

## **Do Tax Service Provider Changes Improve Client Tax Outcomes?**

Davidson B. Gillette  
East Carolina University

Ryan C. Polk  
Clemson University

Courtney E. Yazzie  
Clemson University

Davidson B. Gillette, East Carolina University, College of Business, Accounting, Greenville, North Carolina, USA; Ryan C. Polk, Clemson University, The Wilbur O. and Ann Powers College of Business, Accounting, Clemson, South Carolina, USA; Courtney E. Yazzie, Clemson University, The Wilbur O. and Ann Powers College of Business, Accounting, Clemson, South Carolina, USA

**JEL Classification:** H25; L14; M40

**Acknowledgments:** We thank Ryan Hess (discussant) and Nathan Goldman for their valuable feedback. We also thank participants at the 2025 ATA Midyear Meeting.

**Keywords:** corporate tax; auditor-provided tax services; tax provider switch; tax settlements; tax audit outcomes

## **Do Tax Service Provider Changes Improve Client Tax Outcomes?**

### **Abstract**

Deciding to switch tax service providers represents a substantial shift in a corporation's tax decision-making, with potential long-term implications on tax outcomes, one that likely requires an expectation of future tax benefits. These changes are particularly important when they involve the company's current auditor, either in a shift of tax services to or from the audit firm. Drawing on disclosures of audit and tax-related fees, we identify occurrences of complete shifts in tax services either to or from a company's auditors and examine the association with a variety of tax outcomes. We find that tax service provider changes are related to future tax benefits, in terms of lower cash effective tax rates, higher discretionary permanent book-tax differences, and a lower likelihood of a large tax settlement. These outcomes are influenced, but not driven, by the auditor's experience with complex tax matters. Overall, the study underscores the importance of TSP decisions in shaping future tax outcomes and highlights the nuanced trade-offs involved when integrating audit and tax services under the same provider.

# **Do Tax Service Provider Changes Improve Client Tax Outcomes?**

## **1. Introduction**

The choice of a tax services provider (TSP) is one of the most important tax-focused aspects of corporate decision-making, as external tax advisors play a crucial role in corporate tax behavior (e.g., Acito and Nessa 2022; Albring, Robinson, and Robinson 2014; Belnap, Hoopes, and Wilde 2023; Klassen, Lisowsky, and Mescall 2016). Therefore, when a company chooses to change its TSP, such a decision may have multifaceted impacts on the entity's subsequent tax behavior. Further, given that the prior literature has identified the important role of audit firms in the tax context, with potential benefits of their utilization in both tax (e.g., Hogan and Noga 2015) and audit outcomes (e.g., Gleason and Mills 2011), when a company chooses to shift its tax providers either to or from its financial statement auditor, it carries additional tax implications. In this paper, we examine the tax outcomes associated with wholesale shifts in tax services either to or from a company's auditor.

While the selection of a TSP and the decision to change among TSPs has potentially broad implications for corporate tax decision making, it has received relatively little coverage in the academic literature. Historically, the typically confidential nature of TSP arrangements limited their study. Moreover, while new disclosure requirements have allowed more insight into the non-audit services (NAS), like taxes, provided by audit firms, much of the usage of such data has focused on the role of the level of services, rather than changes in the provider of the services themselves. For example, among the substantial literature on auditor-provided tax services (APTS), much research focuses on audit outcomes (e.g., Goldman, Harris, and Omer 2022; Hux, Bedard, and Noga 2023; Klassen et al. 2016; Lennox 2016). Meanwhile, studies focusing on tax outcomes have primarily concentrated on the association between levels of APTS (e.g., Hogan

and Noga 2015; Chyz, Gal-Or, Naiker, and Sharma 2021), industry specialization (e.g., McGuire, Omer, and Wang 2012) or the reactions to exogenous shocks (e.g., legislative changes, like Sarbanes-Oxley) on tax outcomes (e.g., Cook, Kim, and Omer 2020), rather than wholesale changes in TSP either to or from the audit firm. However, we propose that such fundamental shifts represent a particularly salient setting to examine the influence of different TSPs on outcomes. Therefore, we examine the tax outcomes from this different angle, focusing on complete switches in TSPs, either to or from an audit firm.

Switching TSP entails a substantial change in professional relationships for firms, which could be inconvenient and expensive. Therefore, we expect that firms will only choose to switch providers if they anticipate substantial benefits from the change by the new preparer, whether through improved tax examination outcomes or reduced cash tax payments. Therefore, any shift is likely to result from the new provider promising relatively superior results compared to the existing provider, motivating the firm to make the change (e.g., Christensen 1992; Fleischman and Stephenson 2012). Based on this expectation of promised benefits, we predict that a shift in TSP will be associated with improved tax outcomes over the subsequent periods.

However, reflective of the wide range of impacts exerted by a TSP, these benefits may derive from a variety of sources, with different implications for their long-term effects. Due to opposing positions and obligations, shifts of tax services to or from an auditor may have divergent impacts on tax outcomes, depending on the nature of the direction. For example, shifts of tax services to the current auditor may offer opportunities for greater synergy and knowledge sharing among linked audit-tax teams or deep client relationships (e.g., Hux et al. 2023; Mayer and Gendron 2024). On the other hand, moving to the auditor for tax services may result in a reduction in tax benefits due to independence and assurance concerns. Conversely, shifts away

from an audit firm may open new opportunities for more aggressive tax strategies previously limited by independence and professional standards, but may also entail the loss of shared knowledge between the audit and tax teams.

Additionally, given our focus on interrelationships between tax and audit lines, we also consider the potential role of auditor tax task-specific knowledge (e.g., Goldman et al. 2022; McGuire et al. 2012). Since we focus on the shift of tax provider away from or to the auditor, while the audit relationship continues, we inherently connect with the concept of auditor tax expertise. Given that our focus is on the new shift, rather than the ongoing role of the auditor, we also consider the role of tax-focused task-specific knowledge (TSK) by the auditor by including the TSK measure of Goldman et al. (2022).

To examine the role of switches of TSP from or to an audit firm, we use public data from firms disclosing the total fees paid to the auditor for tax services.<sup>1</sup> Using this information, we isolate situations of complete tax shifts either to (i.e., prior year tax fees of zero and current year greater than zero) or from (i.e., prior tax year fees greater than zero and current year equal to zero). We then examine the association between TSP switches and various tax outcomes. Specifically, we analyze changes in corporate tax aggressiveness in the year following the switch, the three-year average of tax aggressiveness from the first to the third year post-switch, and the prevalence of large tax settlements in the third year after the change. This approach allows sufficient time for the standard three-year statute of limitations to close on the prior TSP's tax positions, ensuring that our analysis primarily reflects the impact of the new provider. We predict that consistent with a focus on providing benefits to justify the client's switch of providers, the change will be associated with subsequent tax benefits.

---

<sup>1</sup> While providing APTS figures was not mandatory until 2003 (SEC 2003), a large number of firms voluntarily disclosed this information.

Consistent with our expectation that firms switch TSPs with the goal of achieving tax benefits, we find that wholesale TSP switches are associated with subsequent reductions in cash effective tax rates (CETRs) and increases in discretionary permanent book-tax differences (DTAX) after controlling for numerous firm characteristics as well as firm fixed effects. These findings suggest that firms engaging new tax service providers implement more tax-efficient strategies, either by better utilizing available tax incentives, refining their tax planning approaches, or adopting more discretionary tax positions that reduce taxable income. The increase in DTAX further indicates that firms take on tax strategies that increase permanent book-tax differences, a characteristic commonly associated with more aggressive tax planning practices (Frank, Lynch, and Rego 2009).

To ensure that these effects are not driven solely by short-term tax planning adjustments, we also examine the three-year average of CETR and DTAX. The persistence of these results indicates that firms maintain lower tax burdens and higher discretionary tax positions for an extended period following a TSP switch, reinforcing the notion that firms change providers with an expectation of achieving sustained tax advantages.

Furthermore, our findings suggest that TSP switches are linked to a lower probability of a large tax settlement in the years when newly adopted tax positions are subject to tax authority scrutiny. Large settlements typically occur when tax authorities challenge uncertain tax positions, leading to significant adjustments, penalties, or repayments. While the absence of a large settlement does not necessarily indicate a lack of audit activity, it may reflect that firms are better at managing tax risks and resolving disputes more effectively.

In additional analyses, we confirm that our results are not driven by systematic differences between firms with and without TSP switches using entropy balancing, ensuring comparability across key firm characteristics. We also examine the magnitude of TSP switches by dividing firms into terciles based on tax service fees. Larger transitions yield the most pronounced reductions in CETR and increases in DTAX, while smaller switches have weaker but still positive effects. Importantly, firms across all terciles report fewer large settlements, suggesting that switching tax providers, regardless of scale, improves tax outcomes. Additionally, given prior research on the role of auditor task-specific knowledge (TSK) and industry expertise (Goldman et al. 2022; McGuire et al. 2012), we incorporate TSK as a control and find it is positively associated with favorable tax outcomes. However, TSP switches remain significantly linked to improved tax positions, reinforcing that TSP changes influence tax outcomes beyond the auditor's tax expertise.

Our findings have important implications for both academic research and tax practitioners. We contribute to the APTS literature by providing empirical evidence on the tax effects of switching preparers, capturing firms that fully start or stop APTS. Firms undergoing such transitions exhibit measurable differences in tax settlements, indicating that TSP changes impact firms' ability to manage tax positions over time. By analyzing both switches to and from the auditor for tax services, we offer a more comprehensive perspective on tax outcomes than prior studies focused solely on APTS presence.

For practitioners, these results highlight the strategic importance of TSP decisions. Tax professionals marketing their services can use this evidence to demonstrate the potential benefits of switching providers, while incumbent TSPs should focus on delivering consistent tax planning value to retain clients. Given the tangible tax advantages associated with switching preparers,

firms are likely to evaluate their tax service providers critically, reinforcing the competitive dynamics of the tax advisory market.

## **2. Background and Hypothesis Development**

### ***Tax Services Providers (TSPs) and Switches***

Large corporations face a dizzying array of tax obligations and planning opportunities, often with considerable rewards, risk, and uncertainty involved (Graham, Hanlon, Shevlin, and Shroff 2014). As such, TSPs play an important role in influencing corporate tax behavior, along with other influences and decision-makers (Belnap et al. 2024). However, the generally confidential nature of these arrangements inhibits much study. However, by utilizing required SEC disclosures for public companies of their audit and tax fees, we can identify situations of changes in TSPs.

