Effects of Transitory Client Characteristics on Auditor Switching Cost

Christian Friedrich
University of Mannheim

Sebastian Kronenberger
University of Mannheim

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Abstract

We investigate whether transitory client characteristics affect auditor switching cost. Switching costs hinder auditor-client matching, thus presenting a friction to clients' financial reporting quality and credibility. Transitory characteristics, such as accruals or short-term losses, may not affect total audit cost over the entire audit tenure if they reverse over time because cost-increasing effects (high accruals or short-term losses) and cost-decreasing effects (low accruals or profits) even out. However, the cost-increasing effects of transitory characteristics in a first-year audit amplify start-up cost. As start-up cost is sunk in later periods, this amplification has a persistent effect on total audit cost. Using contemporaneous audit fees over the entire audit tenure to measure whether amplified start-up cost persist, we find evidence for a substantial persistent effect of transitory client characteristics during the switching year. Its magnitude is similar to average switching cost estimates. Thus, we identify a significant friction of auditor switching.

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1. Introduction

In this paper, we address the research question whether transitory client characteristics at the time of an auditor switch affect total audit cost of the new auditor-client relationship. Choosing an auditor with the right fit contributes to the quality and credibility of a firm's financial reporting, and eventually, the efficiency of capital markets. However, switching auditors can evoke substantial costs, hindering auditor-client matching. Guo et al. (2022) show that switching costs account for approximately 14 percent of audit fees. Thus, it is important to understand the underlying economics of auditor switches. While the effects of contemporaneous client characteristics on audit cost have received much attention (see, e.g., the meta-analysis on fee research by Hay 2013), we know little about whether those characteristics interact with auditor switching to shape the entire auditor-client relationship.

Specifically, we focus on characteristics that are likely to be transitory, i.e., reverse over time. We choose accruals, because they mechanically reverse over time, and one-time losses, because firms need to become profitable to survive. While those characteristics, especially losses and profits, may not be transitory for all firms, we focus on firms for which they are likely transitory. In an established auditor-client relationship, transitory characteristics do not affect total audit cost because cost-increasing and cost-decreasing effects will cancel out over time. However, in combination with start-up cost in the initial engagement year, transitory characteristics could affect total audit costs (Kronenberger 2023). Auditors face learning cost and must invest more audit hours in the initial year. Client characteristics that increase auditor effort or litigation risk in this initial year will amplify this start-up cost because auditors will be less efficient in addressing those additional needs or risks (Kronenberger 2023). Reversals of those characteristics in later periods will not have the same cost effect because they no longer multiply with learning cost. Hence, transitory client characteristics in the switching year have an effect on total audit cost that does not reverse.

Differences in total audit cost have implications for audit pricing. Therefore, we use contemporaneous audit fees over the entire tenure of an auditor-client relationship to test the hypothesis that transitory client characteristics affect total audit costs. Audit pricing models predict that auditors spread their start-up cost across the expected engagement time (e.g., DeAngelo 1981). Another reasons to expect an average fee effect on contemporaneous audit fees is that audit fees tend to be sticky year-over-year (e.g., De Villiers et al. 2014, Kacer et al. 2018). Specifically, we test the difference in coefficients of a high switcher dummy (clients with extreme and likely transitory cost-increasing characteristics in the switching year) and a low switcher dummy (extreme and likely transitory cost-decreasing characteristics in the switching year) in an audit fee regression containing all years after the auditor switch by which we assign high and low switcher groups. We use non-financial US listed firms from 2004 to 2021 and differentiate Big 4 and Non-Big 4 subsamples because prior literature finds systematic differences in initial-year pricing and audit fee developments across tenure between Big 4 and Non-Big 4 clients (Ghosh and Siriviriyakul 2018, Hallman et al. 2023).

To identify high and low switchers based on accruals, we require clients to have at least two years of income-increasing and two years of income-decreasing discretionary accruals (Kothari et al. 2005) in the five years ending in the switching year. Thus, we ensure that they exhibit patterns of transitory discretionary accruals and are relatively unlikely to systematically differ in their average accruals riskiness. We then rank the annual discretionary accruals in this five-year period within each client. The high (low) switcher dummy assumes a value of one for the entire auditor tenure when discretionary accruals rank highest (lowest) in the switching year. Thus, we identify client-specific extreme income-increasing versus income-decreasing accruals characteristics in the switching year.

Our second identification uses losses based on net income. We require clients to have at least two loss years and two profitable years in the five years ending in the switching year. The high (low) switcher dummy assumes a value of one for the entire auditor tenure when the

switching year is a loss (profitable) year. Thus, we identify client-specific bad versus good performance that is likely transitory.

We start by descriptively comparing the reasons for auditor switches between our low and high switcher groups and find no significant differences for groups based on accruals and some differences for groups based on transitory losses. Average client characteristics differ slightly between high and low switchers based on accruals, but accruals seem indeed transitory because discretionary accruals after the switch do not differ significantly between the two groups. High and low switchers based on transitory losses have substantially different client characteristics. Moreover, high switchers continue to have a higher loss likelihood after the switch.

Therefore, we first conduct a set of placebo tests to address the possibility that those differences correlate with omitted persistent and fee-relevant characteristics that we cannot empirically address by controlling for those observable characteristics. If this were the case, our hypothesis tests would be invalid due to omitted variable bias. To do so, we identify high and low switchers based on a pseudo-switching year (the fourth year of an auditor-client relationship). Their client characteristics show similar differences to those identified between our actual high and low switchers. However, after controlling for those contemporaneous characteristics, we find no systematic fee differences between the pseudo-high and pseudo-low switchers. This result suggests that these substantial differences in observable characteristics do not represent substantially different unobservable and fee-relevant client types. Therefore, we conclude that we can validly test our hypothesis by controlling for contemporaneous characteristics that differ between high and low switchers.

Hence, we proceed with our main specification and consider high and low switchers based on the actual switching year. We find support for our hypothesis with both approaches in the Big 4 sample, but not in the Non-Big 4 sample. Economically, average annual audit fees differ by 16.8 (15.5) percent between high and low switchers based on discretionary accruals

(transitory losses). To further substantiate that we do not just identify different unobservable and fee-relevant client types, we show that those differences did not exist in the years before the auditor switch. Our results are robust to alternative definitions of high and low switchers, using auditor switches before 2003, focusing on the first five years of tenure (before audit partner rotation), using entropy balancing, and using the demise of Arthur Andersen to reduce endogenous auditor switching.

Our research contributes to an important research and policy area in auditing. In our sample, observations with transitory fee-increasing and -decreasing characteristics are similarly frequent, and descriptive statistics of switching reasons do not suggest systematic differences, although some observable financial characteristics of clients differ between high and low switchers. Thus, our finding likely represents a friction of auditor switching: At least some clients seem to switch for reasons other than fee-increasing or -decreasing characteristics and thus accept forgoing the cost-optimal switching year. Based on our effect sizes when comparing extreme client characteristics, these frictions account for as much as the average switching costs estimated in structural models (Guo et al. 2022). Thus, we contribute to the literature estimating switching costs and identify an observable source of such costs. These insights are relevant to practice, given mandatory audit firm rotation in the European Union and regular discussions about auditor rotation in the US.

We make additional contributions to the literature on audit pricing. Abbott et al. (2006) find that income-increasing accruals increase contemporaneous audit fees.[1] We extend this finding and show that average fees over the entire auditor tenure are higher despite accruals (loss) reversal when the income-increasing accruals (transitory losses) occur in the initial audit period. Thus, an average fee premium is generated. Fee premia are commonly attributed to contemporaneous risk (Simunic and Stein 1996), auditor size (DeFond et al. 2000, Ireland and

[1] Also see Schelleman and Knechel (2010), Krishnan et al. (2013), Greiner et al. (2017), Choi et al. (2022). See Hay (2013) for an overview of similar findings regarding losses and contemporaneous audit fees.

Lennox 2004), or monopoly pricing (DeFond and Zhang 2014). Our study shows that also prior periods might contribute to persistent differences in audit fees.

