

How does CEO tenure affect corporate income tax and financial reporting decisions?

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Abstract: We examine how CEO tenure affects a firm's tax planning and financial reporting for income taxes. We find that firms report lower GAAP and cash effective tax rates (ETR) early in the CEO's tenure, yielding both higher cash flows and after-tax earnings. This action is consistent with CEOs trying to perform well early in their tenures to influence the market perception of their ability when uncertainty is highest (Holmstrom 1982). We also find that firms have lower GAAP ETRs, but not cash ETRs, in the final year of the CEO's tenure, consistent with CEOs investing less in tax planning later in their tenure and instead using the tax expense to "window dress" earnings. Finally, additional analysis shows that the designation of earnings as permanently reinvested (PRE) and the use of risky tax positions appear to explain at least a portion of how firms obtain lower ETRs.

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1. Introduction

We examine how CEO tenure affects a firm's tax planning and financial reporting of income taxes. CEOs have a high incentive to influence the market perception of their ability early in their tenure at the firm because market uncertainty regarding CEO ability is highest at this time. Holmstrom (1982) argues that CEOs work hard early in their tenure to favorably influence the market perception of their ability. However, recent research suggests that CEOs also influence the market perception of their ability through higher discretionary accruals (Ali and Zhang 2015) and more disinvestment through asset sales and discontinued operations (Pan, Wang and Weisbach 2016) early in their tenure compared to later. Because firms can favorably impact net income by managing the income tax expense or by engaging in real tax planning (Powers, Robinson and Stomberg 2016), tax provides a unique setting to directly test whether CEOs work harder or manage earnings early in their tenure. Thus, we extend this line of recent research by examining how firms' tax planning and financial reporting vary over the CEO's tenure.

Although the CEO is not directly involved in the tax function, prior research finds that executives respond to implicit and explicit contractual incentives for tax planning (Armstrong, Blouin and Larcker 2012; Gaertner 2014; Phillips 2003; Powers et al. 2016; Rego and Wilson 2012) and play an important role in shaping corporate tax policy by setting the "tone at the top" (Dyreg, Hanlon and Maydew 2010). These findings suggest that if CEOs feel additional pressure to perform early in their tenure, this pressure will be reflected in the tone at the top and will affect all aspects of the firm's operations including the tax department. Additionally, after the cost of goods sold, taxes often represent one of the largest recurring expenses for the firm (Powers, Schmidt, Seidman and Stomberg 2016). Therefore, taxes provide CEOs with a potentially

economically significant opportunity to increase cash flows and net income through either real tax planning or financial reporting of income taxes.

A significant literature examines how CEOs behave when exiting a firm (e.g., Chyz and Gaertner 2016; Dechow and Sloan 1991; Murphy and Zimmerman 1993), but studies investigating the role of different phases of CEO tenure on corporate policy and decision-making are relatively few. Ali and Zhang (2015) posit that all else equal, CEOs have a higher incentive to manage earnings early in their tenure because market uncertainty about the CEO's ability is at its highest (Fama 1980; Hermalin and Weisbach 1998). Thus, performance early in their tenure will have a strong influence on market perceptions of their ability. Consistent with these predictions, they find that CEOs early in their tenure at a firm have higher discretionary accruals and lower discretionary expenses than later in their tenure at the firm (Ali and Zhang 2015). Their findings suggest that CEOs respond to pressure to perform well early in their tenure by managing earnings. Also testing theoretical predictions, Pan et al. (2016) find evidence of a CEO investment cycle, whereby CEOs early in their tenure are more likely to disinvest thus increasing the firm's bottom line. Our study complements and extends these by examining whether CEO tenure also systematically affects tax planning and the financial reporting for taxes at the firm.

We utilize theory from this prior research to generate testable predictions of the role of CEO tenure on corporate tax policy. Following Powers et al. (2016a), we examine changes in both the GAAP effective tax rate (ETR) and cash ETR to determine if firms are engaging in real tax planning or making accounting for income tax decisions that allow for a lower tax expense without a corresponding cash tax benefit. Consistent with Ali and Zhang (2015), we hypothesize that CEOs will have lower income tax expense (lower GAAP ETR) early in their tenure and in their final year of tenure, compared to the middle of their tenure. However, we make no prediction regarding the

relation between cash tax savings and CEO tenure. The findings from Pan et al. (2016) suggest that CEOs disinvest early in their tenures. In our setting, these results would suggest that CEOs do not invest in real tax planning early in their tenures. Alternatively, Holmstrom (1982) argues that CEOs work harder earlier in their tenure, which would suggest that firms with CEOs early in their tenure would realize lower cash taxes (lower cash ETR) through incremental tax planning. Because it is unclear which of these behaviors dominates, how CEO tenure affects cash tax savings represents an empirical question of interest.

To test our predictions, we gather data on CEO tenure from the Execucomp database and estimate a pooled, cross-sectional regression of the level of the GAAP (cash) ETR as a function of the CEO's tenure and controls for economic determinants of the ETR. We follow the approach of Ali and Zhang (2015) in that we measure CEO tenure both as a continuous variable equal to the number of years the CEO has held her position at the firm and binary variables capturing whether the CEO is in the early, mid, or late years of her tenure. The use of binary variables allows us to capture nonlinearities and differences in incentives that may exist throughout the CEO's tenure.

We find that firms with CEOs early in their tenure report lower GAAP and cash effective tax rates (ETR). Specifically, firms with CEOs in their first three years of tenure report GAAP (cash) ETR that are 1.0% (0.8%) lower than firms with CEOs later in their tenure. Finding that both GAAP and cash ETR are lower suggests that CEOs motivate more tax planning early in their tenure, resulting in both a cash-flow and earnings benefit. These increases in cash flows and earnings early in the CEO's tenure are also consistent with CEOs trying to signal higher managerial ability early in their tenures when market uncertainty is high (Fama 1980; Gibbons and Murphy 1992; Holmstrom 1999). When examining tax planning and financial reporting during the CEO's final year at the firm, we continue to find that firms report a lower GAAP ETR, but we fail to find

a difference in cash ETRs. This pattern of results suggests that managers report lower income tax expense without increasing cash flows from tax planning and supports findings in prior research that CEOs in their last year of service may artificially inflate net income to meet earnings targets or to provide a higher baseline salary for pension calculations (Kalyta 2009).

These results are robust to controls for various alternative explanations. Because we control for discretionary accruals, our results suggest that management of discretionary accruals does not subsume the effect of CEO tenure on tax planning and financial reporting through income taxes. Thus, income taxes offer an additional avenue through which CEOs can influence market perceptions of their ability incremental to discretionary accruals (Ali and Zhang 2015). We also control for delta and vega to mitigate concerns that changes in CEO equity incentives explain our results (Rego and Wilson 2012). Finally, in untabulated results, we include proxies for CEO age to ensure our results are attributable to CEO tenure, not CEO age. Inferences remain unchanged.

We also explore two mechanisms through which firms can achieve this pattern of results. First, we find that firms designate more foreign earnings as permanently reinvested (PRE) early in a CEO's tenure. Designating foreign earnings as permanently reinvested reduces both the GAAP and cash ETR, all else equal because the delay in repatriating earnings allows for both an income and cash flow benefit. Thus, this finding provides a potential mechanism through which firms obtain lower ETRs early in the CEO's tenure. Second, we find statistically significant variation in firms' reserve for unrecognized tax benefits (UTBs) over their tenure. One intriguing finding is that in the first years of a CEO's tenure, firms record substantially higher UTB reserves related to *current-year* positions that are almost fully offset by decreases to *prior-year* positions. To the extent that UTB reserves capture the risk of a firm's tax positions, this finding indicates that new executives may attempt to generate additional cash flows by engaging in risky tax policy and mask

this additional risk by releasing reserves related to prior-year positions. Consistent with this explanation, we also find that firms engage fewer auditor-provided tax services (APTS) early in the CEO's tenure. Because APTS needs to be approved by the audit committee, this result suggests that firms engage in less transparent tax planning early in the CEO's tenure (McGuire, Omer and Wang 2012; Omer, Bedard and Falsetta 2006).

This study makes several contributions. First, whereas Ali and Zhang (2015) examine the relation between discretionary accruals and CEO tenure, our study examines how CEO tenure affects a specific account, which allows us to observe how CEO tenure affects both earnings management and investment in real activities. The CEO can manage earnings for financial reporting purposes through income tax expense or increase cash flows and net income through real activities (tax planning). Thus, our results advance the literature on CEO tenure by documenting how CEO tenure affects the trade-off between the use of earnings management and real tax planning to achieve better financial performance. Second, we broaden the literature on CEO incentives and tax planning. Although prior literature has investigated how incentives in CEO compensation contracts affect tax planning and financial reporting (Armstrong et al. 2012; Phillips 2003; Powers et al. 2016a) and the effect of tax planning on CEO turnover (Chyz and Gaertner 2016), we are the first to examine how tax planning and the financial reporting for income taxes change over the CEO's tenure. Dyreng et al. (2010) are perhaps most closely related in this regard. Whereas their study attempts to identify a specific CEO characteristic that is associated with tax planning at the firm, we focus instead on the general effect of CEO tenure on tax planning and financial reporting – a critical piece missing from the literature on executives and corporate taxes. Finally, our findings that CEOs invest in riskier and less transparent tax strategies early in their tenure and use the tax expense to “window dress” earnings later in their tenure inform boards of

directors and compensation committees in charge of designing CEO incentive contracts. Because income tax expense and cash taxes paid are concrete accounts present in the financial statements, companies can consider incorporating them when designing compensation contracts.

2. Related literature and hypothesis development

Recent research in accounting investigates the role that managers play in corporate tax policy. One of the first papers in the area, Dyreng et al (2010), provides evidence of a relation between CEOs and corporate tax policy, but fails to find evidence that managerial characteristics are linked to corporate tax policy. Building on Dyreng et al (2010), current studies find evidence that executive compensation incentives are related to corporate tax policy, suggesting that even if the CEO is not directly involved in the tax function she can still affect tax policy indirectly, perhaps by setting a “tone at the top” regarding the firm’s tax policy (Armstrong et al. 2012; Gaertner 2014; Powers et al. 2016a; Rego and Wilson 2012). For example, Chyz and Gaertner (2016) provide evidence that CEOs are fired when firms pay “too much” tax, suggesting that the success or failure of a firm’s tax policy can directly affect the CEO’s tenure.