The potential implications of different TSPs become even more salient when a client chooses to move away from their existing provider. The new provider brings a new set of personnel and background to the client's tax situation while prioritizing delivering new benefits to the client, the offering of which presumably played a role in convincing the client to shift in the first place. Further, the implications of a change become more complex in situations where the client shifts either to or from their auditor as a TSP, settings which we can identify due to the SEC disclosure requirement. Prior research has identified that reliance on auditors and non-auditors for tax planning may influence tax behavior (e.g., Klassen et al. 2016). However, by focusing on the changes of TSPs to or from the audit firm, we can study how various tax outcomes are associated with the shift in providers.



Transitioning to a new TSP inherently entails substantial costs and requires significant shifts in strategy. The marketing literature proposes that consumers are unlikely to endure the disruptions associated with switching unless they perceive compelling benefits. Berry, Zeithaml, and Parasuraman (1985) introduced the perception gap model, which illustrates how changes in service providers are driven by consumers' awareness of a gap between their expectations and the actual service they are receiving. Recognition of this discrepancy serves as a critical trigger for considering a switch, as it underscores the inadequacies of their current provider and motivates clients to seek alternatives that better fulfill their needs.

Drawing on this framework, Christensen (1992) proposes that client satisfaction with tax services hinges on the client's evaluation of the technical quality provided by their TSP. This quality is primarily evaluated in terms of three critical dimensions: tax liability reduction, audit risk, and return accuracy. Clients will only choose to switch providers if they perceive an undesirable gap in the quality of service they currently receive in these dimensions and the potential benefits of switching. Therefore, to successfully persuade clients to switch, a firm must clearly demonstrate potential future benefits and be highly motivated to fulfill them after the transition.

### ***Auditor-Provided Tax Services (APTS)***

Our use of APTS-related disclosures to identify changes in TSP builds upon an extensive body of literature examining the relationship between APTS and various tax and audit outcomes. Previous research has explored the effects of APTS, particularly in terms of its influence on audit quality and auditor independence. Since tax services prioritize client advocacy, which contrasts with the auditor's focus on independence, this dynamic is understandable. Much of the prior

work has addressed these concerns by connecting APTS to different measures of audit quality, yielding nuanced findings on its benefits.

For example, Robinson (2008) finds improvements in audit quality, while Paterson and Valencia (2011) find similar results for recurring tax services; however, they suggest that nonrecurring tax services could threaten independence. Chyz, Gal-Or, and Naiker (2023) differentiate between auditor-provided tax planning and tax compliance work, finding no significant association of audit quality with the former but some positive association with the latter. Other studies have identified the role of APTS in various financial contexts, including earnings management (Krishnan and Visvanathan 2011), the value relevance of earnings (Krishnan, Visvanathan, and Yu 2013), internal control quality (De Simone, Ege, and Stomberg 2015), corporate debt pricing (Fortin and Pittman 2008), and tax reserves (Bulloch, Lynch, Pflitsch, and Schroeder 2024).

Further, prior research has examined the general association of APTS with tax outcomes. For example, Cook, Huston, and Omer (2008) find an association between tax services provided by a firm other than the external auditor and reductions in effective tax rates for firms that would miss earnings expectations. McGuire et al. (2012) find that tax-related auditor expertise is associated with tax avoidance, though their findings inherently highlight the importance of ongoing relationships and specialization, in contrast to our specific focus on changes in providers. Klassen et al. (2016), using confidential data, seek to differentiate the relative driver of tax aggressiveness among internal (tax department) and external (auditing and non-auditing firms) decision-makers, finding that firms not utilizing their external auditor, whether using an internal tax department or a firm other than the auditor, claim more aggressive tax positions. Chyz et al. (2021) use hand-collected data to connect APTS with tax avoidance and tax risk.

They find that firms that utilize their auditors in tax planning demonstrate superior tax planning capabilities, characterized by higher tax avoidance and lower tax risk, compared to firms that do not involve their auditors in tax planning. Cook et al. (2020) examine shifts of tax services away from audit firms in the aftermath of the passage of Sarbanes-Oxley (SOX), finding an increase in both book ETR and CETR in the year following the termination or reduction of purchasing tax services from their audit provider. Together, the literature finds a link between using a non-auditor for tax services and increasing tax aggressiveness.

Our study differs from these studies, particularly McGuire et al. (2012) and Cook et al. (2020), in several important aspects. From a design perspective, we focus on wholesale switches in tax services while those papers concentrate on ongoing industry expertise and variations in percentages of total fees paid to the auditor, respectively. Additionally, we explore an additional dimension of tax services: the outcomes of tax audits.

### ***The Interrelationship of Tax and Audit Practices***

While the actual provision of tax services represents the most direct involvement in corporate tax decision-making, all public audits include tax components. Therefore, in all situations of audits, the overall audit firm has implications for tax matters, separate from whether they serve as the primary TSP for the firm. For example, McGuire et al. (2012) find that tax-specific industry expertise in an audit firm is associated with more tax avoidance. Further, Goldman et al. (2022) find that higher levels of experience with complex tax issues (tax task-specific knowledge, or TSK) among audit offices is associated with higher quality audits of tax accounts. They propose that audit offices that frequently encounter complex tax issues gradually develop TSK, which results in benefits to the audit process, especially in the tax accounts, enjoyed by all clients served by the office. This accumulation of tax-related expertise at the audit

office level enhances the accuracy of financial reporting and strengthens the overall quality of the audit. Drawing on this more recent measure of tax-related audit expertise, we consider its implications for our findings.

Inherently, this concept of TSK may impact our present research. Given that all public companies have ongoing financial statement audits, TSK exerts an influence on the tax decision-making of the companies. In contrast, by focusing on a change in TSP, we seek to highlight the relative effect of the new TSP relationship, rather than the ongoing influence of TSK, which exists before, during, and after the shift in TSP. Therefore, we also consider the competing explanation of TSK as driving our findings, by including it in supplemental regressions.

### ***Hypothesis***

Having established this background, we now consider whether firms experience tax benefits following a TSP switch. Prior research suggests that external tax advisors play a critical role in shaping corporate tax decisions by identifying planning opportunities, ensuring compliance, and optimizing positions (e.g., Acito and Nessa 2022; Belnap et al. 2023; Klassen et al. 2016; among others). However, whether firms realize tax benefits following a TSP switch is unclear. While a new TSP may introduce alternative tax planning approaches, better regulatory insight, or greater industry expertise, there are also significant frictions that could offset or delay any benefits. First, the transition process itself is costly since firms must onboard a new tax team, transfer historical records, and align tax strategies with a provider that may have a different risk tolerance or methodological approach. These disruptions could lead to short-term inefficiencies that negatively impact tax outcomes.

Second, a lack of firm-specific knowledge in the early stages of the new TSP relationship could hinder tax planning effectiveness. Long-standing TSPs develop deep institutional

knowledge of a firm's operations, risk profile, and historical tax positions, which may take time for a new provider to replicate.

Given these competing possibilities, it is not immediately evident that a TSP switch will always result in better tax outcomes. While firms likely switch providers in pursuit of tax benefits, the realization of these benefits depends on how effectively the new TSP navigates firm-specific complexities and tax planning opportunities. However, the significant direct and indirect costs associated with disrupting established business relationships and incurring potential costs and inconveniences makes it unlikely that firms will change TSPs without an expectation of improved tax outcomes, at least in the short term. Therefore, we predict that changes in TSPs will be linked to positive tax outcomes.

*H1: A tax service provider switch is associated with future tax benefits.*

### **3. Research Design**

#### ***Measuring a Tax Service Provider Change***

Since the required SEC change in 2003, public corporations must disclose any fees paid to an auditor for tax services, whether for compliance or consulting work, along with additional disclosure regarding the audit fees themselves. Using this disclosure requirement, we construct our initial independent variable of interest (*Tax Switch*), based on wholesale changes in the fees. Specifically, we measure *Tax Switch* as an indicator variable coded one when the corporation reports either (1) a nonzero fee for auditor-provided tax services in year  $t-1$  and more than zero in year  $t$  or (2) when the corporation discloses payments for auditor-provided tax services in year  $t-1$  and zero in year  $t$ . In all other cases, we code *Tax Switch* as zero.

## ***Tax Outcomes***

To evaluate the immediate impact of tax planning strategies recommended by the TSP, we focus on key tax outcomes, including cash taxes paid and discretionary book-tax differences. We measure *CETR*, the cash effective tax rate, as taxes paid divided by pretax income. To smooth volatility in *CETR*, we also capture *3YR CETR*, representing the average *CETR* from  $t+1$  to  $t+3$ .<sup>2</sup>

Additionally, we proxy for the immediate impact of tax planning strategies by measuring discretionary permanent book-tax differences, *DTAX*, as created by Frank, Lynch, and Rego (2009).<sup>3</sup> *DTAX* isolates tax planning strategies that create permanent differences between book and taxable income, such as shifting income to lower-tax jurisdictions or structuring transactions to take advantage of tax credits. The two measures reflect different levels of tax aggressiveness with reductions in *CETR* potentially related to temporary, lower-risk tax planning activities and higher levels of *DTAX* related to permanent, more aggressive planning activities (see the Hanlon and Heitzman [2010] continuum).

These metrics provide insight into the immediate tax reporting effects of the TSP's strategies. Additionally, to gauge the effectiveness of the TSP in handling tax examinations, we analyze settlements in year  $t+3$ , which aligns with the typical federal statute of limitations. Specifically, we capture *Large Settle*, *Large Settle Count*, and *Total Settlement*. We define *Large Settlement* as an indicator variable set to one when a corporation reports scaled UTB settlements above the annual median, and zero otherwise. This allows us to identify cases where the

---

<sup>2</sup> We do not use ETR measures since, as noted by Schwab, Stomberg, and Xia (2022), they can be influenced by several factors unrelated to tax avoidance activities such as impairment losses or valuation allowance decisions.

<sup>3</sup> As measured in Frank et al. (2009), *DTAX* is the residual term in the regression:  $PERMDIFF = B_0 + B_1 * INTANG + B_2 * UNCON + B_3 * MI + B_4 * CSTE + B_5 * dNOL + B_6 * LAGPERM + B_7 * Industry Fixed Effects + B_8 * Year Fixed Effects + \epsilon$ . Additionally, to avoid the impact of outliers in our conclusions, we winsorize *DTAX* at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. All variables are defined in Appendix A.

settlement amount is economically significant, indicating a more contentious or aggressively disputed tax position. *Large Settle Count* is measured as the number of years between  $t+1$  and  $t+3$  where the firm reports an economically large settlement. Finally, *Total Settlement* is measured as total uncertain tax benefit settlements.