2. Hypothesis Development

Our research combines the concepts of transitory client characteristics affecting contemporaneous audit cost and start-up cost of initial-year audits. Recent analytical research on initial-year audit pricing by Kronenberger (2023) has first connected these two concepts. The study constructs a two-period model that relates client accruals to audit pricing in the two initial years after an auditor switch. It builds on the basic accounting principle that accruals reverse over time. High accruals increase auditors' litigation risk compared to low accruals, thus increasing the auditor's incentives to expand audit effort and increasing the auditor's expected cost (Lys and Watts 1994, Kronenberger and Laux 2022). In the absence of start-up cost, total audit cost over the two audit periods should be identical – all other factors equal – independent of whether a firm has high or low accruals in the initial period because the total risk is identical. However, start-up cost for the initial engagement period changes this logic.

Kronenberger (2023) further argues that the direct effort costs are higher in the initial engagement period because the auditor incurs learning cost. Thus, each audit hour is less effective in reducing the material misstatement risk, which leads to more audit hours and higher audit cost.[2] If the initial engagement period has high accruals, learning cost is multiplied with an increased risk of overstatements, which causes an overproportionate increase in audit cost. When accruals reverse in the second period, the cost saving is smaller in magnitude than the initial cost increase because the learning cost is sunk. In contrast, low accruals in the initial engagement period alleviate the pressure on the auditor because they have a smaller overstatement risk, and high overstatement risk in later periods can be handled without high

[2] Empirically, Gipper et al. (2021) study the existence of learning or adjustment cost in the auditor-client relationship and show that partners spend more audit hours in the first period after a partner switch.

adjustment or learning cost. Therefore, total audit cost over multiple periods are higher when the accruals are high in the initial engagement period.

We add two aspects to Kronenberger (2023) to derive our hypothesis that we empirically test in this paper. First, we identify the driving forces in the model to assess whether there are other client characteristics that could theoretically yield similar effects. The driving functions of accruals in the model are that they (1) affect audit cost and (2) have at least partially transitory elements, which reverse from one period to the next. Based on these considerations, we conclude that one-time losses could be another client characteristics that could yield similar effects. Regarding audit costs, Hay (2013) reports broad empirical evidence on the positive link between losses and audit fees as a proxy of audit cost. Regarding the transitory nature, it is likely that losses reverse over time because firms eventually need to become profitable to earn their cost of equity. Otherwise, the business model is not sustainable

Second, we use audit fees to approximate the effects on audit cost. Empirical evidence suggests that audit fees are a function of audit cost. The audit pricing literature has collected robust evidence consistent with audit fees reflecting drivers of audit cost, such as size or complexity (Hay, 2013). Moreover, research with audit hour data has shown a high correlation between audit hours and audit fees (e.g., Bell et al. 2008, Cho et al. 2017, Christensen et al. 2021, Dekeyser et al. 2019, Davis et al. 1993). To improve this approximation, we expand the model horizon to the entire auditor tenure.[3] Reversals of transitory characteristics may take time. Further, audit cost (or even audit fees) are tough to isolate in a single period (Barua et al. 2020) and several factors could cause "fee-smoothing" over multiple periods. The audit pricing scheme could involve quasi-rents, which are spread over the entire auditor-client relationship, decoupling contemporaneous audit fees from cost without changing the relationship between average contemporaneous audit fees and cost (DeAngelo 1981). The size of these rents (i.e.,

[3] Note that periods in Kronenberger (2023) do not have to be interpreted as years. Period one in a model can also relate to a starting phase of multiple years and period two to a continuation phase.

the decoupling) can depend on the direction of the accruals (Kronenberger 2023). Moreover, there is some evidence that audit fees are sticky, i.e., they do not immediately adjust to year-over-year changes in client characteristics (e.g., De Villiers et al. 2014, Kacer et al. 2018). However, quasi-rents and sticky fees do not change the total fees (as a function of total audit cost) over the client-auditor tenure.

Thus, we predict that *contemporaneous* audit fees during the entire audit tenure, after controlling for *contemporaneous* determinants of audit fees, are higher when the client exhibits transitory cost-increasing versus cost-decreasing characteristics in the *initial* engagement year. Stated formally, we hypothesize as follows:

H1: Clients with the most cost-increasing transitory characteristics in the initial year with a new auditor, on average, pay higher fees during the entire auditor tenure than clients with the most cost-decreasing transitory characteristics in the initial audit year.

The expected pattern that creates the difference predicted in H1 depends on the type of transitory characteristics, i.e., whether they are cost-increasing, cost-decreasing, or neutral compared to an average audit. Specifically, in the case of discretionary accruals, we expect the most cost-increasing transitory characteristics, i.e., client-specific high positive discretionary accruals, to be positively associated with audit fees, compared to an average audit. Conversely, we expect the most cost-decreasing transitory characteristics, i.e., client-specific high negative discretionary accruals, to be negatively associated with audit fees (Abbott et al., 2006). Hence, we expect the difference to result from combining a positive and a negative persistent fee effect. For losses as a transitory characteristic, however, we expect a different pattern. Even when losses, the most cost-increasing transitory characteristic, are possibly transitory, we expect them to be positively associated with audit fees, compared to an average audit. In the case of losses, the most cost-decreasing transitory characteristic are profits. However, we expect that profitable firms pay similar audit fees as an average audit, thus expecting no substantial interaction with

audit fees. In this case, the expected effect of the most cost-decreasing transitory characteristic is a null effect. Therefore, we expect the difference for transitory losses to result from combining a positive and a neutral persistent fee effect.

3. Research Design

3.1 Identifying High and Low Switchers

Our hypothesis relies on client characteristics to reverse for an individual client and pose a transitory, not a permanent risk factor. We use data from five consecutive years ending in the auditor switching year to select clients with comparable risk profiles and identify whether they have cost-increasing (high switchers) or -decreasing (low switchers) characteristics in the switching year. After the switching year, we hold the assignment to the high switcher or low switcher group constant for each auditor-client pairing until there is another auditor switch to cover the average effect on the entire auditor tenure. We retain auditor-client pairings that fulfill neither definition of high or low switchers as control observations.

3.1.1 Identification Based on Discretionary Accruals

We obtain discretionary accruals (*DACC*) as the residual from the performance-adjusted Jones (1991) model (Kothari et al. 2005), estimated on subsamples of SIC 2-digit industry-years with at least 10 observations. We estimate the following equation (1) on all Compustat observations with positive total assets and winsorize all variables at the 1st and 99th percentile.

$$TA_{i,t} = \beta_0 + \beta_1\left(\frac{1}{Assets_{i,t-1}}\right) + \beta_2\left(\Delta Sales_{i,t} - \Delta Receivables_{i,t}\right) + \beta_3 PPE_{i,t} + \beta_4 ROA_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

where *i* indexes firm, *t* indexes year; *TA* is net income minus cash flow from operations, scaled by lagged total assets; *Assets* are lagged total assets; *ΔSales* is the year-on-year change in total revenues, scaled by lagged total assets; *ΔReceivables* is the year-on-year change in total

receivables, scaled by lagged total assets; *PPE* is net property, plant, and equipment, scaled by lagged total assets; and *ROA* is return on assets, which we lag by one year, denoted by *t-1*.

To exclude firms with persistently different risk profiles based on accruals, we require clients to have at least two years of income-increasing and two years of income-decreasing accruals in the five focal years. Then, we rank each client's five discretionary accruals (*DACC*) observations, ensuring that our measure covers the relative riskiness of the switching year within an individual client. Our high switcher indicator, *HIGH_DACC*, is a dummy variable coded as one if the discretionary accruals in the switching year have the highest value of the five annual discretionary accruals. Similarly, our low switch indicator, *LOW_DACC*, is a dummy variable coded as one if the switching year's discretionary accruals have the lowest value within the five-year window.

3.1.2 Identification Based on Losses

We define *LOSS* as a dummy variable coded as one if net income is negative. To ensure that our dummies capture transitory losses from firms with similar risk profiles based on losses, we require clients to have at least two years with *LOSS* = 1 and two years with *LOSS* = 0 in the five focal years. Then, our high switcher indicator, *LOSS_SWITCH*, is a dummy variable coded as one if *LOSS* = 1 in the switching year. Similarly, our low switcher indicator, *PROFIT_SWITCH*, is a dummy variable coded as one if LOSS = 0 in the switching year.