We advance this literature by investigating the relation between CEO tenure and corporate tax planning and the financial reporting of taxes. The innovation of our study is that instead of examining only the initial change between CEOs or the last year of a CEO’s service, we examine the executive’s tenure at a firm in its entirety. Thus, we are able to exploit the differences in incentives related to how long a CEO has been at the firm, allowing us to view a CEO’s effect on tax policy in context. We identify how the CEO behaves in the beginning and later years of her tenure, compared to the middle years of her tenure when intrinsic incentives to manage earnings are lower. By examining executives’ behavior over their entire tenure, we provide benchmarks for

their behavior in the special cases of their early and final years at the firm and provide evidence on how tenure-related incentives affect corporate tax policy and financial reporting.

2.1 CEO tenure-related incentives and financial reporting of income taxes

Throughout their tenure at a firm, CEOs are constantly being evaluated by boards and shareholders. However in this evaluation process, there is no time as crucial as the CEO's first years in office. The market typically has little information on a new CEO's ability or fit with the firm, and hence watches the initial actions of the CEO closely (Ali and Zhang 2015; Gibbons and Murphy 1992).¹ Underscoring this need for a fast and strong positive signal about their ability, one-third of all CEOs chosen to lead a US company have been terminated within three years (Coyne and Rao 2005).

In response to this intense pressure, CEOs have a high incentive to perform well early in their tenure at a firm. Holmstrom (1982) is the first to describe these incentives. CEOs want to send a positive signal of their ability early in their careers. Thus, they work hard to increase their chances that the firm will perform well, as markets often rely on current performance as a measure of a new CEO's ability (Fama 1980; Holmstrom 1982; 1999). However, in response to this pressure, CEOs can also influence the firm's financial reporting to make it appear as though the firm's performance is better than economics would suggest. Indeed, Ali and Zhang (2015) provide evidence that firms with CEOs early in their tenures have more earnings management and conclude that by managing earnings upwards, new CEOs are attempting to provide a positive signal of their ability to the market.

¹ The overwhelming majority of CEO appointments do not have prior CEO experience, as only about 3% of CEOs leave their current firm for a role as a CEO at a new firm (Gibbons and Murphy 1992; Brickley et al (1999); Ali and Zhang (2015)).

We argue that the incentive to perform well early may also affect a firm's financial reporting for taxes. Income tax represents a significant expense for many corporations – often the largest expense after cost of goods sold (Powers et al. 2016b). As such, decreasing this expense can increase net income and provide a positive signal to boards. Additionally, there is significant judgment and discretion involved in accounting for income taxes (Dhaliwal, Gleason and Mills 2004). Thus, it is possible for firms to lower their income tax expense without implementing additional tax planning.

However, there are several reasons why tax expense may not be lower in the early years of a CEO's tenure. First, Ali and Zhang (2015) find that firms manage earnings early in the CEO's tenure by both increasing the amount of discretionary accruals and reducing discretionary expenditures, including research and development (R&D), advertising, and selling general and administration (SG&A) expense. If firms are able to manage earnings sufficiently through discretionary accruals, then the CEO may focus on this avenue rather than income tax expense. Alternatively, because R&D is often associated with large tax credits, if firms cut R&D to manage an earnings target, this action could result in a smaller credit and thus a higher tax expense. Because it is unclear which behavior will dominate, we formally state our first hypothesis in the null:

H1: The firm's GAAP ETR is not different in early years of CEO tenure relative to later years.

Prior research in accounting finds that voluntarily departing CEOs overstate earnings to influence prior year pay as well as retirement benefits (Kalyta 2009). Indeed, Ali and Zhang (2015) find evidence in a broad sample of firms that earnings in the final year of an executive's tenure are higher than would otherwise be expected. We propose that these same incentives to influence exit packages and retirement benefits may lead firms to report lower tax expense (lower GAAP ETRs) in the final year of a CEO's tenure. On the other hand, if the CEO is using alternative means to

manage earnings upward (Ali and Zhang 2015; Roychowdhury 2006), then the firm may not rely on reducing the tax expense to increase net income. Additionally, if the CEO has already taken advantage of all available tax planning and financial reporting opportunities, she may not be able to influence the GAAP ETR in the final year of tenure. Because of these competing predictions, we state our second hypothesis in the null as follows:

H2: The firm's GAAP ETR is not different in the final year of CEO tenure relative to earlier years.

2.2 CEO tenure-related incentives and tax planning at the firm

A unique attribute of tax is that firms' tax planning and financial reporting decisions are not perfectly correlated. Firms can engage in the same level of tax planning, or even the exact same tax planning strategy, and account for it differently (De Simone, Robinson and Stomberg 2014). The GAAP ETR captures both these differences in tax reporting as well as potential earnings management, whereas the cash ETR only reflects differences in actual tax planning.

It is unclear how the incentives associated with CEO tenure will affect tax planning at the firm. First, firms' earnings are often benchmarked in reports of firm performance, whereas their cash flows are not mentioned as prevalently. Therefore, if the CEO is only focused on earnings and cash tax savings do not translate to a lower tax expense, then she may not engage in additional tax planning early or later in her tenure. Additionally, even if CEOs have a desire to work hard and tax plan, firm tax policy often involves years of planning and may not be easy to change. Therefore, new CEOs may not be able to implement changes that would affect a firm's cash ETR quickly. However, each dollar of cash tax (and penalties) that the firm saves represents an additional dollar to invest in positive NPV projects or to distribute to shareholders. Thus, recognizing cash tax savings as a source of capital may entice the CEO to encourage tax planning

at the firm. Because of these competing predictions, we state our third hypothesis in the null form as follows:

H3: The firm's cash ETR is not different in early years of CEO tenure relative to later years.

Finally, we propose that all else equal, executives' tenure-related incentives lead them to focus less on cash flows later in their tenure relative to earlier. First, firms often face a horizon problem when dealing with CEOs later in their tenure. CEOs are less likely to invest late in their tenure, because many positive NPV projects will not turn a profit until the CEO has left the firm. Thus, the outgoing CEO will incur the costs associated with the investment without reaping the reward. Similarly, the CEO may be less willing to invest in tax planning at the end of her tenure since it can take time for implemented tax planning to affect the firm's cash flows. Thus, we state our final hypothesis in the null as follows:

H4: The firm's cash ETR is not different in the final year of CEO tenure relative to earlier years.

3. Research Design

3.1 Variables of Interest

3.1.1 Corporate income tax planning and financial reporting

To measure corporate income tax planning and financial reporting, we specifically focus on annual effective tax rate measures (ETRs). ETRs are good measures of corporate income tax because they capture the average rate of income tax expense (GAAP ETR) or paid (Cash ETR) per dollar of income. Due to differences in inferences among the many different ETR measures (Hanlon and Heitzman 2010), we employ two different proxies for corporate tax planning and financial reporting: the book effective tax rate (GAAPETR) and the cash effective tax rate (CASHETR).

Following Hanlon and Heitzman (2010), we measure *GAAPETR* as the total tax expense per dollar of pre-tax book income. The numerator of this variable is the income tax expense reported in the firm's financial statements. Thus, *GAAPETR* captures both permanent tax planning as well as discretion inherent in the financial reporting of income taxes (Dhaliwal et al. 2004; De Simone et al. 2014), and movement in *GAAPETR* can be attributable to changes in tax planning or opportunistic adjustments in the accounting for income taxes. To more cleanly identify tax savings from all of the firm's tax planning – both permanent and deferred – we use the cash ETR. We calculate *CASHETR* as cash taxes paid per dollar of pre-tax book income. Thus, this measure allows us to examine the aggregate of permanent and temporary book-tax differences and is not affected by financial reporting decisions. Thus, finding similar levels of GAAP and cash ETR suggests that the firm's financial reporting of income taxes reflects their underlying tax planning, whereas finding differences in the measures suggest either a large amount of temporary tax planning that is not reflected in the income tax expense or opportunistic financial reporting.

3.1.2 CEO Tenure

Our construct of interest is CEO tenure. We measure CEO tenure two different ways. First, using the Execucomp database, we compute the number of years each CEO was in office and label this continuous variable *TENURE*. Additionally, because we do not necessarily expect a linear relation between CEO tenure and corporate tax planning and financial reporting, we follow Ali and Zhang (2015) and create binary variables to capture specific years of interest. First, we examine the role of the early years of CEO tenure. *FIRST3* is a binary variable equal to one if *TENURE* equals 1, 2, or 3, and zero otherwise. To examine the role of the last year of CEO tenure, we create a binary variable (*LAST*) equal to one if the CEO is in her last year at the firm, and zero

otherwise. Finally, we create a binary variable (*MIDDLE*) equal to one if the CEO is not in the first three or last year of service, and zero otherwise.