### ***Measuring Tax-Specific Knowledge***

Tax services offer a valuable opportunity for knowledge spillover from auditors who possess tax task-specific knowledge (TSK), potentially helping companies identify and capitalize on tax efficiency opportunities (Kinney, Palmrose, and Scholz 2004). The structure of an audit office enhances this knowledge sharing through mechanisms like audit documentation review, personnel assignments, and formal training. These mechanisms contribute to the accumulation of TSK at the office level (Goldman et al. 2022; Argote and Ingram 2000). Given the potential for such knowledge transfer within audit offices, we include the level of TSK at a company's audit office to capture its impact on tax-related decisions.

We measure TSK using the *Tax Score* metric developed by Goldman et al. (2022). Specifically, *Tax Score* is calculated by identifying each client's involvement in the following areas: research and development (R&D) activities, foreign operations, and tax-loss carryforwards. These elements are widely recognized as indicators of tax planning complexity and can serve as a proxy for the tax challenges a client might face (Dyreng, Hanlon, and Maydew 2019; Bratten, Gleason, Larocque, and Mills 2017).

For each client, we assign a score ranging from 0 to 3 based on the presence of these factors (research and development expenses, foreign operations, and tax-loss carryforwards). Next, we aggregate these values across all clients served by a particular audit office to calculate

the audit office's *Tax Score*.<sup>4</sup> A higher *Tax Score* indicates that the audit office manages clients with more complex tax issues, while a lower *Tax Score* reflects less exposure to these complexities. Accordingly, we suggest that offices with a higher (lower) *Tax Score* possess higher (lower) levels of TSK.

### ***Controls***

We control for several factors that may influence tax outcomes. First, we account for firm size (*Size*), since larger firms may have additional resources and opportunities to engage in tax avoidance behaviors. We also include an indicator for acquisitions (*Merger*), set to one if the firm reports an acquisition in the current or prior year, to capture inherent tax uncertainties. We control for firms audited by a Big 4 auditor (*Big4*), as their resources and expertise can affect tax planning and outcomes. To address foreign tax rates and income-shifting opportunities from transfer pricing (Towery 2017), we control for the presence of foreign operations (*Foreign*) and intangibles scaled by assets (*INTANG*).

Additionally, we control for other factors such as research and development intensity (*R&D Intensity*), capital intensity (*Capital Intensity*), capital expenditures (*Capex*), and inventory intensity (*Inventory Intensity*), all of which may impact tax outcomes from research and development credits, cost segregation studies, or uniform capitalization rules. We also include leverage (*Leverage*), net operating losses (*NOL*), and return on assets (*ROA*) to account for the effects of debt, carryforward losses, and performance pressure on tax outcomes.<sup>5</sup> Further, to control for the dramatic change in the tax landscape and available planning opportunities after the Tax Cuts and Jobs Act was enacted, we include an indicator variable, *TCJA*, coded one for years 2018-2024 and zero otherwise. Finally, we complete Model (1) by including firm fixed

---

<sup>4</sup> To normalize the data, we take the log of the total tax score for each audit office.

<sup>5</sup> All variables are defined in Appendix A.



effects<sup>6</sup> to control for unobservable firm characteristics, such as the relationship the firm has with its auditor and tax preparer and the inherent risk appetite of management.

$$\begin{aligned} \text{Tax Outcome} = & B_0 + B_1 * \text{Tax Switch} + B_{2-11} * \text{Controls} + B_j * \text{Firm Fixed Effects} \quad (1) \\ & + B_k * \text{Year Fixed Effects} + \varepsilon \end{aligned}$$

### ***Sample Selection***

To test our hypothesis, we obtain data from Compustat and Audit Analytics over the sample period of 1997-2023. We begin with all firm-years where corporations disclose tax fees paid to the auditor and cash tax payments. Next, since it is not clear whether a firm switches its tax preparer when there is an auditor change, we remove all records where the company changes auditors.

Following prior research, loss firms often face unique tax planning considerations, as they may have limited immediate incentives to engage in aggressive tax strategies (Schwab, Stomberg, and Xia 2022). However, some loss firms continue to pursue tax avoidance strategies, particularly when they anticipate future profitability or seek to maximize deferred tax assets. Given that approximately 30 percent of public firms report persistent losses, excluding these firms helps ensure that our findings are not biased by firms with structurally different tax incentives (Schwab, Stomberg, and Xia 2023). Finally, we remove all observations with missing data to calculate *CETR* or our control variables. This results in a final sample of 60,672 firm-years, representing 7,611 unique firms. Further, we find 6,988 firm-years with a tax preparer switch (11.5% of the sample).

## **4. Primary Results**

---

<sup>6</sup> Industry fixed effects are calculated using Fama-French 17 classification.

## ***Descriptive Statistics***

Our sample includes mostly large firms paying economically significant amounts of income tax with median (average) total assets of \$835 million (\$13 billion) and cash tax payments of \$7.4 million (\$126 million). Additionally, firms within the sample with APTS pay the audit firm an average of \$360,000, likely representing a significant amount of revenue for the audit firm and its engagement partner (untabulated).

We present descriptive statistics for variables used in our analysis in Table 1. Consistent with being large companies, we find that the vast majority of the sample engages a Big 4 auditor (79%) and has at least some international presence (98%). Additionally, firms within the sample have ample opportunities for tax planning activities, reporting an economically significant level of research and development activities (6% of total assets), capital intensity (26% of total assets), and intangible assets that can be leveraged in transfer pricing and other cost sharing arrangements (28% of total assets). Finally, we find an average *CETR* of 20.1%, representing that the average firm in the sample engages in at least some tax avoidance activity given the 35% statutory rate in place prior to the 21% rate enacted as a part of the Tax Cuts and Jobs Act.

## ***Tax Service Provider Changes and Tax Outcomes***

We begin our analysis of H1 by estimating Model (1), which examines the relationship between tax service provider (TSP) changes and tax outcomes. As presented in Table 2, Panel A, we find a negative and significant relationship between *CETR* and *Tax Switch* ( $b=-0.012$ ,  $p<0.01$ ), indicating that firms switching tax service providers experience lower cash effective tax rates.<sup>7</sup> Additionally, we observe a positive and significant association between *DTAX* and *Tax Switch* ( $b=0.255$ ,  $p<0.01$ ), suggesting that TSP changes are linked to more aggressive tax

---

<sup>7</sup> The average profitable firm in the sample reports pretax income of \$654 million. When multiplied by the coefficient on *Tax Switch* in Model (1), this results in a tax difference of \$7.85 million when switching TSPs.

reporting positions. Together, these findings provide evidence that firms transitioning to a new tax service provider tend to adopt more aggressive tax strategies, resulting in immediate tax benefits.

Moreover, our results indicate that this tax aggressiveness is persistent over time. Firms that switch TSPs report a lower average *CETR* over the three years following the switch ( $b=-0.008$ ,  $p<0.01$ ) and a higher average *DTAX* ( $b=0.231$ ,  $p<0.01$ ), reinforcing the notion that the tax planning approach of the new provider continues to shape tax outcomes beyond the initial transition period. This suggests that firms switch tax service providers with the expectation of achieving sustained tax benefits rather than merely short-term tax savings.

Next, we examine whether firms switching tax providers face an increased likelihood of economically large tax settlements. As presented in Table 2, Panel B, we observe that firms switching TSPs are 5.0% less likely to report an economically significant tax settlement in the third year following the change ( $p<0.01$ ). Additionally, we find evidence that firms engaging in a TSP switch report fewer large tax settlements in years  $t+1$  to  $t+3$  ( $b=-0.127$ ,  $p<0.01$ ). This suggests that the new TSP's strategies not only reduce the tax burden but may also help reduce the likelihood of facing large, contentious tax settlements with tax authorities.

Overall, these findings align with our hypothesis that switching TSPs is associated with future tax benefits. This also reinforces the expectation that new tax service providers prioritize delivering measurable tax advantages to justify the costs and disruptions their clients face during the transition. By offering more aggressive tax positions while managing settlement risks, new TSPs seem to provide a compelling case for firms to make the switch, especially in the pursuit of tax savings and improved audit outcomes.

## 4. Additional Analyses

### *Task-Specific Knowledge and Tax Outcomes*

As previously mentioned, the prior literature (e.g., Goldman et al. 2022; McGuire et al. 2012) has highlighted the role of ongoing tax-related specialization of auditors. In our sample, we are focused on the change in tax providers, rather than the ongoing role of auditors. Therefore, we expand our analysis to include the Goldman et al. (2022) measure (*Tax Score*) for tax-focused task-specific knowledge on the part of the auditor. As TSK represents an auditor-focused construct, rather than a tax one, and our sample is restricted to not include any auditor switches, it presumably remains stable and distinct from our primary variables of interest.

To examine the relationship between TSK and tax outcomes, we estimate Model (2). As presented in Table 3, we find evidence consistent with a spillover effect between auditor tax experience and tax outcomes. Specifically, we find that firms engaging auditors with higher levels of TSK report lower CETRs ( $b=-0.014$ ,  $p<0.05$ ). Additionally, we find that firms engaging auditors with higher levels of TSK report more aggressive tax positions, as evident through higher discretionary permanent differences (*DTAX*,  $b=0.358$ ,  $p<0.01$ ). This provides evidence that high auditor TSK offers a potentially beneficial spillover effect, leading firms to adopt more aggressive tax positions.

Further, we find evidence that firms with high TSK auditors are more likely to report an economically significant tax settlement in year  $t+3$  ( $b=0.019$ ,  $p<0.05$ ). This suggests that firms leveraging the expertise of high TSK auditors may anticipate heightened scrutiny and proactively structure their tax positions to achieve favorable settlement outcomes. Similarly, we find evidence that firms with high TSK auditors report more large tax settlements in the three-year

period  $t+1$  to  $t+3$  ( $b=0.134$ ,  $p<0.01$ ). Given the possibility that there is a knowledge spillover effect that may influence our results, we include *TSK* in subsequent tests.

### ***Entropy Balancing***

The inclusion of firm fixed effects isolates the results to reflect the impact of a TSP switch on tax outcomes after controlling for observable and unobservable idiosyncratic firm characteristics, such as the inherent risk appetite of management, the tax knowledge of executives, and the personal relationships between the TSP and the firm, among others. However, firms that choose to switch TSPs may still differ systematically from those that retain their providers in ways that are both observable and relevant to tax outcomes. If these differences are not adequately accounted for, our estimates of the relationship between TSP switches and tax outcomes could be biased.

To assess this possibility, we compare the means of key control variables, including *TSK*, between firms that switch and those that retain their TSP. As presented in Table 4, we find univariate evidence that firms switching TSPs are, on average, smaller, more capital-intensive, less likely to have a tax loss carryforward, and engage auditors with lower levels of *TSK* (all statistically significant at the  $p<0.01$  level). These differences suggest that firms making a TSP switch may be systematically different from those that do not, raising concerns that any observed tax outcome differences could be driven by preexisting firm characteristics rather than the switch itself.