3.2 Sample Selection

We start our sample selection with 45,416 non-financial industry observations from the intersection of Compustat and the Audit Analytics Opinion data set from fiscal years 2004-2021 that have at least one auditor switch in the Audit Analytics Auditor Changes data set. We remove 7,640 first-year audit observations based on recent developments in the literature on

initial-year audit pricing.[4] We only keep observations with at least $1 million in total assets (minus 3,139 observations) and remove 3,941 observations with missing data to calculate other variables. We further remove 7,478 observations because their last auditor change was before 2003 to avoid the selection bias arising from long audit tenure.[5] Finally, requiring data to calculate discretionary accruals for *t-4* to *t* to identify low and high switchers based on discretionary accruals results in a further loss of 7,155 observations and a final sample of 16,063 observations. Alternatively, requiring data on net income for *t-4* to *t* to to identify low and high switchers based on losses results in losing 4,999 observations and a final sample of 18,219 observations.

Lastly, prior research shows that fee effects of switches (e.g., Hallman et al. 2023) and discretionary accruals (Choi et al. 2022), and fee developments along the auditor tenure (Ghosh and Siriviriyakul 2018) differ systematically between Big 4 and Non-Big 4 clients. Therefore, it is essential for our research to differentiate Big 4 and Non-Big 4 subsamples. They consist of 7,073 Big 4 and 8,990 Non-Big 4 observations for our discretionary accruals-based sample and 8,010 Big 4 and 10,209 Non-Big 4 observations for our loss-based sample. Table 1 summarizes our sample selection.

[Table 1]

3.3 Model

We predict that the coefficient on *HIGH_DACC* (*LOSS_SWITCH*) is significantly larger than the coefficient on *LOW_DACC* (*PROFIT_SWITCH*) when estimating the average fees over the lifetime of an auditor-client pairing. We test this hypothesis by estimating the following pooled OLS regression.

[4] Barua et al. (2020) and Hallman et al. (2023) find that audit fee data of first-year audits are unreliable.
[5] Ghosh and Siriviriyakul (2018) and Zhou et al. (2024) show that auditor-client pairings that enter the sample with long auditor tenure might systematically differ from pairings with shorter tenure.

$$LAF_{it} = \alpha_i + \beta_t + \gamma_1 HIGH_{it} + \gamma_2 LOW_{it} + \sum_{k=3}^{N} \gamma_k CONTROLS_{it} + \varepsilon_{it} \quad (2)$$

where *LAF* is the natural logarithm of audit fees, α_i are industry fixed effects,[6] β_t are year fixed effects, *HIGH* is either *HIGH_DACC* or *LOSS_SWITCH*, *LOW* is either *LOW_DACC* or *PROFIT_SWITCH*, and *CONTROLS* is the vector of control variables used by Barua et al. (2020) and Hallman et al. (2023). *CONTROLS* contains the logarithm of total assets to measure size (*LTA*). Current assets over current liabilities measure liquidity (*LIQ*). Return on assets is a profitability measure (*ROA*). Total liabilities over total assets measure financial leverage (*LEV*). Four complexity measures include the ratio of inventory and receivables over total assets (*RECINV*), an indicator variable coded as one if a firm reports foreign currency adjustments, and zero otherwise (*FOREIGN*), an indicator variable coded as one if the income statement contains extraordinary items, and zero otherwise (*EXORD*), and the square root of the number of business segments (*SQSEG*). Audit-specific controls contain a Big 4 indicator (*BIG 4*), an indicator variable coded as one if the auditor modifies the going concern opinion, and zero otherwise (*GC*), an indicator variable coded as one if the auditor identifies an internal control material weakness, and zero otherwise (*MW*), and an indicator variable coded as one if there is a SOX 404 (b) internal control opinion for the client, and zero otherwise (*D_MW*).

We add *DACC* and *LOSS* to *CONTROLS* in addition to the original control variables from Barua et al. (2020) to control for the fee effect of contemporaneous discretionary accruals and losses. Our hypothesis H1 holds if γ_1 is significantly larger than γ_2. We estimate all models with OLS regressions and use heteroskedasticity-robust standard errors clustered by firm.

[6] Barua et al. (2020) and Hallman et al. (2023) use firm fixed effects. We use industry fixed effects instead because firm fixed effects would remove all variation but observations from clients that have at least two different auditors in our sample *and* have different values for *HIGH* and *LOW* across those two or more auditor-client relationships. This is only the case for about 6.6 (5.9) percent of our Big 4 sample when using *HIGH_DACC* and *LOW_DACC* (*LOSS_SWITCH* and *PROFIT_SWITCH*). Hence, firm fixed effects would remove most of the variation we are interested in.

4. Results

4.1 Sample composition and switching reasons

Our sample is based on 3,161 (3,706) auditor switches when using discretionary accruals (losses) to identify high and low switchers. Most switches happen in our early sample years (before 2008), and the other switches are relatively evenly distributed.[7] Our switches include 354 *HIGH_DACC* switchers and 351 *LOW_DACC* switchers, suggesting an even distribution of accruals riskiness in the switching year. Panel A of Table 2 shows switching year's average accruals and reasons for auditor switches for the high and low switchers. By construction, discretionary accruals are positive for high switchers and negative for low switchers, and the difference is large and significant. The distance from neutral accruals (i.e., zero discretionary accruals) is similar for high and low switchers. Turning to switching reasons, there are no significant differences between high and low switchers. Hence, we find no descriptive evidence indicating that clients strategically favor income-increasing or income-decreasing accruals when they switch auditors.

Focusing on losses, our switches include 454 high switchers (*LOSS_SWITCH*) and 405 low switchers (*PROFIT_SWITCH*), suggesting that firms with transitory losses slightly favor switching in a loss year. Panel B of Table 2 shows discretionary accruals in the switching year and switching reasons. Discretionary accruals are significantly different between high and low switchers, but high (low) switchers have negative (positive) discretionary accruals, contrary to high and low switchers based on discretionary accruals. This suggests that we identify two fundamentally different types of transitory client characteristics. Comparing the reasons for

[7] Sample using discretionary accruals to identify high and low switchers

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
271	327	353	268	224	155	169	133	94	118	132	134	137	136	118	144	130	118

Sample using losses to identify high and low switchers

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
324	382	395	308	246	185	193	158	113	143	154	162	168	167	147	163	147	151

auditor switches suggests some strategic switching behavior. High switchers are significantly more likely to dismiss their auditor due to disagreement, to have the auditor resign, to have a significant internal control issue, and to have a reportable condition according to SEC or professional standards. They are significantly less likely to not be PCAOB registered.

Hence, we must interpret differences between high and low switchers based on losses with some caution because they seem to be clients of slightly different types.

Panels C and D of Table 2 suggest that switching reasons differ substantially between clients switching to a Big 4 and clients switching to a non-Big 4 auditor. This observation further substantiates or choice to analyze those two subsamples separately. However, the differences are consistent across Panels C and D, suggesting they are mostly driven by the choice of a Big 4 or non-Big 4 auditor, not by a strategic timing of switches when transitory client characteristics are either high or low. Moreover, our variables of interest do not differ between clients switching to a Big 4 or a non-Big 4 auditor, corroborating the previous observation that clients do not seem to strategically switch in a year where they meet certain transitory characteristics we use to identify high and low switchers.

[Table 2]

4.2 Descriptive statistics and placebo test

Table 3 presents summary statistics for our test variables, dependent variable, and controls. Panel A (Panel B) contains our full accruals-based (loss-based) sample. We find an even distribution of high and low switchers in our sample. Specifically, 10.2 and 10.5 percent of our sample are high switchers based on discretionary accruals and transitory losses, respectively. For both discretionary accruals and transitory losses, we identify 11.3 percent of our sample as low switchers.