3.2 Empirical Tests

Our primary tests examine the relation between corporate tax strategy and different points during CEO tenure. Following Ali and Zhang (2015), we estimate the following models using ordinary least squares regressions:

$$GAAPETR_{i,t} = \beta_1 CEOVariable_{i,t} + \beta_2 Size_{i,t} + \beta_3 Lev_{i,t} + \beta_4 Foreign_{i,t} + \beta_5 R\&D_{i,t} + \beta_6 PPE_{i,t} + \beta_7 Cash_{i,t} + \beta_8 EQInc_{i,t} + \beta_9 ZScore_{i,t} + \beta_{10} Depr_{i,t} + \beta_{11} SGA_{i,t} + \beta_{12} ROA_{i,t} + \beta_{13} CapEX_{i,t} + \beta_{14} ChangeNOL_{i,t} + \beta_{15} AbsDA_{i,t} + \beta_{16} Loss_{i,t} + \beta_{17} Delta_{i,t} + \beta_{18} Vega_{i,t} + Industry\ Fixed\ Effects + Year\ Fixed\ Effects + \varepsilon_{i,t} \quad (1)$$

$$CASHETR_{i,t} = \beta_1 CEOVariable_{i,t} + \beta_2 Size_{i,t} + \beta_3 Lev_{i,t} + \beta_4 Foreign_{i,t} + \beta_5 R\&D_{i,t} + \beta_6 PPE_{i,t} + \beta_7 Cash_{i,t} + \beta_8 EQInc_{i,t} + \beta_9 ZScore_{i,t} + \beta_{10} Depr_{i,t} + \beta_{11} SGA_{i,t} + \beta_{12} ROA_{i,t} + \beta_{13} CapEX_{i,t} + \beta_{14} ChangeNOL_{i,t} + \beta_{15} AbsDA_{i,t} + \beta_{16} Loss_{i,t} + \beta_{17} Delta_{i,t} + \beta_{18} Vega_{i,t} + Industry\ Fixed\ Effects + Year\ Fixed\ Effects + \varepsilon_{i,t} \quad (2)$$

The dependent variable of model (1) is the firm's GAAP effective tax rate and is the firm's cash effective tax rate in model (2). The variable of interest is the CEOVariable, which is either an indicator variable capturing a specific time in the CEO's tenure (i.e. *FIRST3*, *MIDDLE*, or *LAST*) or a continuous variable marking the total number of years the executive has been CEO (*TENURE*).

The coefficient β_1 captures the association between *GAAPETR* (*CASHETR*) and different aspects of executive tenure. Although we do not formulate predictions, a positive and significant β_1 in equation (1) suggests that the specific CEOVariable (i.e. *FIRST3*, *MIDDLE*, *LAST*, or *TENURE*) is associated with a higher ratio of corporate income tax expense to pretax book income (e.g., less tax planning or opportunistic financial reporting), while a negative and significant coefficient suggests that the CEO Variable is associated with a lower ratio of corporate income tax expense to pretax book income (e.g., more tax planning or opportunistic financial reporting). Similarly, a positive and significant β_1 in equation (2) suggests that the specific CEOVariable (i.e.

FIRST3, *MIDDLE*, *LAST*, or *TENURE*) is associated with a higher ratio of corporate taxes paid to pretax book income (e.g., less tax planning), while a negative and significant coefficient suggests that the CEO Variable is associated with a lower ratio of corporate income tax expense to pretax book income (e.g., more tax planning).

Consistent with other studies that seek to understand the determinants of corporate tax planning (i.e. Dyreng et al. 2008; Dyreng et al. 2010; Hanlon and Heitzman 2010) and executive tenure (Ali and Zhang 2015), we control for numerous variables associated with tax planning and financial reporting of income tax. These variables (fully defined in the appendix) include size, leverage, foreign profitability, research and development expenses, property, plant and equipment, cash holdings, equity income, bankruptcy prediction score, depreciation expenses, selling, general, and administrative expenses, profitability, capital expenditures, and change in net operating losses. We also control for delta and vega to ensure that *TENURE* captures only the time the CEO holds the office and not changes attributable to changes in her equity incentives. Finally, because Ali and Zhang (2015) find that CEOs early and late in their tenure have higher discretionary accruals, we also control for discretionary accruals to ensure our results are incremental to those already documented in Ali and Zhang (2015).

We winsorize all continuous variables at the 1 and 99 percent level and include industry fixed effects using the Fama-French 48 industry classifications, year fixed effects, and cluster standard errors by firm (Petersen 2009).²

² We intentionally do not include CEO fixed effects. Our tests are structured such that we are already testing within CEO. Thus, including a CEO fixed effect would over control our model and remove the variation that we are interested in exploring.

3.3 Sample Selection

Table 1 documents our sample selection process. We begin our sample selection with the intersection of all firms covered by Compustat and Execucomp. Because Execucomp only provides data for the S&P 1500, our sample captures the largest firms in the Compustat universe. Our sample begins in 1993 because that is when SFAS 109 (ASC 740) was implemented and ends in 2015 because that is the most recent data available. After applying these restrictions, our sample begins with 41,392 observations. We limit our sample to observations that are not in regulated industries because prior research suggests that these firms may have different tax planning incentives and opportunities. Additionally, we require all firms to have enough data to calculate the variables used in our analyses. These data cuts leave us with 23,862 observations.

[Insert Table 1 here.]

4. Results

4.1 Descriptive Statistics

Table 2 presents descriptive statistics for our sample. Firms in our sample have mean (median) *CASHETR* of 22.6% (21.6%) and mean (median) *GAAPETR* of 28.2% (31.8%). Both ETR are significantly below the U.S. corporate statutory tax rate of 35%, suggesting that firms in our sample engage in significant tax planning. We also note that there is substantial variation in CEO tenure across our sample. The average CEO tenure at a firm in our sample is 9.5 years, with the 25th percentile of tenure equal to 4 years and the 75th percentile equal to 13 years. Firms in our sample are large and relatively financially healthy, with a mean (median) ROA of 5.1% (6.0%) and a mean (median) Z-score of 5.27 (3.69).

[Insert Table 2 here.]

4.2 Univariate Results

Figure 1 presents the average *CASHETR* and *GAAPETR* over the executives' tenure in our sample. Both *CASHETR* and *GAAPETR* are higher in the middle years than either the early or late years of the CEO's tenure. However the difference in the last year of the executive's tenure is striking. The average *GAAPETR* drops dramatically between the executive's middle years and last year, with the average *GAAPETR* in the final year of tenure the lowest of all. Alternatively the average *CASHETR* is slightly lower in the last year of an executive's tenure than the middle years, but the average *CASHETR* in the last year of an executive's tenure is still higher than in the early years. Overall, we interpret this graph as preliminary evidence that *CASHETR* and *GAAPETR* vary significantly over an executive's tenure.

Table 3 presents correlations among the variables in our model. Pearson (Spearman) correlations are reported below (above) the diagonal. We find that *TENURE* is positively correlated with both *CASHETR* and *GAAPETR* at the 5% level. As tenure incentives are likely not linear, we also separate tenure into three distinct time periods, consisted with those in Ali and Zhang (2015). We find that the first three years of a CEO's tenure (*FIRST3*) are *negatively* correlated to both *CASHETR* and *GAAPETR* ($p < 0.05$). We find that the middle years of the CEO's tenure (*MIDDLE*) are significantly *positively* correlated with *CASHETR* and *GAAPETR* ($p < 0.05$), while the final year of the CEO's tenure (*LAST*) is significantly *negatively* correlated with both *CASHETR* and *GAAPETR* ($p < 0.05$). Taken together, these results support our univariate results and suggest a significant non-linear relation between a CEO's tenure and corporate tax policy and the financial reporting of income taxes. However, we advise caution in interpreting these results, as they do not control for other important characteristics.

[Insert Table 3 here.]

4.3 Multivariate Results

Table 4 presents our multivariate results. Panel A presents our findings on the association between CEO tenure and *GAAPETR*. Consistent with univariate results, we find that *GAAPETR* is significantly lower in the early and late years of the CEO's tenure. Specifically, we find a negative and significant coefficient on *FIRST3* in column (1) and *LAST* in column (3), suggesting that CEOs early and late in their tenure report lower *GAAPETR* than CEOs in the middle of their tenure. In column (5), coefficients on *FIRST3* and *LAST* remain negative and significant, even when both variables are included in the same model. Thus, we reject H1 and H2 that CEO tenure does not affect the financial reporting of income taxes. Panel B presents our findings on the association between CEO tenure and *CASHETR*. In column (1), we continue to find a negative and significant coefficient on *FIRST3*, suggesting that *CASHETR* is significantly lower in the early years of the CEO's tenure. However, we fail to find a significant coefficient on *LAST* in column (3), suggesting that there is no difference in the average cash ETR at firms when the CEO is in her last year compared to earlier years. Our results are consistent when including both *FIRST3* and *LAST* in the same regression in column (5). Thus we reject H3 but fail to reject H4.

[Insert Table 4 here.]

Taken together, the results in Table 4 suggest that in the first years of a CEO's tenure, firms engage in more tax planning. An increase in tax planning, especially permanent tax planning, would translate into lower cash taxes paid (cash ETR) and lower income tax expense (GAAP ETR). Increased tax planning is consistent with theory from Holmstrom (1982) that CEOs work hard early in their tenure at a firm to favorably impact the market's perception of their ability. The lower tax expense is consistent with managers signaling their ability, while the increased cash from tax planning allows the firm to invest in more projects. However, our finding that CEOs in their

final year of tenure report significantly lower GAAP ETRs but not lower cash ETRs suggests that executives may be managing income tax expense without investing in real tax planning. Artificially lowering the firm's tax expense without investing in tax planning is consistent with the horizon problem, as investments in tax planning would likely yield beneficial results after the CEO's departure. This pattern of results is also consistent with CEO's opportunistically accruing for income tax expense to allow the firm's net income to achieve certain earnings targets or allow the CEO to receive inflated exit package. We explore potential reasons for this pattern of results in Section 5 below.

5. Additional Analyses

We further explore potential reasons for our pattern of results by examining several tax planning and reporting mechanisms that influence GAAP and cash ETRs to determine whether these underlying mechanisms also vary predictably with CEO tenure.

5.1 Permanently Reinvested Earnings

We first investigate how the designation of earnings as permanently reinvested (PRE) varies over the CEO's tenure. Krull (2004) provides evidence that firms use the PRE designation to favorably impact net income when the firm is close to missing an earnings target. Designating foreign earnings as permanently reinvested will result in a lower GAAP ETR for the firm, thus increasing net income. However, PRE can also result in a cash tax benefit, in that firms are required to pay cash taxes only when repatriating earnings. We acknowledge that PRE provides a more significant financial reporting benefit, as designating earnings as PRE allows firms to avoid recording a deferred tax expense for these earnings, directly increasing their current year net income. In contrast, the cash tax benefits will be spread out over the entire time that at least some

earnings remain overseas. For this reason, we view PRE designations as having a stronger effect on current-year GAAP ETR than on current-year cash ETR.