To address this concern, we use entropy balancing to reweight the sample, ensuring that switching and non-switching firms are comparable across key observable characteristics.

Specifically, we begin by estimating the relationship between *Tax Switch* and the control variables, including *TSK*, using Model (3) (untabulated).<sup>8</sup>

$$Tax\ Switch = B_0 + B_1 * TSK + B_{2-11} * Controls + B_j * Industry\ Fixed\ Effects + \varepsilon \quad (3)$$

Entropy balancing reweights the control group such that the means and higher-order moments of their covariate distributions match those of firms that switch TSPs, reducing potential confounding effects. After balancing the covariates, we estimate Model (4), which incorporates *TSK* as an additional control in Model (1), to ensure the robustness of the relationship between *Tax Switch* and tax outcomes.

After balancing the coefficients, we run Model (4), which adds a control for *TSK* to Model (1), to ensure the relationship between *Tax Switch* and tax outcomes is robust.

$$Tax\ Outcome = B_0 + B_1 * Tax\ Switch + B_2 * TSK + B_{3-12} * Controls + B_j * Firm\ Fixed\ Effects + \varepsilon \quad (4)$$

As presented in Table 5, our results remain consistent. *Tax Switch* continues to be associated with more aggressive tax positions and a lower likelihood of an economically large tax settlement. These findings suggest that firms switching TSPs experience tax outcomes that include both increased tax aggressiveness and a reduced probability of significant settlements, reinforcing the role of TSP changes in shaping corporate tax reporting and risk exposure.

### ***Tax Engagement Size***

To this point, we provide evidence that firms switching TSPs report more aggressive tax positions while also being less likely to report economically large tax settlements in the years

---

<sup>8</sup> We use industry fixed effects in entropy balancing to control for industry-wide differences in tax strategies and regulatory scrutiny, ensuring balanced comparisons (McGuire et al. 2012; Klassen, Lisowsky, and Mescall 2016). In contrast, firm fixed effects in our main analyses account for time-invariant firm characteristics, isolating within-firm variation for a more precise estimate of tax service provider changes on tax outcomes.

following the change. However, not all TSP switches are identical, and the nature of the transition may influence tax outcomes differently. For example, a firm that previously did not engage its auditor for any tax services but then hires the auditor for a small, one-time tax planning project would be coded as a switch in our main specification. Similarly, a firm that previously had no auditor-provided tax services but then started to rely on the auditor for all tax compliance activities would also be coded as a switch. While both cases reflect a transition from no APTS to APTS, the scope and intensity of the auditor's involvement differ, which may have varying implications for tax planning and reporting outcomes.

To examine how the size of a TSP switch influences tax outcomes, we construct a measure called *Scaled Tax Fees*. For firms transitioning from zero APTS in year t-1 to a nonzero amount in year t, *Scaled Tax Fees* is defined as total tax fees in year t scaled by total assets in year t. Conversely, for firms transitioning from a nonzero APTS in year t-1 to zero in year t, *Scaled Tax Fees* is calculated as total tax fees in year t scaled by the total fees paid to the audit firm in year t-1. We then separate *Scaled Tax Fees* into terciles by year and use these to investigate the effect of the magnitude of the audit firm's tax engagement (where *Tax Switch*=1) via Model (5). To highlight differences in tax outcomes more clearly, we exclude the middle tercile of *Scaled Tax Fees*.<sup>9</sup>

$$Tax\ Outcome = B_0 + B_1 * Scaled\ Tax\ Fee\ (T1) + B_2 * Scaled\ Tax\ Fee\ (T3) + B_{4-13} * Controls + B_j * Firm\ Fixed\ Effects + \varepsilon \quad (5)$$

As reported in Table 6, our findings indicate that the previously observed relationships between TSP switches and tax outcomes are primarily driven by TSP switches involving the largest tax service fees. Specifically, we document a negative and significant association between

---

<sup>9</sup> Our results are not sensitive to this design choice.

*Scaled Tax Fee (T3)* and *CETR* ( $b = -0.016$ ,  $p < 0.01$ ), as well as a positive and significant relationship with *DTAX* ( $b = 0.579$ ,  $p < 0.01$ ), suggesting that firms engaging in larger tax service provider switches adopt more aggressive tax planning strategies. While these effects are most pronounced for substantial tax service engagements, we also find that smaller-scale TSP changes are linked to increased tax aggressiveness, albeit to a lesser extent. Additionally, firms switching TSPs, whether involving smaller or larger tax engagements, are significantly less likely to report a large tax settlement.

Table 7 further examines the impact of TSP switches based on the magnitude of tax service fees. In Panel A, we compare firms in the largest tercile of Scaled Tax Fees that switch TSPs (*Scaled Tax Fee [T3]*) to firms that do not switch ( $\text{Tax Switch} = 0$ ), excluding those with minor increases or decreases in APTS. Consistent with our earlier findings, firms making economically significant TSP switches report more aggressive tax positions and are less likely to report a large tax settlement.

Similarly, Panel B presents results for firms switching TSPs while in the smallest tercile of Scaled Tax Fees. As with firms making larger TSP switches, we find that those making smaller-scale TSP changes also report more aggressive tax positions and are less likely to report a significant tax settlement. These tests provide additional clarity on the role of TSP changes in shaping tax outcomes, reinforcing the conclusion that TSP switches, whether large or small, correspond with better tax outcomes.<sup>10</sup>

## 5. Conclusion

---

<sup>10</sup> In untabulated results, we find directionally and statistically similar results when examining the relationship between *Likely Compliance*, an indicator variable coded one when the fees associated with a TSP change is above ten percent and zero otherwise, and tax outcomes. We choose the 10% threshold as being the most likely to be related to tax compliance engagements instead of smaller planning engagements.



In this study, we investigate the tax outcomes associated with switching tax service providers (TSPs), focusing on shifts to and from a company's auditor. Our study contributes to the literature by offering new insights into the dynamics of TSP switches and their effects on corporate tax outcomes. We extend prior research by examining complete shifts in tax services either to or from the audit firm, providing a more comprehensive understanding of how these changes impact tax planning and financial statement outcomes. Our results indicate that such switches are often associated with significant tax benefits, including reductions in CETR<sub>s</sub>, increases in discretionary permanent book-tax differences (DTAX) and a decreased likelihood of large tax settlements.

A key finding in our study is that these tax outcomes are influenced by the tax task-specific knowledge held by auditors as a result of their experience with complex tax matters. Our evidence suggests that auditor TSK helps the client identify tax-saving opportunities while managing the risks associated with aggressive tax strategies. Importantly, the relationship between TSP switches and tax outcomes holds after controlling for TSK, indicating that the benefits of switching TSPs are not solely attributable to the auditor's tax expertise. Rather, the switch itself, whether to or from the auditor, has a distinct influence on tax outcomes.

As with all research, our study is subject to multiple important limitations. Firstly, though of importance, the choice to switch tax providers is unavoidably endogenous. To address this concern, we include firm fixed effects, implement entropy balancing, and include a battery of control variables. However, as is the case with most archival research, we cannot completely rule out the possibility that unobserved factors influence both the decision to switch tax providers and the resulting tax outcomes. While our robustness tests mitigate concerns about selection bias, our findings should be interpreted as associational rather than strictly causal. Additionally, our

measures rely on publicly available financial statement data, which, while comprehensive, may not fully capture the nuances of firm-specific tax strategies or the qualitative factors driving TSP switches. Future research could build on our findings by leveraging proprietary tax data, survey evidence, or experimental approaches to further isolate the effects of TSP changes on tax planning and compliance.

Additionally, while we use proxies, including CETRs, DTAX, and settlement outcomes, to measure tax aggressiveness and the benefits of switching TSPs, these metrics have inherent limitations. Proxies may not capture the full complexity of corporate tax planning, as in nearly all tax archival research, and future studies could explore additional measures to deepen our understanding of the relationship between TSP changes and tax outcomes.

Furthermore, our study focuses on large, publicly traded firms, which may limit the generalizability of our findings. Smaller firms or firms in different regulatory environments may experience different outcomes when switching TSPs. Future research should investigate how the size and scope of a firm influence the benefits derived from switching TSPs. In addition, while our study examines TSP switches over a significant period, tax laws and corporate governance practices evolve, and the implications of TSP switches may change over time.

Despite these limitations, our study provides valuable insights into the dynamics of TSP switches and their impact on corporate tax outcomes. We extend the literature by focusing on complete shifts in tax services either to or from the audit firm, offering a more comprehensive view of the potential benefits and financial statement impacts. Our findings suggest that firms benefit from switching TSPs, particularly in terms of immediate tax savings and a reduced likelihood of an economically significant tax settlement. However, these benefits must be

weighed against the potential for increased scrutiny and conservative reporting practices, especially when switching to the auditor as the tax provider.

In conclusion, our study makes an important contribution to the literature by demonstrating that switching TSPs can lead to significant tax benefits, such as reduced tax burdens and decreased likelihood of large settlements, while also impacting financial reporting practices. The choice of TSP influences not only tax strategy but also interactions with tax authorities and overall financial transparency. As companies navigate complex tax environments and a competitive market for tax services, understanding the benefits and trade-offs of TSP switches is crucial. Our findings underscore the importance of TSP selection in effectively managing tax outcomes, highlighting the trade-offs between immediate tax benefits and the need for appropriate financial reporting. By focusing on complete shifts to or from the audit firm, we provide a nuanced understanding of how TSP decisions shape corporate tax strategies and financial transparency.

## References

- Acito, A. A., and M. Nessa. 2022. Law firms as tax planning service providers. *The Accounting Review* 97(4): 1-26.
- Albring, S., D. Robinson, and M. Robinson. 2014. "Audit committee financial expertise, corporate governance, and the voluntary switch from auditor-provided to non-auditor-provided tax services." *Advances in Accounting* 30(1): 81-94.
- Argote, Linda, and Paul Ingram. 2000. Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes* 82(1): 150-169.
- Belnap, A., J.L. Hoopes., and J.H. Wilde. 2023. Who really matters in corporate tax? *Journal of Accounting and Economics* 77(1): 101609.
- Berry, L.L., V.A. Zeithaml, and A. Parasuraman. 1985. Quality counts in services, too. *Business Horizons* 28(3): 44-52.
- Bratten, B., C.A. Gleason, S.A. Larocque, and L.F. Mills. 2017. Forecasting taxes: New evidence from analysts. *The Accounting Review*. 92(3): 1-29.
- Bulloch, N., D. Lynch, M. Pflitsch, and J.H. Schroeder. 2024. An examination of uncertain tax position reserves around the purchase of auditor provided tax services. Working paper.
- Christensen, A. 1992. "Evaluation of Tax Services: A Client and Preparer Perspective." *Journal of the American Taxation Association* 14(2).
- Chyz, J., R. Gal-Or, and V. Naiker. 2023. "Separating Auditor-Provided Tax Planning and Tax Compliance Services: Audit Quality Implications." *Auditing: A Journal of Practice & Theory* 42(2): 101-131.
- Chyz, J., R. Gal-Or, V. Naiker, and D. Sharma. 2021. "The association between auditor provided tax planning and tax compliance services and tax avoidance and tax risk." *The Journal of the American Taxation Association* 43(2): 7-36.
- Cook, K., G. Huston, and T. Omer. 2008. "Earnings management through effective tax rates: The effects of tax planning investment and the Sarbanes-Oxley Act of 2002." *Contemporary Accounting Research* 25(2).
- Cook, K., K. Kim, and T. Omer. 2020. "The cost of independence: Evidence from companies' decisions to dismiss audit firms as tax-service providers." *Accounting Horizons* 34(2): 83-107.
- De Simone, L., M. Ege, and B. Stomberg. 2015. "Internal control quality: The role of auditor-provided tax services." *The Accounting Review* 90(4): 1469-1496.