[Table 3]

Panels C and D of Table 3 compare the characteristics between high and low switchers based on discretionary accruals and transitory losses, respectively. For high and low switchers based on discretionary accruals in Panel C, we find no difference in their average discretionary accruals in the years after the switch, suggesting that the discretionary accruals in the switching year are indeed transitory. However, we find some significant differences between the two groups, indicating some more persistent characteristics that could be correlated with the timing of auditor switching. Specifically, we find that high switchers have lower leverage, (*LEV*) suggesting somewhat higher long-term financial stability. They have higher inventories and receivables (*RECINV*) and a higher likelihood of foreign operations (*FOREIGN*), suggesting slightly more complex businesses. They are less likely to be audited by Big 4 auditors (*BIG 4*) and more likely to experience a material weakness in internal controls (*MW*), suggesting slightly lower financial reporting quality.[8] While we control for these characteristics in our primary hypothesis test, we cannot exclude that they reflect unobservable (and therefore empirically hard-to-control) systematic differences between high and low switchers that are correlated with audit fees.

To address this issue, we recreate our high and low switcher groups based on a pseudo-switching year, which we set to the fourth year of the auditor tenure. We choose the fourth year because it is the year with the longest distance to the actual switching year that is not yet affected by mandatory partner rotation. If the observed differences in characteristics between high and low switchers are unrelated to the timing of switches, we would expect significant differences between pseudo-high and pseudo-low switchers as well. Moreover, if average fees indeed only differ because the combination of extreme risk with an initial audit leads to a multiplication of start-up cost and transitory risk, we will find no effect in a falsification test using equation (2) and replacing the *HIGH_DACC* and *LOW_DACC* dummies with our pseudo-high

[8] We compare the differences between high and low switchers for only Big 4 observations in untabulated tests. They have the same differences as the full sample, and high switchers are larger (*LTA*), more liquid (*LIQ*), and more likely to receive a modified going concern opinion (*GC*) than low switchers.

(*PHIGH_DACC*) and pseudo-low (*PLOW_DACC*) switcher groupings. The test controls for differences in the observable characteristics, and no significant differences would suggest that possibly correlated unobservable characteristics are unlikely to be correlated with audit fees.

Table 4 presents the results from analyzing the pseudo switches. Panel A compares the characteristics between pseudo-high and pseudo-low switchers based on discretionary accruals. We find the same differences between the pseudo-high and pseudo-low switchers as between the high and low switchers in Table 3, Panel C, except for the increased likelihood of a material weakness in internal controls. Moreover, we find additional significant differences (smaller size (*LTA*), lower profitability (*LOSS*, *ROA*), and higher likelihood of receiving a modified going concern opinion (*GC*)), all consistent with more risky audits in the pseudo-high switcher group. These results suggest that the timing of switches is unlikely to be the primary driver of the differences we observe between our actual high and low switcher groups. Moreover, despite the riskier characteristics of the pseudo-high switcher group, results from OLS regressions with the pseudo version of equation (2) in Table 4, Panel C, neither suggest significant differences between the pseudo-high and the pseudo-low switcher group nor between either group and the remaining pseudo-control observations. Taken together, these results suggest that it is unlikely that there are omitted systematic differences between the actual high and low switcher groups based on discretionary accruals that are generally correlated with fees.

[Table 4]

We follow the same procedure for high and low switchers based on losses. Table 3, Panel D, reports differences in loss likelihood, suggesting that the losses we use for identification are not fully transitory. Moreover, we find many significant differences between the two groups, all indicating persistent differences in financial distress (higher accruals (*DACC*), smaller size (*LTA*), lower liquidity (*LIQ*), lower profitability (*ROA*), higher leverage (*LEV*), more complexity (*RECINV*), more modified going concern opinions (*GC*), and more material

weaknesses (*MW* and *D_MW*)).[9] These many differences corroborate our previous observations that possible selection concerns are more severe for loss than for discretionary accruals based switchers and that the two types of transitory characteristics are fundamentally different.

Table 4, Panel B, contains the same comparison as Table 3, Panel C, for pseudo-high versus pseudo-low switchers based on losses. We find the same differences except for discretionary accruals (*DACC*, now insignificant), liquidity (*LIQ*, now higher instead of lower), leverage (*LEV*, now lower instead of higher), inventories and receivables (*RECINV*, now insignificant), foreign operations (*FOREIGN*, less likely instead of insignificant), having a Big 4 auditor (*BIG 4*, less likely instead of insignificant), and receiving a modified going concern opinion (*GC*, now insignificant). Hence, our falsification tests seem to be weaker for the loss-based sample because the differences between the actual groups are more severe than between the pseudo groups. Nonetheless, regressions results of loss-based pseudo-switchers in Table 4, Panel D, suggest no significant differences between the pseudo-high and the pseudo-low switcher group. Note that either group, on average, pays higher fees than the remaining pseudo-control observations, consistent with their generally elevated persistent financial distress. While this test again gives us comfort for our primary analysis, as noted above, the loss-based identification of high and low switchers seems to identify somewhat systematically different client types, based on both switching reasons and post-switch client characteristics.

4.3 Multiple Regression Analysis

Next, we proceed with our main specification. Table 5 presents the results from estimating equation (2) to test our hypothesis that high switchers, on average, pay a higher fee than low switchers across the auditor-client relationship. Panel A (Panel B) contains results when we

[9] We again use untabulated tests to compare the differences between high and low switchers for only Big 4 observations. They have the same differences as the full sample, except for *MW* and *D_MW*, which are insignificant, and high switchers are less likely to report special items (*EXORD*) and have fewer segments (*SQSEG*) than low switchers.

identify high and low switchers based on discretionary accruals (transitory losses). As columns 1 and 3 of Panel A show, we find no average fee effect for clients in the entire sample or the Non-Big 4 sample when we use discretionary accruals to identify high and low switchers. Conversely, column 2 of Panel A shows that Big 4 clients enjoy roughly 16.8 percent lower average audit fees over the lifetime of their auditor-client relationship when we identify them as low switchers compared to high switchers, a difference that is significant at the five percent level. Two-thirds of this effect stem from low switchers paying significantly lower fees than control firms. Specifically, their fees are 10.5 percent lower, a difference that is significant at the five percent level. Those effects are economically substantial, e.g., compared to estimations in Guo et al. (2022) that switching cost accounts for approximately 14 percent of audit fees or to the Big 4 premium of 36.9 percent we observe in column 1 of Panel A. Hence, we find support for H1, and the pattern of results is consistent with our expectations for the most cost-increasing and most cost-decreasing effects of transitory discretionary accruals. A possible reason for finding this result only in the Big 4 sample is that Big 4 auditors are more sensitive to litigation and reputation risks than Non-Big 4 auditors (e.g., Choi et al. 2022). This argument is also in line with Kronenberger and Laux (2022), assuming that Big 4 auditors exhibit lower marginal effort cost, e.g., due to their larger resources and specialized back-office expertise.

Results in Panel B are also consistent with H1, and the pattern in terms of the single effects of the high and low switcher dummies is also consistent with our expectations and different from the pattern in Panel A. Column 1 of Panel B shows a significant difference between high and low switchers based on transitory losses for the entire sample. The difference is only 6.9 percent and significant at the five percent level. Columns 2 and 3 of Panel B suggest that Big 4 firms drive this overall effect because it is also significant in column 2 but not in column 3. The difference for the Big 4 sample is 13.5 percent (significant at the five percent level), which is slightly lower than the magnitude we find when using discretionary accruals to identify high and low switchers. Moreover, this effect is entirely driven by a 14.8 percent fee

premium (significant at the one percent level) of high switchers compared to control observations.

The different patterns of results are consistent with our expectations on the nature of the underlying transitory characteristics we use to identify high and low switchers. Discretionary accruals are, by definition, a deviation from neutral accounting choices. Moreover, by construction, they represent a deviation from the client industry's average accruals choices. Therefore, when clients deviate from the neutral choice with aggressive (conservative) accruals accounting, litigation risk increases (decreases) from average levels. Hence, it is plausible that we see upward and downward deviation in fees. By contrast, profitability is necessary for a firm to survive and, eventually, for the going concern assumption to hold. The average audit operates under the going concern assumption. Therefore, losses represent a deviation from the average audit, increasing litigation risk. Hence, it is plausible that we only see upward deviation from average fee levels.