To test whether PRE varies systematically with CEOs' tenure, we modify equation (2) by substituting *PRE* as our dependent variable.³ Table 5 presents our results. In both columns (1) and (5), we find that the coefficient on *FIRST3* is positive and significant, indicating that firms designate more earnings as PRE earlier in the CEO's tenure. This finding is consistent with the firm's lower GAAP ETR (and to a lesser extent its lower cash ETR) in the first years arising from the tax savings associated with permanently reinvested earnings. We also investigate if PRE designations are associated with the lower GAAP ETR in the final year of a CEO's tenure, but fail to find evidence in support of this association, as the coefficient on *LAST* is not significantly different from zero in either column (3) or (5).

[Insert Table 5 here.]

5.2 Unrecognized Tax Benefits

We next examine if the reserve for unrecognized tax benefits (UTBs) varies systematically over the CEO's tenure. We use UTBs as a measure of the riskiness of a firm's tax policies but also recognize that significant financial reporting flexibility is inherent to the calculation of the UTB reserve (De Simone, Robinson and Stomberg 2014; Robinson, Stomberg and Towery 2015). In general, increases in the UTB reserve increase the GAAP ETR and decreases reduce the GAAP ETR. Changes in the UTB reserve have no effect on the cash ETR.⁴ Thus, changes in the UTB reserve can represent both opportunistic financial reporting and serve as a signal of changes in the riskiness of firms' tax planning.

³ Results remain unchanged if we use the model from Krull (2004).

⁴ Payments for settlements with the IRS (or foreign tax authority) are recorded in cash taxes paid. Thus, settlements can have a significant effect on the cash ETR, but increasing or decreasing the UTB reserve should not affect the cash ETR.

To examine whether CEO tenure is associated with changes in the UTB reserve, we follow the model in Drake, Goldman and Lusch (2016):

$$\begin{aligned}
 \text{UTB} = & \beta_1 \text{CEOVariate}_{i,t} + \beta_2 \text{Size}_{i,t} + \beta_3 \text{Lev}_{i,t} + \beta_4 \text{Foreign}_{i,t} + \beta_5 \text{R\&D}_{i,t} + \\
 & \beta_6 \text{PPE}_{i,t} + \beta_7 \text{Cash}_{i,t} + \beta_8 \text{EQInc}_{i,t} + \beta_9 \text{Depr}_{i,t} + \beta_{10} \text{SGA}_{i,t} + \beta_{11} \text{ROA}_{i,t} + \beta_{12} \text{APTS}_{i,t} + \\
 & \beta_{13} \text{AbnormalAccruals}_{i,t} + \beta_{14} \text{ChangeNOL}_{i,t} + \beta_{15} \text{NOLInd}_{i,t} + \beta_{16} \text{BTM}_{i,t} + \\
 & \beta_{17} \text{SalesGrowth}_{i,t} + \beta_{18} \text{CashETR}_{i,t} + \text{Industry Fixed Effects} + \text{Year Fixed Effects} + \varepsilon_{i,t}
 \end{aligned}
 \tag{3}$$

where UTB equals either the current-year increase in the reserve or the net changes relating to prior-year positions.

Table 6, Panel A presents the current-year increase in the reserve as a function of CEO tenure and control variables, and Panel B presents the net changes to the reserve regarding prior-year positions as a function of CEO tenure and controls. In both panels A and B, the only significant relation we find between changes in the UTB reserve and CEO tenure is with respect to the early years. Specifically, in Column (1), we find a significant and positive coefficient on *FIRST3*, suggesting that firms record higher levels of UTB reserves with respect to current-year positions in the first years of the manager's tenure. We interpret this finding as evidence that firms are engaging in risky tax planning early in a CEO's tenure, which corresponds to the lower cash ETR early in the CEO's tenure and is consistent with the CEO working hard to increase cash flows and generate additional capital (Holmstrom 1982).

In Panel B of Table 6, we find an almost equally offsetting movement in column (1). We find a negative and significant coefficient on *FIRST3* when net changes in the reserve for prior-year positions is the dependent variable. This nearly-offsetting movement in the reserve for net prior-year positions would negate a possible increase in the GAAP ETR due to the additional reserves for current-year positions. Taken together, this pattern of results suggests that firms with

CEOs early in their tenures achieve additional cash tax savings by engaging in riskier tax planning and mask this increase in risk by releasing UTB reserves relating to prior-year positions.

[Insert Table 6 here.]

To further substantiate this interpretation, we examine whether auditor-provided tax services (APTS) vary systematically with CEO tenure. Because the audit committee is required to approve APTS, tax planning through APTS is more transparent to the board and audit committee than either internal tax planning or tax planning provided from a different outside firm (McGuire et al. 2012; Omer et al. 2006).⁵ Thus, finding *less* use of APTS early in the CEO's tenure supports our interpretation that CEOs early in their tenure engage in riskier tax planning.

We follow the two-stage Heckman (1979) methodology described in Omer et al. (2006) to test whether APTS varies over the CEO's tenure. We first model the decision to purchase APTS to control for selection bias. Panel A of Table 7 presents these results. The model has acceptable discrimination as measured by the area under the ROC curve of 0.82 (Hosmer and Lemeshow 2002), and the coefficient on our exclusion parameter, *ChangeAuditor*, is negative and significant.⁶

Using the coefficient estimates from this model, we construct an inverse Mills ratio which we include in the second stage model detailed below:

$$APTS_{i,t} = \beta_1 CEOVariable_{i,t} + \beta_2 DefTax_{i,t} + \beta_3 Merger_{i,t} + \beta_4 Foreign_{i,t} + \beta_5 NOL_{i,t} + \beta_6 BigN_{i,t} + \beta_7 NonAudit_AuditFees_{i,t} + \beta_8 NonAudit_PI_{i,t} + \beta_9 Lev_{i,t} + \beta_{10} Size_{i,t} + \beta_{11} ROA_{i,t} + \beta_{12} Yr2002_{i,t} + Industry\ Fixed\ Effects + Year\ Fixed\ Effects + \varepsilon_{i,t} \quad (4)$$

where *APTS* is the total amount of auditor-provided tax services scaled by total audit fees. All variables are defined in detail in the Appendix.

⁵ Following Title II, Section 201, Subnote (H) of the Sarbanes-Oxley Act: ““(h) PREAPPROVAL REQUIRED FOR NON-AUDIT SERVICES. – A registered public accounting firm may engage in any non-audit service, including tax services, that is not described in any of paragraphs (1) through (9) of subsection (g) for an audit client, only if the activity is approved in advance by the audit committee of the issuer, in accordance with subsection (i).”

⁶*ChangeAuditor* is not associated with the amount of audit fees purchased, and thus meets the necessary conditions to be an exclusionary variable.

Panel B of Table 7 presents our second-stage results. We find a negative and significant coefficient on *FIRST3* in column (1) suggesting less use of APTS during the beginning of a CEO's tenure. Taken together with our results from Table 6, these findings suggest that CEOs engage in riskier and less transparent tax planning early in their tenure with the firm, enabling them to positively influence the market perception of their ability through tax planning.

[Insert Table 7 here.]

6. Robustness tests

6.1 Disentangling CEO age from CEO tenure

Although not addressed in Ali and Zhang (2015), one explanation for our pattern of results is that young CEOs, early in their *careers*, rather than CEOs early in their *tenure*, are driving our results. Holmstrom (1982) suggests that CEOs work hard early in their careers to improve market perception of their ability. However, CEO tenure is a distinct construct from CEO age in that either a young or old CEO could be early in her tenure at a firm, despite differences in age. If CEOs are only able to sway market perception of their ability early in their *careers*, as opposed to early in their *tenure*, we would expect differences in behavior for CEOs in their first role as CEO versus their second role. Finding this difference in behavior suggests that CEO age is driving our results. However, if uncertainty regarding CEO ability arises at each firm, we would expect no difference in behavior from CEOs in their first versus second role as CEO. Finding no difference in behavior suggests that sufficient uncertainty arises regarding the CEO's ability *at each firm* which allows the CEO to influence market perceptions early in her tenure at each firm.

In untabulated analysis, we limit our sample to firm-years where the same CEO was CEO of two different firms during our sample period. We create a binary variable, *SECOND*, which takes the value of one for the first three years of the CEO's tenure at the second firm, and interact

this variable with *FIRST3*. We fail to find a significant coefficient on this interaction term, which suggests that CEOs behave in a similar manner in the early years of their tenure, regardless of whether it is their first or second CEO appointment. Although this test provides additional support that the patterns we observe are attributable to CEO tenure rather than CEO age, we caution that out of the 3,247 unique CEOs in our sample, only 121 (3.7%) have multiple CEO appointments at S&P 1500 firms. Thus, it is possible that the insignificant coefficient on *SECOND* may be attributable to power issues.

6.2 Alternative ETR definitions

Because our ETR measures are scaled by pretax income, an additional concern is that our results are driven by non-tax earnings management rather than tax planning or opportunistic financial reporting of tax expense. If firms are managing pretax earnings upward, our ETR measures would have an artificially higher denominator, resulting in lower ETR, all else equal. Although we control for discretionary accruals in our analysis to mitigate this concern, in untabulated analysis, we redefine our ETR by scaling tax expense (cash taxes paid) by pretax cash flows rather than pretax income. Guenther, Krull, and Williams (2014) demonstrate that ETR scaled by pretax cash flows are significantly less affected by earnings management than ETR measures in which pretax income is the denominator. When re-estimating our model with these new ETR, our results are nearly identical, indicating that our results are not driven by earnings management, and are thus incremental to the effect documented in Ali and Zhang (2015).