- Dyreng, S.D., M. Hanlon, and E.L. Maydew. 2019. When does tax avoidance result in tax uncertainty? *The Accounting Review* 94(2): 179-203.
- Fleischman, G. and T. Stephenson. 2012. "Client variables associated with four key determinants of demand for tax preparer services: An exploratory study." *Accounting Horizons* 26(3): 417-437.
- Fortin, S., and J. Pittman. 2008. "The impact of auditor-related tax services on corporate debt pricing." *Journal of the American Taxation Association* 30(2): 79-106.
- Frank, M.M., L.J. Lynch, and S. Rego. 2009. Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review* 84(2): 467-496.
- Gleason, C. and L. Mills. 2011. "Do auditor-provided tax services improve the estimate of tax reserves?" *Contemporary Accounting Research* 28(5): 1484-1509
- Goldman, N., M.K. Harris, and T. Omer. 2022. "Does task-specific knowledge improve audit quality: Evidence from audits of income tax accounts." *Accounting, Organizations and Society* 99: 101320.
- Graham, J., M. Hanlon, T. Shevlin, and N. Shroff. 2014. "Incentives for tax planning and avoidance: Evidence from the field." *The Accounting Review* 89(3): 991-1023.
- Hanlon, M., and S. Heitzman. 2010. A review of tax research. *Journal of Accounting and Economics* 50(2-3): 127-178.
- Hogan, B., and T. Noga. 2015. "Auditor-provided tax services and long-term tax avoidance." *Review of Accounting and Finance* 14(3): 285-305.
- Hux, C., J. Bedard, and T. Noga. 2023. "Knowledge sharing in auditor-provided tax services: Experiences of audit and tax personnel." *Journal of the American Taxation Association* 45(1): 63-89.
- Klassen, K., P. Lisowsky, and D. Mescall. 2016. "The role of auditors, non-auditors, and internal tax departments in corporate tax aggressiveness." *The Accounting Review* 91(1): 179-205.
- Krishnan, G., and G. Visvanathan. 2011. "Is there an association between earnings management and auditor-provided tax services?" *Journal of the American Taxation Association* 33(2): 111-135.
- Krishnan, G., G. Visvanathan, and W. Yu. 2013. "Do auditor-provided tax services enhance or impair the value relevance of earnings?" *The Journal of the American Taxation Association* 35(1): 1-19.
- Lennox, C. 2016. "Did the PCAOB's restrictions on auditors' tax services improve audit quality?" *The Accounting Review* 91(5): 1493-1512.

- Mayer, M. and Y. Gendron. 2024. "The client can get caught out": Tax structure maintainability and the intricacies of tax planning aggressiveness." *Contemporary Accounting Research*, forthcoming.
- McGuire, S., T. Omer, and D. Wang. 2012. "Tax avoidance: Does tax-specific industry expertise make a difference? *The Accounting Review* 87(3): 975-1003.
- Paterson, J., and A. Valencia. 2011. "The effects of recurring and nonrecurring tax, audit-related, and other nonaudit services on auditor independence." *Contemporary Accounting Research* 28(5): 1510-1536.
- Robinson, D. 2008. "Auditor independence and auditor-provided tax service: Evidence from going-concern audit opinions prior to bankruptcy filings." *Auditing: A Journal of Practice & Theory* 27(2): 31-54.
- Schwab, C.M., B. Stomberg, and J. Xia. 2022. What determines effective tax rates? The relative influence of tax and other factors. *Contemporary Accounting Research* 39(1): 459-497.
- \_\_\_\_\_. 2023. Tax avoidance of loss firms. Working paper.
- Securities and Exchange Commission. 2003. Strengthening the Commission's requirements regarding auditor independence (Release No. 33-8183; 34-47265; 35-27642; IC-25915; IA-2103, FR-68, File No. S7-49-02) RIN 3235-AI73. Federal Register. <https://www.sec.gov/rule-release/33-8183>
- Towery, E. 2017. "Unintended Consequences of Linking Tax Return Disclosures to Financial Reporting for Income Taxes: Evidence from Schedule UTP." *The Accounting Review* 92(5): 201-226.

## Appendix A. Variable definitions

Variable	Variable definition	Source
<b>Measures of tax outcomes</b>		
<i>CETR</i>	Cash effective tax rate measured as taxes paid (TXPD) scaled by pretax income in year t+1, winsorized between 0 and 1	Compustat
<i>3YR CETR</i>	The average value of <i>CETR</i> for years t+1 to t+3	Compustat
<i>DTAX</i>	The residual term in the regression $PERMDIFF = B_0 + B_1 * INTANG + B_2 * UNCON + B_3 * MI + B_4 * CSTE + B_5 * dNOL + B_6 * LAGPERM + B_j * Industry\ Fixed\ Effects + B_k * Year\ Fixed\ Effects + \varepsilon$ in year t+1	Calculated
<i>3YR DTAX</i>	The average value of <i>DTAX</i> for years t+1 to t+3	Compustat
<i>Large Settle</i>	Indicator variable coded one when the firm reports a UTB decrease due to settlements above the annual median and 0 otherwise in year t+3	Compustat
<i>Large Settle Count</i>	Total number of years between t+1 and t+3 with a UTB decrease due to settlements above the annual median	Compustat
<i>Total Settlement</i>	Total UTB decreases due to settlements in year t+3	Compustat
<b>Tax Switch measures</b>		
<i>Tax Switch</i>	Indicator variable coded 1 when a firm reports a nonzero value for auditor-provided tax services in year t-1 and zero in year t or vice versa. Coded 0 otherwise.	Audit Analytics
<i>Scaled Tax Fees</i>	For firms transitioning from zero APTS in year t-1 to a nonzero amount in year t, <i>Scaled Tax Fees</i> is defined as total tax fees in year t scaled by total assets in year t. Conversely, for firms transitioning from a nonzero APTS in year t-1 to zero in year t, <i>Scaled Tax Fees</i> is calculated as total tax fees in year t scaled by the total fees paid to the audit firm in year t-1.	Audit Analytics
<i>Scaled Tax Fee (T1)</i>	An indicator variable coded 1 when <i>Scaled Tax Fees</i> is in the smallest nonzero tercile for the year and 0 otherwise	Audit Analytics
<i>Scaled Tax Fee (T3)</i>	An indicator variable coded 1 when <i>Scaled Tax Fees</i> is in the largest nonzero tercile for the year and 0 otherwise	Audit Analytics
<b>Control variables</b>		
<i>Tax Score</i>	Each client of an audit office is assigned a score ranging from 0 to 3 based on the presence of research and development expenses, foreign operations, and tax-loss carryforwards. Next, the values of all clients served by a particular audit office are aggregated. Finally, the total	Compustat and Audit Analytics

	amount is scaled by the total number of clients to calculate <i>Tax Score</i> .	
<i>Merger</i>	Indicator variable coded one when the firm reports a financial statement effect from an acquisition in year t-1 and zero otherwise.	Compustat
<i>Big 4</i>	Indicator variable coded 1 when a company is audited by a Big 4 firm and 0 otherwise	Audit Analytics
<i>Size</i>	Log of total assets in year t-1 (AT)	Compustat
<i>R&amp;D Intensity</i>	Research and development expenses (XRD) scaled by total assets (AT) in year t-1	Compustat
<i>Capital Intensity</i>	Net property, plant, and equipment (PPENT) scaled by total assets (AT) in year t-1	Compustat
<i>Inventory Intensity</i>	Inventory (INVT) scaled by total assets (AT) in year t-1	Compustat
<i>Leverage</i>	Total debt (DLTT) scaled by total assets (AT) in year t-1	Compustat
<i>Capex</i>	Log of capital expenditures in year t-1	Compustat
<i>NOL</i>	Indicator variable coded 1 if a corporation has a net operating loss carryforward and 0 otherwise (NOLT)	Compustat
<i>INTANG</i>	Sum of goodwill (GDWL) and intangibles (INTAN), scaled by total assets (AT) in year t-1	Compustat
<i>Return on Assets</i>	Pretax earnings (PI) less interest expense (XINT) scaled by total assets (AT) in year t-1	Compustat
<i>Foreign</i>	An indicator variable coded 1 when the firm has foreign operations and 0 otherwise	Compustat
<i>TCJA</i>	An indicator variable coded 1 for years following the enactment of the TCJA (2018) and 0 otherwise	Compustat
<b>Variables to Calculate <i>DTAX</i> (from Frank et al. 2009)</b>		
<i>PERDIFF</i>	Total book-tax differences less temporary book-tax differences, scaled by total assets in year t. Calculated as: $[PI - [(CFTE + CFOR)/STR] - (DTE /STR)] / AT$	Compustat
<i>PI</i>	Pretax income (PI)	Compustat
<i>CFTE</i>	Current federal tax expense (TXFED) scaled by total assets (AT). If CFTE is missing, then CFTE is set equal to total tax expense (TXT) less <i>CFOR</i> , <i>CSTE</i> , and deferred tax expense (TXDI)	Compustat
<i>CFOR</i>	Current foreign tax expense (TXFO)	Compustat
<i>STR</i>	Statutory federal tax rate	Historical Tax Rates
<i>DTE</i>	Deferred tax expense (TXDI)	Compustat
<i>UNCON</i>	Income (loss) reported under the equity method (ESUB) scaled by total assets (AT)	Compustat



<i>MI</i>	Income (loss) attributable to minority interest (MII) scaled by total assets (AT)	Compustat
<i>CSTE</i>	Current state income tax expense (TXS) scaled by total assets (AT)	Compustat
<i>dNOL</i>	Difference in tax loss carryforwards (TLCF) from t-1 to t, scaled by total assets (AT)	Compustat
<i>LAGPERM</i>	Lagged <i>PERMDIFF</i> , scaled by total assets	Compustat