[Table 5]

To further substantiate that our identification of high and low switchers is unlikely to capture persistent omitted characteristics that persistently affect their audit fees, we compare the fees of low and high switchers before they switch auditors. To do so, we re-estimate equation (2) with all available years before the switch (and after 2003) of all switches included in our primary analysis, i.e., on a pre-switching sample. This sample consists of 13,703 observations (7,707 Big 4; 5,994 Non-Big 4) for our discretionary accruals-based switchers and 14,931 observations (8,291 Big 4; 6,638 Non-Big 4) for our loss-based switchers.

Table 6 presents the results from these pre-switch audit fee regressions. We find comparably small and insignificant coefficients on *HIGH_DACC*, *LOW_DACC*, *LOSS_SWITCH*, or *PROFIT_SWITCH* (absolute value of all coefficients < 0.060, all $p > 0.21$) and small and insignificant differences between high and low switchers (absolute differences all < 0.073, all $p > 0.23$). These results are comparable to our placebo tests in Table 4 and both

statistically and economically much weaker than our primary results. Collectively, our evidence thus suggests that our hypothesis of a multiplication of start-up cost and transitory risk is a much more likely explanation for the fee patterns we observe than some persistent unobservable client type that simultaneously determines switcher types and audit fees. Figure 1 graphically summarizes our collective results for the Big 4 sample.

[Table 6]

[Figure 1]

4.4 Robustness Tests

Table 7 reports results from several robustness tests. For brevity, we focus our robustness tests on the core results in the Big 4 subsample. Columns 1 and 2 rely on more extreme definitions of high and low switchers. Specifically, for our accruals-based definitions, we keep the requirements from our original variables *HIGH_DACC* and *LOW_DACC* and additionally require positive (negative) discretionary accruals in the year before the auditor switch. The same logic applies to an additional loss (profitable) year before the switch for *LOSS_SWITCH* (*PROFIT_SWITCH*). Results remain inferentially robust and become economically stronger (remain almost identical) in column 1 (column 2).

Columns 3 and 4 relax the restriction to auditor switches after 2002 and include a larger sample with earlier switches, essentially overweighting later years of auditor-client relationships. Results remain inferentially robust but become economically weaker in column 3, consistent with selection bias in this extended sample (Zhou et al. 2024). However, the economic effect is stronger in column 4.

Columns 5 and 6 repeat our tests for a subsample of firms with a maximum auditor tenure of five years because mandatory partner rotation after five years could affect the economics of audit pricing. We find inferentially robust results with a similar (weaker) economic effect in column 5 (column 6).

Columns 7 and 8 use entropy balancing to balance the first and second moment of all covariates between high and low switchers, where all control observations (neither high nor low switchers) keep a weight of one. We find almost identical results after entropy balancing, providing some comfort that selection on observables does not drive our results.

[Table 7]

4.5 Using Arthur Andersen's Demise

Switching auditors is an endogenous decision. Although our descriptive evidence, placebo tests, analysis of pre-trends, and entropy balancing collectively suggest that being a high or low switcher does not seem to be a strategic choice or proxy for an otherwise unobservable persistent client type, we cannot exclude endogeneity concerns. Moreover, for losses, we find some evidence of systematic differences in switching reasons and for persistent client types, making endogeneity concerns more tangible. As a final robustness test, we therefore use the demise of audit firm Arthur Andersen after the Enron collapse in 2002 as a quasi-experiment to test our hypotheses. Arthur Andersen's collapse is a plausibly exogenous shock to markets for first-year audits.[10]

Our sample is based on 568 (681) former Arthur Andersen clients switching auditors in their fiscal year 2002 or 2003 and fulfilling all of our selection criteria based on discretionary accruals (losses). We decide to keep all observations because those clients were Big 5 clients before the switch. After Arthur Andersen's demise, the Big 4 might not have had the capacity to pick up all those clients. We also run our tests on a subsample of those Arthur Andersen clients switching to a Big 4 auditor. We drop clients from our sample once they switch again, because those switches are again endogenous. The final sample of former Arthur Andersen

[10] We do not use Arthur Andersen's demise as our primary research design because the resulting switches coincide with the introduction of SOX, which also substantially affected audit fees.

clients contains 4,161 (5,198) observations when we use our discretionary accruals-based (loss-based) test variables.

Table 8 presents results of repeating our primary analyses with discretionary accruals-based test variables and the full Arthur Andersen (Big 4 only) sample in column 1 (column 3) and loss-based test variables and the full (Big 4) sample in column 2 (column 4). Results of our primary test in columns 1 and 2 of Table 8 remain inferentially robust and with a similar economic effect of a 17.4 (16.5) percent difference when using discretionary accruals (losses). Moreover, the components of this effect are also similar, with a 10 percent discount on extremely income-decreasing discretionary accruals and a 12.9 percent premium on switching in a loss year. Column 3 shows that results become insignificant when using the Big 4 sample with the discretionary accruals-based test variables, although the economic effect of a 16.6 percent difference is comparable to our primary results. Column 4 shows robust results when using the Big 4 sample with the loss-based test variables.

[Table 8]

5. Conclusion

In this paper, we investigate whether transitory client characteristics at the time of an auditor switch affect total audit cost of the new auditor-client relationship. Extending recent theory on combining start-up cost and cost effects of discretionary accruals (Kronenberger 2023), we predict that clients with transitory cost-increasing characteristics at the time of the switch pay higher average fees throughout the engagement than clients with transitory cost-decreasing characteristics, although those characteristics expectedly reverse in later years. We use extreme client-specific discretionary accruals and transitory losses, i.e., losses of clients with a history of both loss and profitable years, to test our hypothesis and find support for it across several specifications for clients switching to Big 4 auditors.

Our findings have important implications for audit theory and practice. Based on descriptive statistics that show little (at most, moderate) signs of strategic switching in high accruals (loss years), the most likely explanation for our findings is that we identify a friction of auditor switching. The economic effects we find suggest that the friction is as high as the average switching costs estimated in structural models (Guo et al. 2022). Thus, we show that clients switching to Big 4 auditors seem to choose the timing of switching based on criteria unrelated to their transitory financial characteristics. In so doing, they accept to pay substantially higher average fees compared to switching in a more optimal year regarding transitory characteristics.

Several caveats are important when interpreting our research. First, many clients rarely change auditors, and clients with very long tenure are not part of our sample. It is unclear whether our findings are relevant to such long-tenured clients. However, given discussions or mandates (e.g., in the EU) of audit firm rotation, our findings are highly relevant for existing settings and scenarios. Second, our operationalization of high and low switchers relies on several research design choices. We address this issue by focusing on accruals and losses, two distinct transitory characteristics, and by running falsification and robustness tests. However, future research could find even more alternatives, especially regarding the underlying transitory characteristic, to further corroborate the robustness of our results. Finally, we cannot rule out that we endogenously identify different types of clients or auditor-client relationships with our operationalization. Our results using Arthur Andersen's demise mitigate some endogeneity concerns but still leave the issue that auditor-client matching is mostly endogenous, although capacity constraints likely induce some exogeneity.

Despite these limitations, we believe that we identify a robust and sizeable friction of auditor switching, thus contributing to debates about audit firm rotation and contributing estimates for the size of switching costs from a novel approach to the literature. We encourage future research to further investigate motivations and frictions around auditor switches.