6.3 CEOs with short tenures

A non-trivial portion of our sample includes CEOs with relatively short tenures. Specifically, in Table 2, we find that 25% of CEOs have tenure equal to four years or less and hence, appear in our model in only *EARLY3* and *LAST*, not *MIDDLE*. To address this concern, we

conduct two separate robustness tests. First, we re-estimate equations (1) and (2) excluding all observations where the CEO's tenure is not at least four years. Our results are robust to this sample restriction. Second, we conduct a separate test in which we exclude all observations that do not have at least 2 years of data for the middle years and 2 years of data for the early years. Our results are also robust to this sample restriction, suggesting that CEOs with short tenures are not driving our results.

6.4 Prior Year Tax Avoidance

Another potential concern is that any firm policies in the early years of one CEO's tenure are driven by decisions made in the later years of outgoing CEO's tenure. Thus, the low cash and GAAP ETR in the early years of the CEO's tenure is attributable to the late years of the previous CEO. To address this concern, we re-estimate equations (1) and (2), controlling for *Cash ETR* or *GAAP ETR* in year $t-1$, the year prior to the new CEO's first year. Our results are robust to the inclusion of this control variable, suggesting that we are correctly attributing results to the current CEO.

7. Conclusion

We investigate the role of CEO tenure in corporate tax policy and the financial reporting of income taxes. We find that firms report lower GAAP and cash effective tax rates (ETR) early in the CEO's tenure, resulting in higher after-tax earnings as well as higher cash flows. This action is consistent with the incentives CEOs face to demonstrate high performance early in their tenures when uncertainty about their ability is highest (Fama 1980; Hermalin and Weisbach 1998; Holmstrom 1982). We also find that firms have lower GAAP ETRs, but not cash ETRs, in the final year of the CEO's tenure, consistent with CEOs investing less in tax planning later in their tenure and instead using the tax expense to "window dress" earnings. Our results are robust to controlling

for discretionary accruals, equity compensation, alternate measures of ETR, and CEO age. We also investigate the different mechanisms through which firms can achieve this pattern of results. We find that early in a CEO's tenure firms designate more earnings as permanently reinvested (PRE), suggesting a possible mechanism through which they obtain lower GAAP ETR. We also find that firms record additional reserves for unrecognized tax benefits (UTBs) relating to current year positions and engage in less auditor-provided tax services (APTS), suggesting that firms with CEOs early in their tenure engage in riskier and less transparent tax planning to achieve lower cash ETRs.

This study makes several contributions. First, we advance the burgeoning literature in accounting on the relation between executives and taxes. Our findings suggest that in addition to explicit and implicit contract incentives, CEOs' incentive to perform well early in their tenure also affects firm's tax planning and financial reporting. This finding should be useful for boards of directors and compensation committees responsible for designing executive compensation contracts. We also inform the literature examining whether CEO's incentives to influence the market perception of their ability causes them to work harder (Holmstrom 1982) or manage earnings (Ali and Zhang 2015). Our findings suggest that CEOs early in their tenure encourage tax planning at the firm resulting in both an earnings and cash flow benefit, but that this additional tax planning may be riskier.

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APPENDIX

Variable Name	Description
Dependent Variables of Interest	
<i>GAAPETR</i>	The book effective tax rate, calculated as tax expense (TXT) scaled by the difference between pre-tax book income (PI) and special items (SPI).
<i>CashETR</i>	The cash effective tax rate, calculated as cash taxes paid (TXPD) scaled by the difference between pre-tax book income (PI) and special items (SPI).
<i>PRE</i>	Earnings declared as permanently reinvested (from Audit Analytics Tax Footnote database) scaled by prior year total assets (AT).
<i>CYInc</i>	Increases to uncertain tax positions among positions taken in the current year (TXTUBPOSINC) scaled by prior year total assets (AT).
<i>PYNet</i>	Increases to incertain tax positions among positions that were taken in prior years (TXTUBPOSPINC) less decreases to uncertain tax positions among positions that were taken in prior years (TXTUBPOSPDEC), all scaled by prior year total assets (AT).
<i>APTS</i>	Total auditor-provided tax services (TAX_FEES), scaled by total audit fees (AUDIT_FEES). Variables are generated from the Audit Analytics dataset.
Independent Variables of Interest	
<i>FIRST3</i>	Indicator variable equal to 1 if the CEO is in his or her's first three years as CEO, and 0 otherwise
<i>MIDDLE</i>	Indicator variable equal to 1 if both <i>FIRST3</i> and <i>LAST</i> equal 0, and 0 otherwise.
<i>LAST</i>	Indicator variable equal to 1 if the CEO is in his or her's final year as CEO, and 0 otherwise.
<i>TENURE</i>	A discrete variable measuring the distance in number of years from the CEO's first year as CEO to the observation year.
Control Variables	
<i>Size</i>	The natural log of total assets (AT).
<i>Lev</i>	Current debt (DLC) plus long term debt (DLTT), scaled by prior year total assets (AT).
<i>Foreign</i>	Foreign pre-tax income (PIFO) scaled by prior year total assets (AT).
<i>R&D</i>	Research and development expenses (XRD) scaled by prior year total assets.
<i>PPE</i>	Net property plant and equipment (PPENT) scaled by prior year total assets (AT).
<i>Cash</i>	Cash and cash equivelents (CHE) scaled by prior year total assets (AT).
<i>EqInc</i>	Equity in earnings from unconsolidated subsidiaries (ESUB) scaled by prior year total assets (AT).
<i>Zscore</i>	Mathematical formula to predict bankruptcy developed by Altman [1968] calculated as the following: $1.2*A + 1.4*B + 3.3*C + 0.6*D + 0.999*E$ A = Working Capital (ACT-LCT) / Total Assets (AT) B = Retained Earnings (RE) / Total Assets (AT) C = Earnings Before Interest and Taxes (EBIT) / Total Assets (AT) D = Market Value of Equity (PRCC_F*CSHO) / Total Liabilities (LT) E = Sales (REVT) / Total Assets (AT).
<i>Depr</i>	Depreciation expense (DP) scaled by prior year total assets (AT).
<i>SGA</i>	Selling general and admininstrative expenses (XSGA) scaled by prior year total assets (AT).
<i>ROA</i>	Pre-tax income (PI) scaled by prior year total assets (AT).
<i>Capex</i>	Capital expenditures (CAPX) scaled by prior year total assets (AT).
<i>ChangeNOL</i>	The difference between current year and prior year tax loss carryforwards (TLCF) all scored by prior year assets (AT).

<i>AbsDA</i>	The absolute value of discretionary accruals calculated in accordance with the Modified-Jones discretionary accruals model (Dechow, Sweeney, and Sloan 1995).
<i>Loss</i>	Indicator variable equal to 1 if pre-tax book income (PI) is less than 0, and 0 otherwise.
<i>Delta</i>	The dollar change in portfolio value for a 1% change in the stock price.
<i>Vega</i>	The dollar change in portfolio value for a 0.01 change in the annualized standard deviation of stock returns

Other Variables of Interest

<i>APTSInd</i>	Indicator variable equal to 1 if the firm engages its auditor for tax services, and 0 otherwise.
<i>APTS</i>	Total auditor provided tax fees scaled by total audit fees.
<i>ChangeAuditor</i>	Indicator variable equal to 1 if the firm changes its external auditor, and 0 otherwise.
<i>DefTax</i>	Deferred taxed (TXDP) scaled by tax expense (TXT).
<i>NOL</i>	Indicator variable equal to 1 if the firm has a tax-loss carryforward (TLCF), and 0 otherwise.
<i>BigN</i>	Indicator variable if the firm is audited by a Big N auditor, and 0 otherwise.
<i>NonAudit_AuditFees</i>	Total non-audit fees scaled by audit fees.
<i>NonAudit_PI</i>	Total non-audit fees scaled by pre-tax income.
<i>Year2002</i>	Indicator variable if the observation's fiscal year is after 2002, and 0 otherwise.