**Table 1. Descriptive Statistics**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>p25</b>	<b>p50</b>	<b>p75</b>
<b>Tax Switch</b>						
Tax Switch	60,672	0.115	0.319	0.000	0.000	0.000
<b>Tax Outcomes</b>						
CETR	55,442	0.201	0.225	0.000	0.157	0.308
CETR 3YR	46,705	0.198	0.165	0.040	0.189	0.311
DTAX	60,672	1.374	1.981	-0.004	0.931	2.375
DTAX 3YR	49,990	1.451	1.739	0.201	1.101	2.273
Large Settle	49,850	0.143	0.350	0.000	0.000	0.000
Large Settle Count	49,850	0.413	0.883	0.000	0.000	0.000
Total Settle	49,990	0.535	1.957	0.000	0.000	0.000
<b>Controls</b>						
Size	60,672	6.638	2.345	5.073	6.667	8.218
Capital Intensity	60,672	0.256	0.255	0.050	0.165	0.392
Inventory Intensity	60,672	0.102	0.134	0.000	0.045	0.157
R&D Intensity	60,672	0.059	0.590	0.000	0.000	0.022
Capex	60,672	3.071	2.271	1.048	2.956	4.713
INTANG	60,672	0.282	0.412	0.000	0.090	0.421
Leverage	60,672	0.209	0.224	0.012	0.153	0.330
ROA	60,672	0.028	0.400	-0.004	0.043	0.105
Merger	60,672	0.363	0.481	0.000	0.000	1.000
Foreign	60,672	0.980	0.139	1.000	1.000	1.000
NOL	60,672	0.621	0.485	0.000	1.000	1.000
Big4	60,672	0.790	0.407	1.000	1.000	1.000

Table 1 presents descriptive statistics for all observations used to test H1. The difference in the number of observations results from missing values in t+2 or t+3 or from observations that are removed due to the removal of singleton observations in the regressions. All continuous variables are winsorized at the 1st and 99th percentiles except for CETR, which is winsorized between 0 and 1. All variables are defined in Appendix A.

**Table 2. Tax Service Provider Switches and Tax Outcomes****Panel A. Immediate Tax Outcomes following a TSP Switch**

VARIABLES	(1) CETR	(2) 3YR CETR	(3) DTAX	(4) 3YR DTAX
Tax Switch	-0.012*** (0.003)	-0.008*** (0.002)	0.255*** (0.020)	0.231*** (0.012)
Size	0.004** (0.002)	0.001 (0.001)	0.109*** (0.013)	0.144*** (0.008)
Capital Intensity	-0.011 (0.015)	0.005 (0.010)	-0.120* (0.085)	-0.276*** (0.059)
Inventory Intensity	0.042** (0.023)	0.046*** (0.015)	-0.474*** (0.144)	-0.236*** (0.100)
R&D Intensity	-0.003*** (0.001)	-0.003*** (0.001)	-0.045** (0.024)	-0.008 (0.016)
Capex	-0.002 (0.002)	-0.003** (0.001)	-0.025*** (0.010)	-0.026*** (0.006)
INTANG	0.003 (0.004)	0.007** (0.003)	0.003 (0.023)	-0.113*** (0.016)
Leverage	-0.008 (0.008)	-0.007* (0.005)	0.071* (0.052)	0.046 (0.037)
ROA	0.016*** (0.003)	0.015*** (0.002)	0.022 (0.056)	-0.030 (0.035)
Merger	0.001 (0.003)	0.002* (0.002)	-0.047*** (0.014)	-0.042*** (0.009)
Foreign	0.008 (0.009)	0.002 (0.007)	-0.150*** (0.060)	-0.112*** (0.039)
NOL	-0.042*** (0.004)	-0.030*** (0.002)	0.246*** (0.021)	0.178*** (0.013)
Big4	0.022*** (0.005)	0.008** (0.004)	-0.112*** (0.029)	-0.057*** (0.020)
TCJA	-0.021*** (0.003)	-0.018*** (0.002)	-0.620*** (0.015)	-0.484*** (0.009)
Constant	0.181*** (0.016)	0.205*** (0.011)	0.983*** (0.099)	0.790*** (0.066)
Firm FE	Yes	Yes	Yes	Yes
Observations	55,442	46,705	60,672	49,990
R-squared	34.4%	58.6%	68.7%	86.4%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses.

Table 2, Panel A presents the results of Model (1) testing H1 which examines the relationship between tax service provider (TSP) switches and immediate tax outcomes. In Columns (1) and (2), a negative (positive) coefficient represents better (worse) tax outcomes. In Columns (3) and (4), a positive (negative) coefficient represents better (worse) tax outcomes. The difference in observations is due to missing values of the dependent variable in years t+2 and t+3 and the removal of singleton observations. All variables are defined in Appendix A.

**Table 2. Tax Service Provider Switches and Tax Outcomes****Panel B. Tax Settlements following a TSP Switch**

VARIABLES	(1) Large Settle	(2) Large Settle Count	(3) Total Settle
Tax Switch	-0.050*** (0.004)	-0.127*** (0.009)	-0.184*** (0.021)
Size	0.067*** (0.003)	0.206*** (0.006)	0.279*** (0.016)
Capital Intensity	-0.178*** (0.017)	-0.607*** (0.039)	-0.565*** (0.095)
Inventory Intensity	-0.218*** (0.030)	-0.560*** (0.068)	-0.631*** (0.149)
R&D Intensity	0.001* (0.001)	0.002 (0.003)	0.006* (0.004)
Capex	0.002 (0.002)	0.018*** (0.005)	0.049*** (0.015)
INTANG	0.026*** (0.007)	0.072*** (0.015)	0.079** (0.040)
Leverage	-0.035*** (0.012)	-0.029 (0.026)	-0.004 (0.062)
ROA	-0.006*** (0.002)	-0.019*** (0.005)	-0.032*** (0.008)
Merger	0.000 (0.004)	-0.019** (0.009)	-0.004 (0.023)
Foreign	-0.025** (0.013)	-0.100*** (0.030)	-0.010 (0.062)
NOL	0.096*** (0.005)	0.306*** (0.012)	0.316*** (0.028)
Big4	0.004 (0.005)	0.013 (0.012)	0.078*** (0.021)
TCJA	-0.057*** (0.005)	-0.132*** (0.010)	-0.185*** (0.027)
Constant	-0.266*** (0.020)	-0.874*** (0.048)	-1.484*** (0.110)
Firm FE	Yes	Yes	Yes
Observations	49,850	49,850	49,990
R-squared	46.2%	61.3%	44.4%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses.

Table 2, Panel B presents the results of Model (1) testing H1 which examines the relationship between tax service provider (TSP) switches and tax settlements. In Columns (1)-(3), a negative (positive) coefficient represents better (worse) tax outcomes in the form of a lower likelihood or amount of tax settlements. The difference in observations is due to the removal of singleton observations. All variables are defined in Appendix A.

**Table 3. Audit Firm Tax Task-Specific Knowledge and Tax Outcomes**  
**Panel A. Immediate Tax Outcomes**

VARIABLES	(1) CETR	(2) 3YR CETR	(3) DTAX	(4) 3YR DTAX
Tax Score	-0.014** (0.006)	-0.013*** (0.004)	0.358*** (0.039)	0.342*** (0.025)
Size	0.013*** (0.003)	0.006*** (0.002)	-0.121*** (0.019)	-0.029*** (0.012)
Capital Intensity	-0.017 (0.020)	-0.003 (0.013)	0.288** (0.125)	-0.050 (0.078)
Inventory Intensity	0.056** (0.031)	0.091*** (0.022)	0.139 (0.199)	0.231** (0.129)
R&D Intensity	-0.003** (0.002)	-0.003** (0.002)	-0.001 (0.022)	0.011 (0.015)
Capex	-0.003 (0.002)	-0.004*** (0.002)	0.037*** (0.013)	0.010 (0.008)
INTANG	-0.005 (0.006)	0.001 (0.004)	0.080*** (0.031)	-0.086*** (0.021)
Leverage	-0.005 (0.010)	-0.003 (0.007)	0.187*** (0.064)	0.146*** (0.044)
ROA	0.013*** (0.003)	0.014*** (0.003)	0.121** (0.062)	-0.015 (0.032)
Merger	0.001 (0.003)	0.004** (0.002)	-0.019 (0.017)	-0.026*** (0.011)
Foreign	0.006 (0.011)	0.009 (0.009)	-0.126* (0.080)	-0.111** (0.052)
NOL	-0.034*** (0.005)	-0.028*** (0.003)	0.000 (0.032)	-0.048*** (0.020)
Big4	0.017** (0.007)	0.013*** (0.005)	0.073* (0.045)	0.165*** (0.030)
TCJA	-0.025*** (0.003)	-0.019*** (0.002)	-0.585*** (0.017)	-0.470*** (0.011)
Constant	0.157*** (0.024)	0.193*** (0.017)	1.446*** (0.165)	1.018*** (0.108)
Firm FE	Yes	Yes	Yes	Yes
Observations	34,575	28,420	37,196	30,054
R-squared	36.4%	61.4%	71.2%	88.7%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed).

Robust standard errors in parentheses.

Table 3, Panel A presents the results of Model (2), which examines the relationship between the tax task-specific knowledge (TSK) of the auditor and short-term tax outcomes. To isolate the effect of TSK, we limit the sample to only firms that do not have a TSP change. The variable of interest in the model is *Tax Score*, a continuous measure of tax TSK. In Columns (1) and (2), a negative (positive) coefficient represents better (worse) tax outcomes. In Columns (3) and (4), a positive (negative) coefficient represents better (worse) tax outcomes. The difference in observations is due to missing values of the dependent variable in years t+2 and t+3 and the removal of singleton observations. All variables are defined in Appendix A.