APPENDIX A

Variable Definitions

Variable	Definition
TA	Total accruals, calculated as net income before extraordinary items minus net cash flow from operating activities, scaled by lagged total assets
1/Assets	1, scaled by lagged total assets
Δ*Sales*	Change in total revenue, scaled by lagged total assets
Δ*Receivables*	Change in total receivables, scaled by lagged total assets
PPE	Net property, plant, and equipment, scaled by lagged total assets
ROA	Return on assets, calculated as net income before extraordinary items, scaled by the average of current year and prior year total assets
DACC	Discretionary accruals estimated as the residuals estimating the following OLS regression separately for each SIC 2-digit industry-year sample with at least 10 observations: $$TA_{i,t} = \beta_0 + \beta_1(1/Assets_{i,t-1}) + \beta_2(\Delta Sales_{i,t} - \Delta Receivables_{i,t}) + \beta_3 PPE_{i,t} + \beta_4 ROA_{i,t-1} + \varepsilon_{i,t}$$
HIGH_DACC	Dummy variable coded as one for the entire tenure of an auditor-client pairing if the discretionary accruals rank highest among the five discretionary accruals from the five-year window ending in the initial year of the auditor-client pairing and those five discretionary accruals comprise at least two income-increasing (positive sign) and two income-decreasing (negative sign) discretionary accruals.
LOW_DACC	Dummy variable coded as one for the entire tenure of an auditor-client pairing if the discretionary accruals rank lowest among the five discretionary accruals from the five-year window ending in the initial year of the auditor-client pairing and those five discretionary accruals comprise at least two income-increasing (positive sign) and two income-decreasing (negative sign) discretionary accruals.
PHIGH_DACC	Dummy variable coded as one for the entire tenure of an auditor-client pairing if the discretionary accruals rank highest among the five discretionary accruals from the five-year window ending in the fourth year of the auditor-client pairing and those five discretionary accruals comprise at least two income-increasing (positive sign) and two income-decreasing (negative sign) discretionary accruals.
PLOW_DACC	Dummy variable coded as one for the entire tenure of an auditor-client pairing if the discretionary accruals rank lowest among the five discretionary accruals from the five-year window ending in the fourth year of the auditor-client pairing and those five discretionary accruals comprise at least two income-increasing (positive sign) and two income-decreasing (negative sign) discretionary accruals.
LOSS	Dummy variables coded as one if net income is negative
LOSS_SWITCH	Dummy variable coded as one for the entire tenure of an auditor-client pairing if *LOSS* = 1 in the initial year of the auditor-client pairing and *LOSS* = 1 and *LOSS* = 0 at least two times in the client's five consecutive years ending in the initial year of the auditor-client pairing.

PROFIT_ SWITCH	Dummy variable coded as one for the entire tenure of an auditor-client pairing if *LOSS* = 0 in the initial year of the auditor-client pairing and *LOSS* = 1 and *LOSS* = 0 at least two times in the client's five consecutive years ending in the initial year of the auditor-client pairing.
PLOSS_ SWITCH	Dummy variable coded as one for the entire tenure of an auditor-client pairing if *LOSS* = 1 in the fourth year of the auditor-client pairing and *LOSS* = 1 and *LOSS* = 0 at least two times in the client's five consecutive years ending in the initial year of the auditor-client pairing.
PPROFIT_ SWITCH	Dummy variable coded as one for the entire tenure of an auditor-client pairing if *LOSS* = 0 in the fourth year of the auditor-client pairing and *LOSS* = 1 and *LOSS* = 0 at least two times in the client's five consecutive years ending in the initial year of the auditor-client pairing.
LAF	The natural logarithm of audit fees. This variable is not defined for auditor switching years.
LTA	Natural logarithm of total assets.
LIQ	Current assets, scaled by current liabilities.
LEV	Leverage, measured as total debt divided by total assets.
RECINV	The sum of inventory and receivables divided by total assets.
FOREIGN	Dummy coded as one if the firm reports nonzero foreign currency translation.
EXORD	Dummy coded as one if the firm reports nonzero extraordinary items.
SQSEG	Square root of the number of business segments.
BIG 4	Dummy variable coded as 1 for firms with a Big 4 auditor (Deloitte, EY, KPMG, or PwC).
GC	Dummy coded as one if the auditor issues a modified going-concern opinion.
MW	Dummy variable coded as 1 if the auditor identified an internal control weakness.
D_MW	Dummy variable coded as 1 if the observation could be matched to the Audit Analytics Internal Controls data base.

Table 1: Sample Selection

	Less	Remaining observations	Big 4	Non-Big 4
Intersection of Compustat and Audit Analytics Opinions, 2004-2021, Non-Financial Firm Years, at Least One Change in Audit Analytics Changes		45,416	19,580	25,836
No First Year Audits	(7,640)	37,776	17,527	20,249
Total Assets ≥ $1 Million	(3,139)	34,637	17,432	17,205
Missing Variables	(3,941)	30,696	15,481	15,215
Last Auditor Change After 2002	(7,478)	23,218	9,686	13,532
Final Samples				
No Missing Data for *HIGH_DACC*	(7,155)	16,063	7,073	8,990
No Missing Data for *LOSS_SWITCH*	(4,999)	18,219	8,010	10,209

Table 2: Switching Characteristics of Auditor Switches

Panel A: Auditor Switches classified as *HIGH_DACC* and *LOW_DACC*

	HIGH_DACC		*LOW_DACC*			
	N	Mean	N	Mean	Difference	T-statistic
DACC	353	0.305	340	-0.361	0.666	25.566***
Dismissed auditor due to going concern opinion	353	0.218	340	0.185	0.033	1.077
Dismissed auditor due to disagreement	353	0.272	340	0.274	-0.002	-0.046
Auditor resigned	353	0.275	340	0.253	0.022	0.652
There was an internal control issue	353	0.244	340	0.232	0.011	0.348
There was an accounting issue	353	0.088	340	0.071	0.017	0.840
There was a limitation of scope issue	353	0.003	340	0.003	0.000	-0.027
Financials were restated	353	0.051	340	0.062	-0.011	-0.613
Disagreement about audit opinion	353	0.037	340	0.047	-0.010	-0.670
Unreliable management	353	0.011	340	0.009	0.003	0.330
There was an illegal act	353	0.003	340	0.000	0.003	1.000
Desire to reduce fees	353	0.034	340	0.018	0.016	1.360
Auditor drops public company audits	353	0.006	340	0.000	0.006	1.416
Auditor lacks independence	353	0.006	340	0.009	-0.003	-0.488
Auditor merged	353	0.076	340	0.079	-0.003	-0.143
Auditor not PCAOB registered	353	0.003	340	0.006	-0.003	-0.607
Reaudit of previous financial statements	353	0.003	340	0.000	0.003	1.000
There was a reportable condition according to SEC or professional standards	353	0.266	340	0.256	0.010	0.311
There was an audit fee dispute	353	0.000	340	0.003	-0.003	-1.000
Firm filed bankruptcy	353	0.000	340	0.003	-0.003	-1.000
Auditor was banned	353	0.006	340	0.003	0.003	0.549
Other issue	353	0.017	340	0.026	-0.009	-0.853

Panel B: Auditor Switches classified as *LOSS_SWITCH* and *PROFIT_SWITCH*

	LOSS_SWITCH		*PROFIT_SWITCH*			
	N	Mean	N	Mean	Difference	T-statistic
DACC	448	-0.057	394	0.080	-0.137	-8.300***
Dismissed auditor due to going concern opinion	448	0.103	394	0.084	0.019	0.944
Dismissed auditor due to disagreement	448	0.326	394	0.264	0.062	1.973**
Auditor resigned	448	0.241	394	0.193	0.048	1.698*
There was an internal control issue	448	0.292	394	0.241	0.051	1.683*
There was an accounting issue	448	0.051	394	0.058	-0.007	-0.446
There was a limitation of scope issue	448	0.004	394	0.003	0.002	0.476

Financials were restated	448	0.054	394	0.071	-0.017	-1.043
Disagreement about audit opinion	448	0.045	394	0.053	-0.009	-0.579
Unreliable management	448	0.009	394	0.003	0.006	1.248
There was an illegal act	448	0.004	394	0.000	0.004	1.416
Desire to reduce fees	448	0.033	394	0.023	0.011	0.936
Auditor drops public company audits	448	0.007	394	0.005	0.002	0.308
Auditor lacks independence	448	0.004	394	0.003	0.002	0.476
Auditor merged	448	0.042	394	0.061	-0.019	-1.203
Auditor not PCAOB registered	448	0.000	394	0.008	-0.008	-1.736*
Reaudit of previous financial statements	448	0.002	394	0.003	0.000	-0.091
There was a reportable condition according to SEC or professional standards	448	0.304	394	0.239	0.065	2.125**
SEC inquiry of firm	448	0.000	394	0.003	-0.003	-1.000
There was an audit fee dispute	448	0.002	394	0.000	0.002	1.000
Firm filed bankruptcy	448	0.004	394	0.003	0.002	0.476
Other issue	448	0.016	394	0.018	-0.002	-0.241