FIGURE 1: ETRs over Tenure

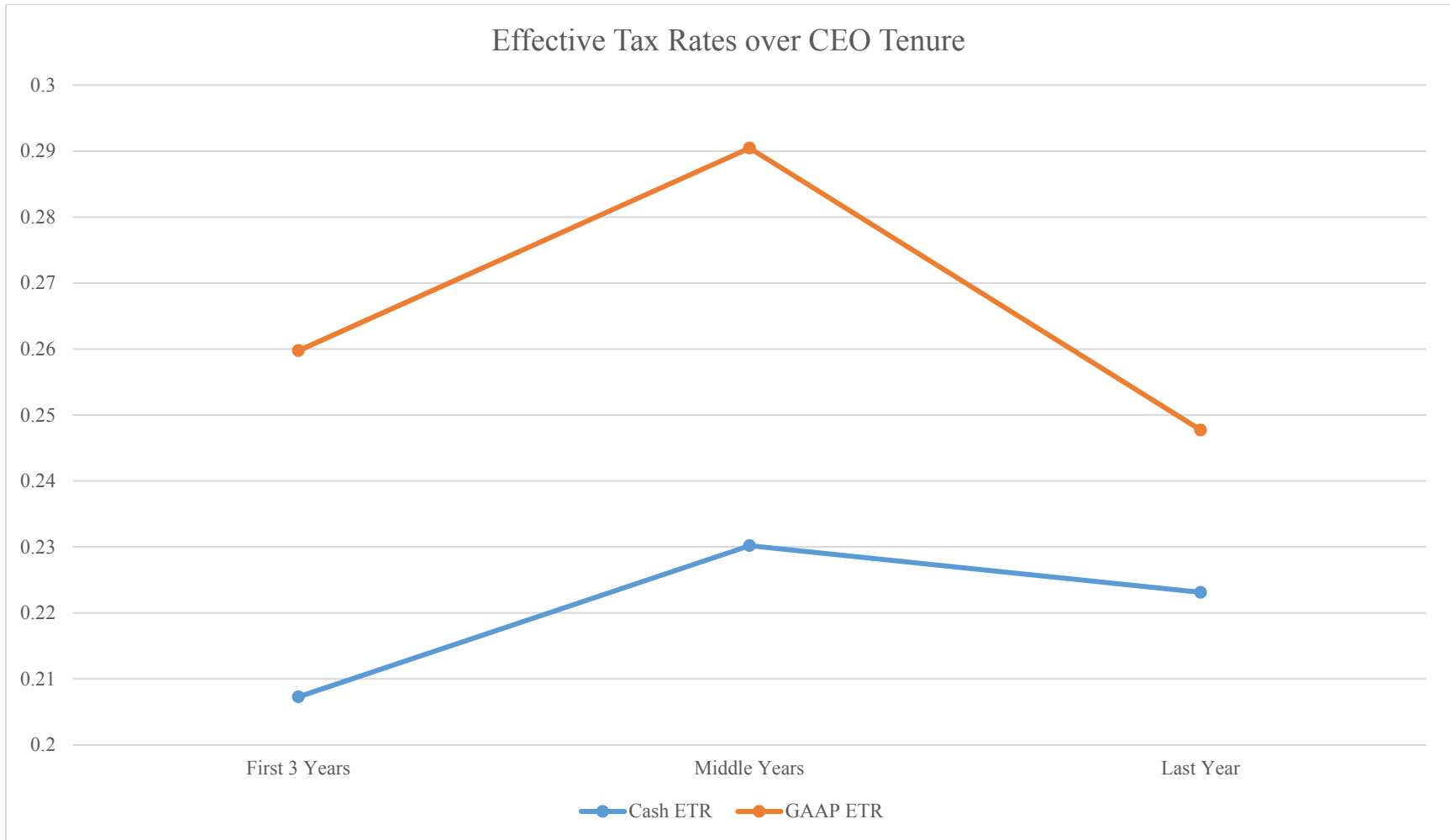


TABLE 1
Sample Selection

Criteria:	
1993 - 2015 Compustat and Execucomp Observations	41,392
Less: Observations in regulated industries	-9,655
Less: Observations with data to calculate control variables	-7,864
Total Observations	23,873

TABLE 2
Descriptive Statistics

Variable	N	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl
<i>CASHETR</i>	23,873	0.226	0.201	0.050	0.216	0.332
<i>GAAPETR</i>	23,873	0.282	0.191	0.165	0.318	0.377
<i>FIRST3</i>	23,873	0.248	0.432	0.000	0.000	0.000
<i>MIDDLE</i>	23,873	0.624	0.484	0	1	1
<i>LAST</i>	23,873	0.164	0.370	0	0	0
<i>TENURE</i>	23,873	9.453	8.428	4	7	13
<i>Size</i>	23,873	7.166	1.654	6	7	8
<i>Lev</i>	23,873	0.208	0.213	0.016	0.169	0.312
<i>Foreign</i>	23,873	0.019	0.038	0.000	0.000	0.027
<i>R&D</i>	23,873	0.043	0.076	0.000	0.004	0.055
<i>PPE</i>	23,873	0.321	0.257	0.127	0.248	0.444
<i>Cash</i>	23,873	0.193	0.255	0.028	0.095	0.258
<i>EqInc</i>	23,873	0.001	0.004	0.000	0.000	0.000
<i>Zscore</i>	23,873	5.272	5.892	2.367	3.687	5.956
<i>Depr</i>	23,873	0.051	0.029	0.031	0.045	0.062
<i>SG&A</i>	23,873	0.290	0.246	0.109	0.234	0.407
<i>ROA</i>	23,873	0.051	0.122	0.018	0.060	0.106
<i>Capex</i>	23,873	0.070	0.073	0.025	0.047	0.086
<i>ChangeNOL</i>	23,873	0.009	0.061	0.000	0.000	0.000
<i>AbsDA</i>	23,873	0.198	0.434	0.025	0.066	0.166
<i>Loss</i>	23,873	0.180	0.384	0.000	0.000	0.000
<i>Delta</i>	23,873	15.545	34.862	0.000	0.365	14.094
<i>Vega</i>	23,873	6.777	18.019	0	0	4
<i>PRE</i>	5,903	0.080	0.143	0.000	0.004	0.114
<i>CYInc</i>	6,588	0.179	0.410	0.004	0.062	0.197
<i>PYNet</i>	6,584	0.000	0.278	-0.032	0.000	0.055

Notes: Table 2 Panel A presents the descriptive statistics for variables used in the study. All continuous variables are winsorized at the 1 and 99% level. See the Appendix for a full description and calculation of each variable.

TABLE 3
Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
(1) <i>CASHETR</i>	1	0.29	-0.01	-0.01	-0.01	-0.02	0.03	-0.02	0.05	0.05	-0.06	0.00	-0.18	-0.04	-0.14	0.02	0.02	-0.07	0.06	0.19	-0.04	-0.10	-0.04	-0.20	-0.01	0.00
(2) <i>GAAPETR</i>	0.39	1	-0.12	-0.02	0.05	-0.04	0.06	-0.06	0.05	0.04	0.00	-0.03	-0.21	0.08	-0.13	0.01	0.04	0.00	0.01	0.23	0.06	-0.12	-0.07	-0.23	0.00	-0.01
(3) <i>PRE</i>	0.02	-0.20	1	0.19	-0.07	0.02	-0.02	0.00	-0.05	0.30	-0.06	0.52	0.12	-0.14	0.10	0.04	0.05	-0.09	0.00	0.13	-0.08	-0.02	0.04	-0.09	0.15	0.17
(4) <i>CYInc</i>	0.02	-0.12	0.30	1	0.01	0.03	0.01	-0.04	-0.01	0.10	-0.04	0.22	0.19	-0.11	0.18	0.00	0.08	-0.03	0.09	0.09	-0.06	0.03	0.02	-0.01	0.08	0.09
(5) <i>PYNet</i>	-0.01	0.03	0.01	0.00	1	-0.02	0.02	0.00	0.00	-0.02	-0.02	-0.01	0.05	-0.01	0.03	0.00	0.03	0.00	0.02	0.01	0.01	0.02	0.01	0.00	0.00	-0.01
(6) <i>FIRST3</i>	-0.04	-0.04	0.00	0.00	-0.02	1	-0.74	-0.03	-0.52	-0.05	0.01	-0.03	0.03	0.00	0.01	0.03	-0.05	0.05	0.02	-0.06	-0.01	0.03	0.00	0.07	-0.06	-0.04
(7) <i>MIDDLE</i>	0.06	0.08	-0.01	0.04	0.02	-0.74	1	-0.57	0.39	0.03	-0.01	0.02	-0.01	0.03	0.02	-0.02	0.08	-0.02	0.00	0.11	0.05	-0.04	-0.02	-0.11	0.06	0.05
(8) <i>LAST</i>	-0.05	-0.09	0.01	-0.05	-0.01	-0.03	-0.57	1	0.01	0.00	0.01	-0.02	-0.02	-0.06	-0.04	-0.01	-0.09	-0.02	-0.02	-0.12	-0.07	0.04	0.03	0.11	-0.03	-0.03
(9) <i>TENURE</i>	0.07	0.06	-0.07	0.02	0.02	-0.75	0.56	0.02	1	0.01	-0.05	0.00	-0.05	-0.02	-0.02	-0.04	0.07	-0.06	0.01	0.06	-0.01	-0.03	0.00	-0.07	0.03	0.01
(10) <i>Size</i>	0.10	0.02	0.37	0.27	0.00	-0.05	0.03	0.00	0.03	1	0.06	0.35	-0.05	0.08	-0.06	0.12	0.09	-0.05	-0.13	0.31	0.02	-0.08	0.01	-0.32	0.38	0.35
(11) <i>Lev</i>	-0.04	0.01	-0.03	-0.06	-0.03	0.00	-0.01	0.01	-0.03	0.13	1	-0.07	-0.16	0.32	-0.21	0.03	-0.38	0.13	-0.19	-0.09	0.12	0.04	-0.02	0.02	-0.01	-0.01
(12) <i>Foreign</i>	0.07	-0.09	0.60	0.29	0.03	-0.02	0.01	0.00	0.00	0.35	-0.02	1	0.07	-0.09	0.06	0.09	0.06	-0.07	0.03	0.29	-0.04	-0.06	0.05	-0.25	0.18	0.18
(13) <i>R&D</i>	-0.18	-0.28	0.30	0.31	0.07	0.03	-0.03	0.00	-0.05	0.02	-0.27	0.22	1	-0.25	0.57	-0.09	0.27	0.08	0.29	-0.22	0.00	0.20	0.10	0.22	0.02	0.01
(14) <i>PPE</i>	0.02	0.13	-0.15	-0.19	-0.01	0.01	0.02	-0.06	-0.01	0.09	0.32	-0.10	-0.34	1	-0.24	0.08	-0.12	0.52	-0.25	0.07	0.68	-0.03	-0.14	-0.08	0.00	-0.03
(15) <i>Cash</i>	-0.11	-0.15	0.15	0.21	0.03	0.00	0.02	-0.02	0.02	-0.04	-0.46	0.09	0.44	-0.36	1	-0.10	0.50	0.00	0.27	0.05	0.06	0.10	0.12	0.07	0.04	0.00
(16) <i>EqInc</i>	0.03	0.00	0.05	0.01	0.00	0.01	-0.01	0.00	-0.03	0.14	0.10	0.12	-0.09	0.11	-0.14	1	-0.06	-0.02	-0.12	0.07	0.00	-0.03	0.00	-0.08	0.06	0.05
(17) <i>Zscore</i>	0.22	0.16	0.11	0.16	0.03	-0.08	0.12	-0.11	0.11	0.11	-0.58	0.08	0.17	-0.15	0.41	-0.12	1	-0.02	0.24	0.34	0.13	-0.01	-0.01	-0.16	0.09	0.02
(18) <i>Depr</i>	-0.04	0.05	-0.09	-0.07	0.01	0.04	-0.02	-0.03	-0.06	-0.03	0.11	-0.09	-0.03	0.58	-0.10	-0.01	-0.04	1	0.08	-0.06	0.57	0.07	-0.03	0.08	-0.03	-0.06
(19) <i>SG&A</i>	0.13	0.05	0.05	0.15	0.02	0.01	0.00	-0.02	0.00	-0.13	-0.28	0.02	0.23	-0.30	0.24	-0.16	0.39	0.00	1	0.10	0.02	0.04	0.03	-0.03	-0.02	-0.03
(20) <i>ROA</i>	0.29	0.27	0.16	0.20	0.01	-0.06	0.12	-0.13	0.07	0.31	-0.20	0.25	0.00	0.05	0.19	0.02	0.61	0.02	0.22	1	0.13	-0.32	-0.04	-0.69	0.13	0.10
(21) <i>Capex</i>	0.06	0.15	-0.07	-0.11	0.01	-0.01	0.06	-0.09	0.00	0.08	0.09	-0.06	-0.14	0.71	-0.10	0.02	0.14	0.60	-0.02	0.25	1	0.00	-0.07	-0.08	0.02	-0.03
(22) <i>ChangeNOL</i>	-0.06	-0.07	0.02	-0.01	0.00	0.01	-0.02	0.02	-0.02	-0.02	0.04	-0.06	0.03	0.00	0.00	-0.01	-0.09	0.03	-0.01	-0.18	-0.02	1	0.04	0.26	-0.02	-0.02
(23) <i>AbsDA</i>	-0.09	-0.12	0.13	0.08	0.06	0.01	-0.02	0.03	-0.01	-0.05	-0.12	0.07	0.25	-0.28	0.23	-0.04	0.06	-0.08	0.09	0.00	-0.16	0.01	1	0.05	0.03	0.03
(24) <i>Loss</i>	-0.35	-0.31	-0.14	-0.10	-0.01	0.07	-0.11	0.11	-0.07	-0.31	0.00	-0.27	0.13	-0.09	0.05	-0.08	-0.33	0.04	-0.06	-0.66	-0.15	0.20	0.08	1	-0.12	-0.11
(25) <i>Delta</i>	0.01	-0.01	0.16	0.13	0.01	-0.08	0.05	0.03	0.07	0.23	0.00	0.11	-0.02	-0.05	0.06	0.03	0.06	-0.08	-0.05	0.13	-0.06	-0.02	0.06	-0.11	1	0.84
(26) <i>Vega</i>	0.01	0.01	0.10	0.14	0.00	-0.04	0.06	-0.03	0.03	0.12	-0.03	0.07	0.01	-0.03	0.05	0.01	0.05	-0.04	-0.02	0.09	-0.03	-0.03	0.03	-0.08	0.83	1