**Table 3. Audit Firm Tax Task-Specific Knowledge and Tax Outcomes**  
**Panel B. Tax Settlements**

VARIABLES	(1) Large Settle	(2) Large Settle Count	(3) Total Settle
Tax Score	0.019** (0.010)	0.134*** (0.022)	0.090* (0.056)
Size	0.048*** (0.004)	0.175*** (0.009)	0.233*** (0.024)
Capital Intensity	-0.134*** (0.031)	-0.558*** (0.064)	0.039 (0.167)
Inventory Intensity	-0.092** (0.050)	-0.185** (0.105)	0.118 (0.254)
R&D Intensity	0.001 (0.001)	0.001 (0.003)	0.005 (0.006)
Capex	0.004 (0.003)	0.025*** (0.007)	0.060*** (0.021)
INTANG	0.003 (0.010)	0.001 (0.021)	-0.007 (0.060)
Leverage	-0.053*** (0.018)	-0.045 (0.036)	-0.118 (0.100)
ROA	-0.003 (0.003)	-0.014*** (0.005)	-0.025** (0.014)
Merger	0.009* (0.006)	0.002 (0.012)	0.040 (0.033)
Foreign	-0.015 (0.018)	-0.116*** (0.037)	0.121* (0.085)
NOL	0.046*** (0.009)	0.199*** (0.020)	0.175*** (0.047)
Big4	-0.006 (0.009)	0.001 (0.019)	-0.007 (0.036)
TCJA	-0.062*** (0.006)	-0.166*** (0.011)	-0.226*** (0.034)
Constant	-0.139*** (0.039)	-0.852*** (0.085)	-1.457*** (0.210)
Firm FE	Yes	Yes	Yes
Observations	29,986	29,986	30,054
R-squared	52.6%	69.8%	51.6%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses.

Table 3, Panel B presents the results of Model (2), which examines the relationship between the tax task-specific knowledge (TSK) of the auditor and tax settlements. To isolate the effect of TSK, we limit the sample to only firms that do not have a TSP change. The variable of interest in the model is *Tax Score*, a continuous measure of tax TSK. In Columns (1)-(3), a negative (positive) coefficient represents better (worse) tax outcomes. The difference in observations is due to missing values of the dependent variable in years t+2 and t+3 and the removal of singleton observations. All variables are defined in Appendix A.

**Table 4. Averages between TSP switch and no-switch firms**

<b>Variable</b>	<b>Retain TSP<sup>a</sup></b>	<b>Switch TSP<sup>b</sup></b>	<b>Difference</b>
Tax Score	2.423	2.318	<b>0.105</b>
Size	6.965	6.335	<b>0.631</b>
Capital Intensity	0.232	0.244	<b>-0.012</b>
Inventory Intensity	0.098	0.109	<b>-0.012</b>
R&D Intensity	0.051	0.051	0.000
Capex	3.233	2.841	<b>0.392</b>
INTANG	0.333	0.278	<b>0.055</b>
Leverage	0.212	0.202	<b>0.010</b>
ROA	0.036	0.041	-0.005
Merger	0.395	0.351	<b>0.044</b>
Foreign	0.980	0.978	0.002
NOL	0.708	0.574	<b>0.133</b>
Big4	0.776	0.807	<b>-0.031</b>

<sup>a</sup> n=35,020

<sup>b</sup> n=6,226

Table 4 presents the average value for each variable, split on whether the firm switches its tax service provider. All values in **bold** represent statistical significance at the 0.01 level. All variables are defined in Appendix A.

**Table 5. Tax Outcomes, TSP Switches, and Auditor TSK**  
**Panel A. Immediate Tax Outcomes**

VARIABLES	(1) CETR	(2) 3YR CETR	(3) DTAX	(4) 3YR DTAX
Tax Switch	-0.005** (0.003)	-0.003** (0.002)	0.085*** (0.023)	0.039*** (0.013)
Tax Score	-0.011* (0.007)	-0.009** (0.005)	0.243*** (0.052)	0.169*** (0.032)
Size	0.013*** (0.003)	0.008*** (0.002)	-0.059*** (0.023)	-0.041*** (0.014)
Capital Intensity	-0.013 (0.021)	0.010 (0.015)	0.418*** (0.154)	0.233*** (0.099)
Inventory Intensity	-0.015 (0.035)	0.036* (0.023)	-0.745*** (0.250)	-0.042 (0.161)
R&D Intensity	-0.002** (0.001)	-0.002*** (0.001)	-0.050** (0.028)	-0.014 (0.016)
Capex	-0.002 (0.003)	-0.005*** (0.002)	-0.076*** (0.018)	-0.021** (0.010)
INTANG	-0.002 (0.006)	0.006* (0.004)	0.019 (0.040)	-0.083*** (0.027)
Leverage	-0.015* (0.010)	-0.014** (0.007)	0.086 (0.086)	0.143*** (0.058)
ROA	0.011*** (0.003)	0.010*** (0.003)	-0.009 (0.089)	-0.021 (0.056)
Merger	-0.004 (0.004)	0.000 (0.002)	-0.039* (0.025)	-0.018 (0.015)
Foreign	0.014* (0.011)	0.011 (0.009)	-0.106 (0.118)	-0.085 (0.072)
NOL	-0.039*** (0.006)	-0.029*** (0.004)	0.099*** (0.038)	-0.009 (0.023)
Big4	0.003 (0.008)	-0.003 (0.005)	0.275*** (0.056)	0.284*** (0.035)
TCJA	-0.036*** (0.004)	-0.031*** (0.003)	-0.563*** (0.024)	-0.395*** (0.016)
Constant	0.170*** (0.026)	0.190*** (0.019)	1.474*** (0.213)	1.427*** (0.128)
Entropy Balancing	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	41,246	34,147	44,334	36,069
R-squared	42.7%	65.2%	67.8%	87.6%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses.

Table 5, Panel A presents the results of Model (3), which examines the relationship between TSP changes and tax outcomes after controlling for the tax task-specific knowledge (TSK) of the auditor and using entropy balancing to control for any potential systemic differences between firms engaging in a TSP switch. In Columns (1) and (2), a negative (positive) coefficient represents better (worse) tax outcomes. In Columns (3) and (4), a positive (negative) coefficient represents better (worse) tax outcomes. The difference in observations is due to missing values of the dependent variable in years t+2 and t+3 and the removal of singleton observations. All variables are defined in Appendix A.



**Table 5. Tax Outcomes, TSP Switches, and Auditor TSK**  
**Panel B. Tax Settlements**

VARIABLES	(1) Large Settle	(2) Large Settle Count	(3) Total Settle
Tax Switch	-0.079*** (0.004)	-0.196*** (0.010)	-0.256*** (0.019)
Tax Score	0.051*** (0.010)	0.220*** (0.023)	0.132*** (0.042)
Size	0.060*** (0.004)	0.195*** (0.010)	0.202*** (0.019)
Capital Intensity	-0.138*** (0.028)	-0.493*** (0.063)	-0.319*** (0.118)
Inventory Intensity	-0.155*** (0.047)	-0.384*** (0.101)	-0.433*** (0.187)
R&D Intensity	0.002** (0.001)	0.004 (0.003)	0.009** (0.005)
Capex	0.000 (0.003)	0.012** (0.007)	0.043*** (0.015)
INTANG	0.028*** (0.010)	0.046** (0.021)	0.055 (0.048)
Leverage	-0.065*** (0.017)	-0.145*** (0.037)	-0.106* (0.076)
ROA	-0.006*** (0.002)	-0.022*** (0.006)	-0.030*** (0.008)
Merger	0.005 (0.006)	0.001 (0.013)	0.021 (0.029)
Foreign	-0.037* (0.023)	-0.135*** (0.048)	0.011 (0.112)
NOL	0.085*** (0.008)	0.257*** (0.019)	0.226*** (0.036)
Big4	0.005 (0.009)	-0.004 (0.019)	0.078*** (0.020)
TCJA	-0.063*** (0.008)	-0.159*** (0.016)	-0.176*** (0.038)
Constant	-0.278*** (0.040)	-1.111*** (0.088)	-1.236*** (0.179)
Entropy Balancing	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Observations	35,990	35,990	36,069
R-squared	44.7%	60.0%	41.6%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses.

Table 5, Panel B presents the results of Model (3), which examines the relationship between TSP changes and tax outcomes after controlling for the tax task-specific knowledge (TSK) of the auditor and using entropy balancing to control for any potential systemic differences between firms engaging in a TSP switch. In Columns (1)-(3), a negative (positive) coefficient represents better (worse) tax outcomes. The

difference in observations is due to missing values of the dependent variable in years  $t+2$  and  $t+3$  and the removal of singleton observations. All variables are defined in Appendix A.

**Table 6. TSP Switch Magnitude and Tax Outcomes**

VARIABLES	(1) CETR	(2) 3YR CETR	(3) DTAX	(4) 3YR DTAX	(5) Large Settle	(6) Large Settle Count	(7) Total Settle
Scaled Tax Fee (T1)	-0.003 (0.005)	0.000 (0.003)	0.357*** (0.038)	0.189*** (0.021)	-0.023*** (0.008)	-0.040** (0.018)	-0.126*** (0.042)
Scaled Tax Fee (T3)	-0.016*** (0.007)	-0.010** (0.004)	0.579*** (0.057)	0.356*** (0.029)	-0.033*** (0.008)	-0.103*** (0.019)	-0.094*** (0.028)
Tax Score	-0.014** (0.007)	-0.014*** (0.005)	0.245*** (0.049)	0.194*** (0.031)	0.050*** (0.010)	0.212*** (0.024)	0.158*** (0.044)
Size	0.012*** (0.003)	0.006*** (0.002)	-0.044** (0.022)	-0.031** (0.014)	0.070*** (0.004)	0.222*** (0.010)	0.244*** (0.020)
Capital Intensity	-0.029* (0.021)	-0.010 (0.014)	0.491*** (0.158)	0.131* (0.103)	-0.177*** (0.030)	-0.575*** (0.067)	-0.351*** (0.131)
Inventory Intensity	-0.006 (0.036)	0.050** (0.025)	-0.433** (0.239)	0.134 (0.166)	-0.195*** (0.049)	-0.453*** (0.106)	-0.548*** (0.195)
R&D Intensity	-0.001* (0.001)	-0.002*** (0.001)	-0.057** (0.030)	-0.016 (0.016)	0.001 (0.001)	0.002 (0.003)	0.006* (0.004)
Capex	-0.001 (0.003)	-0.003** (0.002)	-0.062*** (0.017)	-0.016* (0.010)	-0.001 (0.003)	0.009 (0.007)	0.039*** (0.016)
INTANG	0.001 (0.006)	0.006* (0.004)	0.016 (0.040)	-0.097*** (0.027)	0.022** (0.011)	0.046** (0.023)	0.062 (0.055)
Leverage	-0.013 (0.010)	-0.010* (0.007)	0.120* (0.088)	0.183*** (0.061)	-0.074*** (0.017)	-0.151*** (0.037)	-0.133** (0.080)
ROA	0.010*** (0.002)	0.008*** (0.003)	-0.015 (0.092)	-0.012 (0.058)	-0.006*** (0.002)	-0.021*** (0.005)	-0.026*** (0.007)
Merger	-0.003 (0.004)	0.003 (0.002)	-0.006 (0.024)	0.004 (0.015)	0.003 (0.006)	-0.010 (0.013)	0.024 (0.030)
Foreign	0.011	0.004	-0.026	-0.096*	-0.043**	-0.158***	0.028