Panel C: Auditor Switches to Big 4 and Non-Big 4 Auditors

	Big 4		Non-Big 4			
	N	Mean	N	Mean	Difference	T-statistic
HIGH_DACC	902	0.108	2226	0.115	-0.007	-0.605
LOW_DACC	902	0.108	2226	0.109	-0.002	-0.133
Dismissed auditor due to going concern opinion	902	0.043	2226	0.230	-0.187	-16.704***
Dismissed auditor due to disagreement	902	0.277	2226	0.271	0.006	0.330
Auditor resigned	902	0.103	2226	0.328	-0.225	-15.832***
There was an internal control issue	902	0.253	2226	0.226	0.027	1.606
There was an accounting issue	902	0.069	2226	0.052	0.017	1.722*
There was a limitation of scope issue	902	0.004	2226	0.008	-0.004	-1.252
Financials were restated	902	0.051	2226	0.055	-0.004	-0.434
Disagreement about audit opinion	902	0.044	2226	0.046	-0.001	-0.181
Unreliable management	902	0.006	2226	0.012	-0.006	-1.825*
There was an illegal act	902	0.004	2226	0.005	-0.001	-0.354
Desire to reduce fees	902	0.012	2226	0.034	-0.022	-4.134***
There was an SEC investigation	902	0.001	2226	0.000	0.001	0.551
Auditor drops public company audits	902	0.000	2226	0.007	-0.007	-3.885***
Auditor lacks independence	902	0.008	2226	0.009	-0.001	-0.221
Auditor merged	902	0.002	2226	0.112	-0.110	-15.975***
Auditor not PCAOB registered	902	0.002	2226	0.004	-0.001	-0.683
Reaudit of previous financial statements	902	0.000	2226	0.004	-0.004	-2.833***

There was a reportable condition according to SEC or professional standards	902	0.273	2226	0.239	0.034	1.942*
SEC inquiry of firm	902	0.000	2226	0.003	-0.003	-2.649***
There was an audit fee dispute	902	0.000	2226	0.002	-0.002	-2.238**
Firm filed bankruptcy	902	0.001	2226	0.003	-0.002	-1.254
Auditor was banned	902	0.000	2226	0.002	-0.002	-2.001**
Other issue	902	0.011	2226	0.022	-0.011	-2.338**

Panel D: Switching Characteristics of Auditor Switches to Big 4 and Non-Big 4 Auditors

	Big 4		Non-Big 4			
	N	Mean	N	Mean	Difference	T-statistic
LOSS_SWITCH	1061	0.139	2645	0.124	0.015	1.173
PROFIT_SWITCH	1061	0.112	2645	0.104	0.008	0.720
Dismissed auditor due to going concern opinion	1061	0.043	2645	0.254	-0.211	-20.017***
Dismissed auditor due to disagreement	1061	0.287	2645	0.266	0.021	1.303
Auditor resigned	1061	0.103	2645	0.329	-0.226	-17.325***
There was an internal control issue	1061	0.260	2645	0.219	0.042	2.652***
There was an accounting issue	1061	0.062	2645	0.050	0.013	1.486
There was a limitation of scope issue	1061	0.004	2645	0.009	-0.006	-2.135**
Financials were restated	1061	0.047	2645	0.051	-0.004	-0.454
Disagreement about audit opinion	1061	0.043	2645	0.044	-0.001	-0.068
Unreliable management	1061	0.007	2645	0.011	-0.004	-1.362
There was an illegal act	1061	0.005	2645	0.005	0.000	-0.081
Desire to reduce fees	1061	0.010	2645	0.032	-0.021	-4.634***
There was an SEC investigation	1061	0.001	2645	0.000	0.001	0.556
Auditor drops public company audits	1061	0.000	2645	0.008	-0.008	-4.600***
Auditor lacks independence	1061	0.009	2645	0.008	0.001	0.433
Auditor merged	1061	0.005	2645	0.113	-0.108	-16.611***
Auditor not PCAOB registered	1061	0.002	2645	0.006	-0.005	-2.219**
Reaudit of previous financial statements	1061	0.001	2645	0.004	-0.003	-1.866*
There was a reportable condition according to SEC or professional standards	1061	0.281	2645	0.232	0.049	3.058***
SEC inquiry of firm	1061	0.000	2645	0.003	-0.003	-2.649***
There was an audit fee dispute	1061	0.000	2645	0.002	-0.002	-2.238**
Firm filed bankruptcy	1061	0.002	2645	0.003	-0.002	-0.868
Auditor was banned	1061	0.000	2645	0.002	-0.002	-2.001**
Other issue	1061	0.012	2645	0.023	-0.010	-2.344**

Notes: Panels A and B present switching characteristics, if available, of high (*HIGH_DACC* in Panel A, *LOSS_SWITCH* in Panel B) and low (*LOW_DACC* in Panel A, *PROFIT_SWITCH* in Panel B) switchers that we identify based on discretionary accruals in Panel A and losses in Panel B (see Appendix A for detailed variable definitions). Panels C and D present switching characteristics, if available, of auditor switches to Big 4 and Non-

Big 4 auditors from our primary sample when we base our variables of interest on discretionary accruals (Panel C) or losses (Panel D). All switching characteristics are from the Audit Analytics Auditor Change data set. Where certain switching reasons are never mentioned in one of the subsamples used, we exclude these data items from the respective Panel. In Panels A and B, the last two columns present results from t-tests comparing the auditor switches from high and low switchers. In Panels C and D, the last two columns present results from t-tests comparing the auditor switches picking up a Big 4 versus non-Big 4 auditor.

Table 3: Descriptive Statistics

Panel A: Sample when *HIGH_DACC* and *LOW_DACC* are the Test Variables

Variable	N	Mean	Median	Std. Dev.	Min	0.25	0.75	Max
Test Variables								
HIGH_DACC	16,063	0.102	0.000	0.302	0.000	0.000	0.000	1.000
LOW_DACC	16,063	0.113	0.000	0.316	0.000	0.000	0.000	1.000
Dependent Variable								
LAF	16,063	13.295	13.281	1.412	10.376	12.178	14.327	16.634
Control Variables								
DACC	16,063	0.010	0.000	0.253	-1.199	-0.072	0.076	1.035
LOSS	16,063	0.419	0.000	0.493	0.000	0.000	1.000	1.000
LTA	16,063	5.414	5.367	2.428	0.375	3.593	7.195	11.035
LIQ	16,063	2.357	1.426	3.101	0.067	0.878	2.509	21.221
ROA	16,063	-0.108	0.020	0.438	-2.767	-0.093	0.068	0.408
LEV	16,063	0.187	0.108	0.241	0.000	0.000	0.291	1.330
RECINV	16,063	0.267	0.237	0.197	0.000	0.099	0.392	0.799
FOREIGN	16,063	0.328	0.000	0.469	0.000	0.000	1.000	1.000
EXORD	16,063	0.003	0.000	0.053	0.000	0.000	0.000	1.000
SQSEG	16,063	0.639	0.000	0.801	0.000	0.000	1.414	2.449
BIG 4	16,063	0.440	0.000	0.496	0.000	0.000	1.000	1.000
GC	16,063	0.099	0.000	0.298	0.000	0.000	0.000	1.000
MW	16,063	0.106	0.000	0.308	0.000	0.000	0.000	1.000
D_MW	16,063	0.929	1.000	0.257	0.000	1.000	1.000	1.000