Notes: Table 3 presents the correlation matrix for the variables used in the study. Correlations presented in bold represent a significant correlation at the 5% level or stronger. All continuous variables are winsorized at the 1 and 99% level. See the Appendix for a full description and calculation of each variable.

TABLE 4
Panel A: GAAP ETR and CEO Tenure

D.V. = GAAPETR	(1) Coefficient (t-stat)	(2) Coefficient (t-stat)	(3) Coefficient (t-stat)	(4) Coefficient (t-stat)	(5) Coefficient (t-stat)
<i>Intercept</i>	0.262*** (10.02)	0.251*** (9.58)	0.261*** (10.11)	0.251*** (9.91)	0.263*** (10.14)
<i>FIRST3</i>	-0.010*** (-3.11)				-0.011*** (-3.19)
<i>MIDDLE</i>		0.012*** (4.25)			
<i>LAST</i>			-0.011*** (-2.96)		-0.012*** (-3.06)
<i>TENURE</i>				0.001*** (3.83)	
<i>Size</i>	-0.001 (-0.45)	-0.001 (-0.42)	-0.001 (-0.48)	-0.000 (-0.36)	-0.001 (-0.46)
<i>Lev</i>	-0.013 (-1.56)	-0.014 (-1.62)	-0.013 (-1.58)	-0.012 (-1.43)	-0.014 (-1.61)
<i>Foreign</i>	-0.303*** (-6.27)	-0.303*** (-6.27)	-0.303*** (-6.26)	-0.302*** (-6.26)	-0.302*** (-6.27)
<i>R&D</i>	-0.237*** (-7.66)	-0.238*** (-7.71)	-0.238*** (-7.71)	-0.234*** (-7.58)	-0.239*** (-7.74)
<i>PPE</i>	-0.007 (-0.56)	-0.008 (-0.57)	-0.008 (-0.59)	-0.008 (-0.62)	-0.008 (-0.60)
<i>Cash</i>	-0.056*** (-7.37)	-0.056*** (-7.38)	-0.057*** (-7.48)	-0.055*** (-7.33)	-0.056*** (-7.40)
<i>EqInc</i>	-0.798** (-2.12)	-0.791** (-2.11)	-0.839** (-2.23)	-0.778** (-2.07)	-0.792** (-2.11)
<i>Zscore</i>	0.001*** (3.14)	0.001*** (3.05)	0.001*** (3.18)	0.001*** (3.05)	0.001*** (3.04)
<i>Depr</i>	0.030 (0.40)	0.033 (0.43)	0.024 (0.31)	0.032 (0.42)	0.032 (0.42)
<i>SG&A</i>	0.001 (0.16)	0.002 (0.17)	0.001 (0.13)	0.001 (0.11)	0.002 (0.18)
<i>ROA</i>	0.221*** (10.00)	0.220*** (9.95)	0.219*** (9.91)	0.221*** (10.01)	0.219*** (9.92)
<i>Capex</i>	0.048 (1.59)	0.046 (1.54)	0.049 (1.63)	0.051* (1.68)	0.047 (1.55)
<i>ChangeNOL</i>	-0.053** (-2.11)	-0.052** (-2.09)	-0.053** (-2.12)	-0.053** (-2.13)	-0.052** (-2.09)
<i>AbsDA</i>	-0.006** (-2.05)	-0.006** (-2.00)	-0.006** (-2.04)	-0.007** (-2.11)	-0.006** (-2.00)
<i>Loss</i>	-0.050*** (-6.45)	-0.050*** (-6.39)	-0.050*** (-6.44)	-0.050*** (-6.42)	-0.050*** (-6.35)
<i>Delta</i>	0.000 (0.09)	0.000 (0.03)	0.000 (0.15)	0.000 (0.02)	0.000 (0.04)
<i>Vega</i>	-0.000 (-0.76)	-0.000 (-0.73)	-0.000 (-0.77)	-0.000 (-0.68)	-0.000 (-0.72)
Fixed Effects	Industry & Year	Industry & Year	Industry & Year	Industry & Year	Industry & Year
Clustered S.E.	Firm	Firm	Firm	Firm	Firm
N	23,873	23,873	23,873	23,873	23,873
Adjusted R-Square	0.115	0.116	0.115	0.116	0.116

TABLE 4
Panel B: Cash ETR and CEO Tenure

D.V. = <i>CASHETR</i>	(1) Coefficient (t-stat)	(2) Coefficient (t-stat)	(3) Coefficient (t-stat)	(4) Coefficient (t-stat)	(5) Coefficient (t-stat)
<i>Intercept</i>	0.267*** (9.74)	0.261*** (9.53)	0.265*** (9.76)	0.255*** (9.53)	0.267*** (9.74)
<i>FIRST3</i>	-0.008** (-2.35)				-0.008** (-2.35)
<i>MIDDLE</i>		0.005 (1.65)			
<i>LAST</i>			-0.001 (-0.27)		-0.001 (-0.35)
<i>TENURE</i>				0.001*** (3.59)	
<i>Size</i>	0.005*** (3.50)	0.005*** (3.50)	0.005*** (3.48)	0.005*** (3.60)	0.005*** (3.50)
<i>Lev</i>	-0.052*** (-5.86)	-0.052*** (-5.87)	-0.052*** (-5.84)	-0.051*** (-5.73)	-0.052*** (-5.87)
<i>Foreign</i>	-0.192*** (-3.70)	-0.192*** (-3.71)	-0.192*** (-3.71)	-0.190*** (-3.69)	-0.192*** (-3.70)
<i>R&D</i>	-0.293*** (-8.29)	-0.294*** (-8.31)	-0.293*** (-8.29)	-0.291*** (-8.23)	-0.294*** (-8.30)
<i>PPE</i>	-0.080*** (-5.88)	-0.080*** (-5.89)	-0.080*** (-5.89)	-0.081*** (-5.92)	-0.080*** (-5.89)
<i>Cash</i>	-0.079*** (-9.46)	-0.080*** (-9.50)	-0.080*** (-9.51)	-0.078*** (-9.40)	-0.079*** (-9.46)
<i>EqInc</i>	-0.042 (-0.10)	-0.056 (-0.13)	-0.077 (-0.18)	-0.000 (-0.00)	-0.041 (-0.10)
<i>Zscore</i>	0.000 (0.47)	0.000 (0.49)	0.000 (0.57)	0.000 (0.31)	0.000 (0.46)
<i>Depr</i>	0.145* (1.85)	0.143* (1.83)	0.139* (1.77)	0.150* (1.92)	0.145* (1.85)
<i>SG&A</i>	0.047*** (4.72)	0.046*** (4.71)	0.046*** (4.69)	0.046*** (4.68)	0.047*** (4.72)
<i>ROA</i>	0.144*** (7.32)	0.143*** (7.29)	0.144*** (7.31)	0.144*** (7.35)	0.144*** (7.30)
<i>Capex</i>	0.005 (0.15)	0.005 (0.16)	0.007 (0.20)	0.007 (0.22)	0.005 (0.15)
<i>ChangeNOL</i>	-0.018 (-0.77)	-0.018 (-0.78)	-0.018 (-0.80)	-0.018 (-0.77)	-0.018 (-0.77)
<i>AbsDA</i>	-0.005 (-1.45)	-0.004 (-1.44)	-0.005 (-1.48)	-0.005 (-1.49)	-0.005 (-1.44)
<i>Loss</i>	-0.047*** (-6.48)	-0.047*** (-6.48)	-0.048*** (-6.54)	-0.047*** (-6.43)	-0.047*** (-6.47)
<i>Delta</i>	-0.000*** (-3.28)	-0.000*** (-3.27)	-0.000*** (-3.21)	-0.000*** (-3.40)	-0.000*** (-3.29)
<i>Vega</i>	0.000* (1.82)	0.000* (1.83)	0.000* (1.80)	0.000* (1.93)	0.000* (1.83)
Fixed Effects	Industry & Year	Industry & Year	Industry & Year	Industry & Year	Industry & Year
Clustered S.E.	Firm	Firm	Firm	Firm	Firm
N	23,873	23,873	23,873	23,873	23,873
Adjusted R-Square	0.111	0.111	0.111	0.112	0.111

Notes: Table 4 presents the analyses examining the association between corporate tax planning and CEO tenure. Panel A presents the findings when *GAAPETR* is the dependent variable, while Panel B presents the findings when *CASHETR* is the dependent variable. Additionally, columns (1) – (5) each present results with differing independent variables of interest as follows: (1) *FIRST3*, (2) *MIDDLE*, (3) *LAST*, (4) *TENURE*, and (5) *FIRST3* and *LAST*. All regressions are run with Fama-French 48 industry fixed effects and year fixed effects, as well as firm clustered standard errors. All continuous variables are winsorized at the 1 and 99% levels. See the Appendix for a full description and calculation of each variable used in the analysis. *, **, and *** represents a significant association at the 10%, 5%, and 1% level, respectively.