	(0.012)	(0.010)	(0.119)	(0.065)	(0.025)	(0.055)	(0.135)
NOL	-0.036***	-0.026***	0.090***	-0.016	0.096***	0.303***	0.264***
	(0.006)	(0.004)	(0.035)	(0.023)	(0.009)	(0.020)	(0.039)
Big4	0.007	-0.001	0.203***	0.276***	0.003	-0.005	0.057***
	(0.008)	(0.005)	(0.052)	(0.036)	(0.008)	(0.019)	(0.021)
TCJA	-0.033***	-0.031***	-0.576***	-0.412***	-0.070***	-0.179***	-0.202***
	(0.004)	(0.003)	(0.023)	(0.016)	(0.008)	(0.016)	(0.042)
Constant	0.180***	0.208***	1.131***	1.232***	-0.344***	-1.293***	-1.617***
	(0.026)	(0.018)	(0.209)	(0.124)	(0.041)	(0.094)	(0.198)
Entropy Balancing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	39,391	32,557	42,350	34,409	34,332	34,332	34,409
R-squared	43.3%	65.7%	70.6%	88.1%	46.0%	60.9%	42.6%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses. Table 6 presents the results of Model (5), which examines the relationship between the magnitude of TSP switches and tax outcomes after controlling for the tax task-specific knowledge (TSK) of the auditor and using entropy balancing to control for any potential systemic differences between firms engaging in a TSP switch. In Columns (1)-(2) and (5)-(7), a negative (positive) coefficient represents better (worse) tax outcomes. In Columns (3) and (4), a positive (negative) coefficient represents better (worse) tax outcomes. The difference in observations is due to missing values of the dependent variable in years t+2 and t+3 and the removal of singleton observations. All variables are defined in Appendix A.

**Table 7. Large Scale TSP Changes and Tax Outcomes**

VARIABLES	(1) CETR	(2) 3YR CETR	(3) DTAX	(4) 3YR DTAX	(5) Large Settle	(6) Large Settle Count	(7) Total Settle
Scaled Tax Fee (T3)	-0.014** (0.007)	-0.009** (0.004)	0.568*** (0.057)	0.339*** (0.029)	-0.032*** (0.008)	-0.096*** (0.017)	-0.077*** (0.024)
Tax Score	-0.013** (0.008)	-0.014*** (0.005)	0.286*** (0.050)	0.216*** (0.032)	0.054*** (0.009)	0.213*** (0.022)	0.175*** (0.036)
Size	0.010*** (0.003)	0.006*** (0.002)	-0.037** (0.022)	-0.015 (0.015)	0.072*** (0.004)	0.224*** (0.009)	0.237*** (0.017)
Capital Intensity	-0.023 (0.021)	-0.003 (0.014)	0.351** (0.163)	0.121 (0.107)	-0.203*** (0.028)	-0.659*** (0.064)	-0.433*** (0.116)
Inventory Intensity	-0.039 (0.033)	0.027 (0.024)	-0.375* (0.245)	0.325** (0.158)	-0.224*** (0.045)	-0.487*** (0.105)	-0.518*** (0.177)
R&D Intensity	-0.002** (0.001)	-0.002*** (0.001)	-0.058** (0.033)	-0.009 (0.018)	0.001* (0.001)	0.004* (0.002)	0.005* (0.003)
Capex	-0.002 (0.003)	-0.004** (0.002)	-0.044*** (0.018)	-0.020** (0.011)	-0.004 (0.003)	0.000 (0.007)	0.019* (0.014)
INTANG	0.005 (0.006)	0.006* (0.004)	0.034 (0.041)	-0.092*** (0.028)	0.020** (0.010)	0.060*** (0.021)	0.089** (0.040)
Leverage	-0.010 (0.011)	-0.007 (0.007)	0.184** (0.091)	0.208*** (0.059)	-0.063*** (0.016)	-0.110*** (0.035)	-0.111* (0.074)
ROA	0.008*** (0.002)	0.006*** (0.002)	-0.005 (0.094)	-0.008 (0.059)	-0.007*** (0.002)	-0.024*** (0.005)	-0.026*** (0.006)
Merger	-0.002 (0.004)	0.003* (0.002)	-0.047** (0.024)	-0.013 (0.014)	-0.002 (0.006)	-0.024** (0.013)	0.012 (0.025)
Foreign	0.003 (0.012)	0.003 (0.009)	-0.191** (0.091)	-0.091* (0.061)	-0.040** (0.018)	-0.142*** (0.044)	0.002 (0.049)
NOL	-0.031*** (0.006)	-0.022*** (0.004)	0.141*** (0.034)	0.009 (0.023)	0.095*** (0.008)	0.310*** (0.020)	0.280*** (0.035)
Big4	0.002 (0.008)	-0.005 (0.005)	0.152*** (0.053)	0.253*** (0.038)	-0.001 (0.007)	-0.001 (0.017)	0.070*** (0.022)
TCJA	-0.033*** (0.004)	-0.028*** (0.003)	-0.550*** (0.021)	-0.416*** (0.014)	-0.067*** (0.006)	-0.160*** (0.013)	-0.160*** (0.025)
Constant	0.202*** (0.026)	0.213*** (0.018)	1.172*** (0.180)	1.113*** (0.121)	-0.340*** (0.035)	-1.246*** (0.083)	-1.528*** (0.130)

Entropy Balancing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	37,462	30,905	40,307	32,671	32,594	32,594	32,671
R-squared	43.1%	65.8%	70.9%	87.8%	44.8%	59.7%	41.4%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses. Table 7 presents the results of Model (5), which examines the relationship between the TSP switches where the total scaled fees are in the largest tercile and tax outcomes after controlling for the tax task-specific knowledge (TSK) of the auditor and using entropy balancing to control for any potential systemic differences between firms engaging in a TSP switch. In Columns (1)-(2) and (5)-(7), a negative (positive) coefficient represents better (worse) tax outcomes. In Columns (3) and (4), a positive (negative) coefficient represents better (worse) tax outcomes. The difference in observations is due to missing values of the dependent variable in years t+2 and t+3 and the removal of singleton observations. All variables are defined in Appendix A.

**Table 8. Small Scale TSP Changes and Tax Outcomes**

VARIABLES	(1) CETR	(2) 3YR CETR	(3) DTAX	(4) 3YR DTAX	(5) Large Settle	(6) Large Settle Count	(7) Total Settle
Scaled Tax Fee (T1)	-0.004 (0.005)	-0.001 (0.003)	0.345*** (0.038)	0.187*** (0.021)	-0.024*** (0.008)	-0.042*** (0.018)	-0.135*** (0.042)
Tax Score	-0.014** (0.007)	-0.013*** (0.005)	0.300*** (0.046)	0.255*** (0.031)	0.051*** (0.011)	0.218*** (0.025)	0.152*** (0.049)
Size	0.012*** (0.003)	0.007*** (0.002)	-0.009 (0.020)	-0.016 (0.014)	0.071*** (0.004)	0.226*** (0.011)	0.261*** (0.021)
Capital Intensity	-0.030* (0.021)	-0.015 (0.014)	0.325** (0.157)	0.036 (0.105)	-0.180*** (0.032)	-0.595*** (0.073)	-0.334*** (0.141)
Inventory Intensity	-0.011 (0.037)	0.045** (0.025)	-0.397** (0.235)	0.257* (0.173)	-0.205*** (0.053)	-0.480*** (0.116)	-0.614*** (0.221)
R&D Intensity	-0.002** (0.001)	-0.003*** (0.001)	-0.027 (0.023)	-0.014 (0.018)	0.001* (0.001)	0.003 (0.003)	0.006* (0.004)
Capex	-0.002 (0.003)	-0.004** (0.002)	-0.051*** (0.016)	-0.013* (0.010)	-0.003 (0.003)	0.005 (0.008)	0.037** (0.016)
INTANG	-0.001 (0.006)	0.007* (0.004)	0.012 (0.038)	-0.113*** (0.027)	0.021** (0.012)	0.047** (0.025)	0.058 (0.060)
Leverage	-0.017* (0.010)	-0.011* (0.007)	0.112* (0.078)	0.173*** (0.059)	-0.080*** (0.018)	-0.152*** (0.039)	-0.130* (0.083)
ROA	0.011*** (0.003)	0.009*** (0.003)	0.065 (0.100)	0.012 (0.072)	-0.005** (0.003)	-0.018*** (0.006)	-0.026*** (0.009)
Merger	-0.003 (0.004)	0.003 (0.002)	-0.007 (0.022)	0.000 (0.014)	0.005 (0.007)	-0.007 (0.014)	0.033 (0.033)
Foreign	0.018* (0.012)	0.007 (0.010)	0.009 (0.127)	-0.132** (0.067)	-0.034* (0.026)	-0.142*** (0.057)	0.058 (0.148)
NOL	-0.035*** (0.006)	-0.027*** (0.004)	0.069** (0.034)	-0.003 (0.022)	0.095*** (0.009)	0.305*** (0.021)	0.260*** (0.041)
Big4	0.007 (0.008)	-0.002 (0.006)	0.037 (0.047)	0.178*** (0.034)	0.011* (0.007)	0.013 (0.019)	0.060*** (0.020)
TCJA	-0.034*** (0.004)	-0.031*** (0.003)	-0.599*** (0.022)	-0.429*** (0.015)	-0.071*** (0.008)	-0.185*** (0.017)	-0.222*** (0.044)
Constant	0.183*** (0.0264)	0.210*** (0.019)	0.894*** (0.214)	1.101*** (0.126)	-0.366*** (0.043)	-1.360*** (0.098)	-1.753*** (0.214)

Entropy Balancing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	38,271	31,637	41,123	33,435	33,361	33,361	33,435
R-squared	42.9%	64.8%	71.7%	88.2%	46.3%	61.4%	42.9%

\*\*\*, \*\*, and \* represent statistical significance at the 0.01, 0.05, and 0.10 levels, respectively (one-tailed). Robust standard errors in parentheses. Table 8 presents the results of Model (5), which examines the relationship between the TSP switches where the total scaled fees are in the smallest tercile and tax outcomes after controlling for the tax task-specific knowledge (TSK) of the auditor and using entropy balancing to control for any potential systemic differences between firms engaging in a TSP switch. In Columns (1)-(2) and (5)-(7), a negative (positive) coefficient represents better (worse) tax outcomes. In Columns (3) and (4), a positive (negative) coefficient represents better (worse) tax outcomes. The difference in observations is due to missing values of the dependent variable in years t+2 and t+3 and the removal of singleton observations. All variables are defined in Appendix A.