferred tax provision (benefit)			
Federal	(17,786)	(14,094)	9,602
State	(1,728)	(3,317)	1,709
Foreign	772	1,820	(3,025)
	(18,742)	(15,591)	8,286
Total provision for income taxes	$ 66,775	$ 43,862	$34,626

Total income taxes paid include settlement payments for federal, state and foreign audit adjustments. The total income taxes paid were $31,386, $54,178 and $19,134 in fiscal years 2000, 1999 and 1998, respectively.

Using the formula on page 11, we estimate the change in tax cushion for 2000 to be $(4.789) million (85,517 – 31,386 – 45,867 – 13,053).

Interestingly, Scientific-Atlanta discloses the impact of their cushion on their effective tax rate:

The tax provision differs from the amount resulting from multiplying earnings before income taxes by the statutory federal income tax rate as follows:

<TABLE>
<CAPTION>

	2000	1999	1998
<S>	<C>	<C>	<C>
Statutory federal tax rate	35.0%	35.0%	35.0%
State income taxes, net of state credits and federal tax benefit	0.7	2.0	1.1
Tax contingencies and settlements	**(2.7)**	**(2.3)**	**(0.4)**
Research and development tax credit	(2.3)	(3.7)	(4.8)
Other, net	(0.7)	(1.0)	(0.9)
	30.0%	30.0%	30.0%

Since pre-tax income in 2000 was $222,583, it appears that the change in the tax cushion resulted in a $(6.009) million increase to taxable income, which is reasonably close to our $(4.789) million estimate.

Figure 3
Tax Cushion Disclosure: Example
Microsoft 2004 and 2005

The following tables details Microsoft's disclosures regarding changes in its cushion account from 2003 to 2006.[18]

Panel A:		
FYR Ending	Disclosed Change in the Cushion Income (increasing) decreasing	Reason
06/30/2003	-126 million	The fiscal 2003 rate reflected a benefit in the second quarter of $126 million from the reversal of previously accrued taxes related to the initial items from the 9th Circuit Court of Appeals ruling, that reversed, in part, a previous Tax Court ruling that had denied tax benefits on certain revenue earned from the distribution of software to foreign customers.
06/30/2004	-208 million	A benefit of $208 million was recorded during the fourth quarter from the reversal of previously accrued taxes from resolving the remaining open issue remanded by the 9th Circuit Court of Appeals ruling in December 2002.
06/30/2005	-776 million	Accordingly, our fiscal year 2005 tax provision has been reduced by $776 million as a result of reversing previously established reserves in excess of the additional tax liability assessed by the IRS for the 1997-1999 tax years.
06/30/2006	Nothing said	

In their 06/30/2005 financial statements, Microsoft made the following disclosure:

RECLASSIFICATIONS

To conform to our current year presentation we have also reclassified $2.0 billion in our fiscal year 2004 balance sheet from net long-term deferred income taxes to other long-term liabilities, with conforming reclassifications in the statement of cash flows. These reclassifications had no impact on our results of operations or changes in stockholders' equity, or cash flows.

Later, in the tax footnote:

Tax Contingencies. We are subject to income taxes in the United States and numerous foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes and recording the related assets and liabilities. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are regularly under audit by tax authorities. Accruals for tax contingencies are provided for in accordance with the requirements of SFAS No. 5, *Accounting for Contingencies*.
Although we believe we have appropriate support for the positions taken on our tax returns, we have recorded a liability for our best estimate of the probable loss on certain of these positions, the non-current portion of which is included in other long-term liabilities. We believe that our accruals for tax liabilities are adequate for all open years, based on our assessment of many factors including past experience and interpretations of tax law applied to the facts of each matter, which matters result primarily from intercompany transfer pricing, tax benefits from the Foreign Sales Corporation and Extra Territorial Income tax rules and the amount of research and experimentation tax credits claimed…

[18] We are indebted to Michelle Hanlon who shared her analysis of Microsoft's 06/30/2005 tax cushion.

Finally, in the breakout of long-term liabilities we see:

NOTE 11 OTHER LONG-TERM LIABILITIES

June 30 (in Millions)	**2004**	**2005**	**2006**
Tax contingencies	$1,979	$3,066	$4,194
Legal contingencies	699	961	1,022
Employee stock option transfer program	146	48	-
Other	87	83	71
Other long-term liabilities	$2,911	$4,158	$5,287

Here is our estimate the cushion using the technique described in the paper:

Panel B:							
(in Millions)							
FYR Ending	Income Taxes Payable (1)	Current Tax Provision (i.e., expense) (2)	Cash Paid for Income Taxes (3)	Tax Benefit from Stock Options (4)	Our Estimate of the Change (5)	Change in the Tax Contingency Account (Note 11) (6)	Disclosed Change in the Cushion (Panel A) (7)
06/30/2002	2,022						
06/30/2003	2,044	4,669	2,800	1,376	471	N/A	-126
06/30/2004	3,478	4,996	2,500	1,100	-38	N/A	-208
06/30/2005	2,020	4,464	4,300	668	954	1,087	-776
06/30/2006	1,557	5,454	4,800	89	1,028	1,128	Nothing said