TABLE 5
Permanently Reinvested Foreign Earnings and CEO Tenure

D.V. = <i>PRE</i>	(1) Coefficient (t-stat)	(2) Coefficient (t-stat)	(3) Coefficient (t-stat)	(4) Coefficient (t-stat)	(5) Coefficient (t-stat)
<i>Intercept</i>	-0.029 (-0.25)	-0.021 (-0.17)	0.045 (0.38)	-0.020 (-0.17)	0.032 (0.27)
<i>FIRST3</i>	0.014*** (3.72)				0.014*** (3.75)
<i>MIDDLE</i>		-0.009*** (-2.73)			
<i>LAST</i>			0.003 (0.68)		0.003 (0.81)
<i>TENURE</i>				-0.001*** (-3.18)	
Controls	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Industry & Year	Industry & Year	Industry & Year	Industry & Year	Industry & Year
Clustered S.E.	Firm	Firm	Firm	Firm	Firm
N	5,903	5,903	5,903	5,903	5,903
Adjusted R-Square	0.377	0.376	0.375	0.376	0.377

Notes: Table 5 presents the analyses examining the association between permanently reinvested foreign earnings (*PRE*) and CEO tenure. Columns (1) – (5) each present results with differing independent variables of interest as follows: (1) *FIRST3*, (2) *MIDDLE*, (3) *LAST*, (4) *TENURE*, and (5) *FIRST3* and *LAST*. All regressions are run with Fama-French 48 industry fixed effects and year fixed effects, as well as firm clustered standard errors. All continuous variables are winsorized at the 1 and 99% levels. See the Appendix for a full description and calculation of each variable used in the analysis. *, **, and *** represents a significant association at the 10%, 5%, and 1% level, respectively.

TABLE 6
Panel A: CY Increases to UTB and CEO Tenure

D.V. = <i>CYInc</i>	(1) Coefficient (t-stat)	(2) Coefficient (t-stat)	(3) Coefficient (t-stat)	(4) Coefficient (t-stat)	(5) Coefficient (t-stat)
<i>Intercept</i>	-0.329** (-2.03)	-0.330** (-2.03)	-0.318* (-1.95)	-0.333** (-2.05)	-0.317* (-1.95)
<i>FIRST3</i>	0.031** (2.50)				0.031** (2.46)
<i>MIDDLE</i>		-0.011 (-1.02)			
<i>LAST</i>			-0.014 (-0.99)		-0.013 (-0.89)
<i>TENURE</i>				0.000 (0.12)	
Controls	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Industry & Year	Industry & Year	Industry & Year	Industry & Year	Industry & Year
Clustered S.E.	Firm	Firm	Firm	Firm	Firm
N	6,588	6,588	6,588	6,588	6,588
Adjusted R-Square	0.112	0.111	0.111	0.111	0.112

Panel B: PY Net Changes to UTB and CEO Tenure

D.V. = <i>PYNet</i>	(1) Coefficient (t-stat)	(2) Coefficient (t-stat)	(3) Coefficient (t-stat)	(4) Coefficient (t-stat)	(5) Coefficient (t-stat)
<i>Intercept</i>	0.034 (0.41)	0.050 (0.67)	0.048 (0.65)	0.054 (0.68)	0.047 (0.65)
<i>FIRST3</i>	-0.025* (-1.68)				-0.011 (-1.05)
<i>MIDDLE</i>		0.011 (1.18)			
<i>LAST</i>			0.002 (0.24)		0.002 (0.19)
<i>TENURE</i>				-0.000 (-0.32)	
Controls	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Industry & Year	Industry & Year	Industry & Year	Industry & Year	Industry & Year
Clustered S.E.	Firm	Firm	Firm	Firm	Firm
N	6,584	6,584	6,584	6,584	6,584
Adjusted R-Square	0.004	0.004	0.004	0.004	0.004

Notes: Table 6 presents the analyses examining the association between uncertain tax benefits (UTBs) and CEO tenure. Panel A presents the findings when *CYInc* is the dependent variable, and Panel B presents the findings when *PYNet* is the dependent variable. Additionally, columns (1) – (5) each present results with differing independent variables of interest as follows: (1) *FIRST3*, (2) *MIDDLE*, (3) *LAST*, (4) *TENURE*, and (5) *FIRST3* and *LAST*. All regressions are run with Fama-French 48 industry fixed effects and year fixed effects, as well as firm clustered standard errors. All continuous variables are winsorized at the 1 and 99% levels. See the Appendix for a full description and calculation of each variable used in the analysis. *, **, and *** represents a significant association at the 10%, 5%, and 1% level, respectively.

TABLE 7
Panel A: APTS Selection Model 1st Stage

D.V. = <i>APTSInd</i>	Coefficient (t-stat)
<i>Intercept</i>	-5.544*** (-7.75)
<i>ChangeAuditor</i>	-0.243*** (-3.36)
<i>DefTax</i>	-0.000 (-0.02)
<i>Merger</i>	0.447*** (6.52)
<i>Foreign</i>	0.140 (1.20)
<i>NOL</i>	-0.034 (-0.43)
<i>BigN</i>	0.880*** (5.39)
<i>NonAudit_AuditFees</i>	0.292*** (7.65)
<i>NonAudit_PI</i>	0.000** (2.01)
<i>Leverage</i>	0.042 (0.23)
<i>Size</i>	0.254*** (9.13)
<i>ROA</i>	-0.262 (-0.88)
<i>Year2002</i>	4.228*** (19.25)
Fixed Effects	Industry & Year
Clustered S.E.	Firm
N	14343
Adjusted R-Square	0.2339
ROC Curve Area	0.8165

TABLE 7
Panel B: APTS Selection Model Second Stage

D.V. = <i>APTS</i>	(1) Coefficient (t-stat)	(2) Coefficient (t-stat)	(3) Coefficient (t-stat)	(4) Coefficient (t-stat)
<i>Intercept</i>	-0.746*** (-5.24)	-0.758*** (-5.33)	-0.732*** (-5.21)	-0.762*** (-5.33)
<i>FIRST3</i>	-0.015** (-2.45)			
<i>MIDDLE</i>		0.015*** (2.82)		
<i>LAST</i>			-0.013* (-1.83)	
<i>TENURE</i>				0.001** (2.42)
<i>DefTax</i>	-0.001 (-0.82)	-0.001 (-0.80)	-0.001 (-0.80)	-0.001 (-0.77)
<i>Merger</i>	0.039*** (5.05)	0.040*** (5.12)	0.038*** (5.03)	0.040*** (5.10)
<i>Foreign</i>	0.010 (1.14)	0.010 (1.15)	0.010 (1.15)	0.010 (1.11)
<i>NOL</i>	-0.007 (-1.11)	-0.007 (-1.12)	-0.007 (-1.12)	-0.007 (-1.10)
<i>BigN</i>	0.115*** (6.53)	0.115*** (6.57)	0.114*** (6.56)	0.117*** (6.62)
<i>NonAudit_AuditFees</i>	0.407*** (66.91)	0.407*** (67.03)	0.407*** (67.88)	0.407*** (66.83)
<i>NonAudit_PI</i>	0.000** (2.32)	0.000** (2.34)	0.000** (2.39)	0.000** (2.27)
<i>Leverage</i>	-0.013 (-0.87)	-0.014 (-0.91)	-0.014 (-0.92)	-0.013 (-0.81)
<i>Size</i>	0.011*** (3.18)	0.010*** (3.17)	0.010*** (3.15)	0.011*** (3.21)
<i>ROA</i>	0.100*** (3.28)	0.097*** (3.18)	0.098*** (3.24)	0.102*** (3.34)
<i>Year2002</i>	0.525*** (6.68)	0.535*** (6.81)	0.530*** (6.82)	0.525*** (6.67)
<i>INVMills</i>	0.315*** (7.15)	0.314*** (7.16)	0.310*** (7.16)	0.315*** (7.15)
Controls	Yes	Yes	Yes	Yes
Fixed Effects	Industry & Year	Industry & Year	Industry & Year	Industry & Year
Clustered S.E.	Firm	Firm	Firm	Firm
N	14,343	14,343	14,343	14,343

Notes: Table 7 presents the analyses examining the association between auditor-provided tax services (APTS) and CEO tenure. Panel A presents the first stage, which models the decision to have APTS following Omer et al. (2006) and McGuire et al. (2012), and is used to generate an Inverse-Mills ratio. Panel B presents the second stage model. Columns (1) – (4) each present results

with differing independent variables of interest as follows: (1) *FIRST3*, (2) *MIDDLE*, (3) *LAST*, and (4) *TENURE*. All regressions are run with Fama-French 48 industry fixed effects and year fixed effects, as well as firm clustered standard errors. All continuous variables are winsorized at the 1 and 99% levels. See the Appendix for a full description and calculation of each variable used in the analysis. *, **, and *** represents a significant association at the 10%, 5%, and 1% level, respectively.