Panel B: Sample when *LOSS_SWITCH* and *PROFIT_SWITCH* are the Test Variables

Variable	N	Mean	Median	Std. Dev.	Min	0.25	0.75	Max
Test Variables								
LOSS_SWITCH	18,219	0.105	0.000	0.307	0.000	0.000	0.000	1.000
PROFIT_SWITCH	18,219	0.113	0.000	0.316	0.000	0.000	0.000	1.000
Dependent Variable								
LAF	18,219	13.258	13.252	1.419	10.309	12.148	14.308	16.591
Control Variables								
DACC	18,219	0.011	0.001	0.286	-1.480	-0.072	0.082	1.160
LOSS	18,219	0.437	0.000	0.496	0.000	0.000	1.000	1.000
LTA	18,219	5.359	5.311	2.451	0.331	3.515	7.170	10.899
LIQ	18,219	2.396	1.405	3.293	0.051	0.852	2.518	22.602
ROA	18,219	-0.131	0.016	0.488	-3.113	-0.115	0.066	0.412
LEV	18,219	0.190	0.107	0.245	0.000	0.000	0.298	1.337
RECINV	18,219	0.258	0.225	0.197	0.000	0.090	0.382	0.796
FOREIGN	18,219	0.320	0.000	0.466	0.000	0.000	1.000	1.000
EXORD	18,219	0.003	0.000	0.053	0.000	0.000	0.000	1.000

SQSEG	18,219	0.619	0.000	0.795	0.000	0.000	1.414	2.449
BIG 4	18,219	0.440	0.000	0.496	0.000	0.000	1.000	1.000
GC	18,219	0.113	0.000	0.316	0.000	0.000	0.000	1.000
MW	18,219	0.114	0.000	0.318	0.000	0.000	0.000	1.000
D_MW	18,219	0.926	1.000	0.262	0.000	1.000	1.000	1.000

Panel C: Comparing *HIGH_DACC* and *LOW_DACC* Subsamples

	HIGH_DACC = 1		*LOW_DACC* = 1			
Variable	N	Mean	N	Mean	Difference	T-statistic
Dependent Variable						
LAF	1,636	13.224	1,811	13.150	0.074	1.506
Control Variables						
DACC	1,636	0.016	1,811	0.017	0.000	-0.022
LOSS	1,636	0.439	1,811	0.428	0.011	0.647
LTA	1,636	5.272	1,811	5.204	0.068	0.796
LIQ	1,636	2.117	1,811	2.150	-0.033	-0.345
ROA	1,636	-0.128	1,811	-0.142	0.015	0.853
LEV	1,636	0.183	1,811	0.204	-0.021	-2.435***
RECINV	1,636	0.286	1,811	0.270	0.015	2.209**
FOREIGN	1,636	0.347	1,811	0.282	0.066	4.144***
EXORD	1,636	0.002	1,811	0.001	0.002	1.412
SQSEG	1,636	0.628	1,811	0.657	-0.029	-1.036
BIG 4	1,636	0.406	1,811	0.456	-0.050	-2.941***
GC	1,636	0.121	1,811	0.122	-0.001	-0.090
MW	1,636	0.133	1,811	0.108	0.026	2.299**
D_MW	1,636	0.925	1,811	0.914	0.011	1.181

Panel D: Comparing *LOSS_SWITCH* and *PROFIT_SWITCH* Subsamples

	LOSS_SWITCH = 1		*PROFIT_SWITCH* = 1			
Variable	N	Mean	N	Mean	Difference	T-statistic
Dependent Variable						
LAF	1,916	13.287	2,053	13.275	0.011	0.267
Control Variables						
DACC	1,916	0.023	2,053	-0.006	0.029	4.260***
LOSS	1,916	0.588	2,053	0.353	0.235	15.243***
LTA	1,916	5.109	2,053	5.336	-0.226	-3.360***
LIQ	1,916	1.807	2,053	2.488	-0.681	-8.122***
ROA	1,916	-0.087	2,053	-0.006	-0.081	-9.851***
LEV	1,916	0.210	2,053	0.176	0.034	4.394***
RECINV	1,916	0.320	2,053	0.283	0.036	5.810***
FOREIGN	1,916	0.366	2,053	0.373	-0.007	-0.438
EXORD	1,916	0.003	2,053	0.005	-0.002	-0.871
SQSEG	1,916	0.671	2,053	0.700	-0.029	-1.130
BIG 4	1,916	0.402	2,053	0.420	-0.017	-1.118

GC	1,916	0.105	2,053	0.033	0.072	8.928***
MW	1,916	0.120	2,053	0.101	0.019	1.877*
D_MW	1,916	0.923	2,053	0.902	0.021	2.358**

Notes: This table presents descriptive statistics of all variables used in our main regression models. Panel A presents the sample we use when we identify high and low switchers based on discretionary accruals. Panel B presents the sample we use when we identify high and low switchers based on losses. Panel C (D) presents comparisons of means and t-test results for differences in means between the high and low switchers based on discretionary accruals (losses). Continuous variables are winsorized at the 1st and 99th percentile. Appendix A contains variable definitions.

Table 4: Falsification Tests: Pseudo-Switching Years in the Fourth Year of Auditor Tenure

Panel A: Comparing *PHIGH_DACC* and *PLOW_DACC* Subsamples

	PHIGH_DACC = 1		*PLOW_DACC* = 1			
Variable	N	Mean	N	Mean	Difference	T-statistic
Dependent Variable						
LAF	1,605	13.184	1,431	13.419	-0.235	-4.622***
Control Variables						
DACC	1,605	0.002	1,431	0.003	-0.001	-0.154
LOSS	1,605	0.429	1,431	0.398	0.031	1.734*
LTA	1,605	5.129	1,431	5.584	-0.455	-5.404***
LIQ	1,605	2.244	1,431	2.271	-0.027	-0.266
ROA	1,605	-0.105	1,431	-0.069	-0.036	-2.487**
LEV	1,605	0.160	1,431	0.174	-0.014	-1.669*
RECINV	1,605	0.320	1,431	0.275	0.045	6.368***
FOREIGN	1,605	0.369	1,431	0.319	0.050	2.907***
EXORD	1,605	0.002	1,431	0.002	0.000	0.228
SQSEG	1,605	0.730	1,431	0.689	0.040	1.342
BIG 4	1,605	0.404	1,431	0.439	-0.034	-1.921*
GC	1,605	0.098	1,431	0.075	0.023	2.266**
MW	1,605	0.113	1,431	0.110	0.003	0.260
D_MW	1,605	0.921	1,431	0.927	-0.006	-0.607

Panel B: OLS regression of equation (2) with pseudo-switchers based on discretionary accruals

	Model 1: Full Sample	Model 2: Big 4 Sample	Model 3: Non-Big 4 Sample
Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)
PHIGH_DACC	0.006 (0.163)	0.001 (0.011)	-0.003 (-0.058)
PLOW_DACC	0.048 (1.386)	0.067 (1.245)	0.022 (0.509)
PHIGH = PLOW?	Z = -1.190	Z = -0.820	Z = -0.429
DACC	0.159*** (6.436)	0.222*** (3.199)	0.151*** (5.754)
LOSS	0.149*** (8.316)	0.074** (2.37)	0.150*** (6.801)
LTA	0.519*** (63.749)	0.523*** (42.099)	0.519*** (49.355)
LIQ	-0.027*** (-7.202)	-0.021*** (-2.725)	-0.030*** (-7.386)
ROA	-0.262*** (-9.598)	-0.636*** (-5.505)	-0.239*** (-8.412)
LEV	0.038 (0.893)	0.142* (1.774)	0.028 (0.571)

RECINV	0.256*** (3.574)	0.650*** (4.194)	0.111 (1.444)
FOREIGN	0.187*** (7.609)	0.131*** (3.970)	0.203*** (5.862)
EXORD	0.025 (0.274)	0.100 (0.854)	-0.007 (-0.047)
SQSEG	0.031** (2.215)	0.053*** (2.812)	-0.004 (-0.231)
BIG 4	0.348*** (11.321)		
GC	0.021 (0.625)	0.139 (1.643)	0.020 (0.548)
MW	0.090*** (3.323)	0.295*** (6.598)	0.015 (0.473)
D_MW	0.360*** (9.535)	0.462*** (4.727)	0.385*** (7.883)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year
N	14,395	6,538	7,857
Adj. R^2	0.875	0.777	0.766

Panel C: Comparing *PLOSS_SWITCH* and *PPROFIT_SWITCH* Subsamples

	PLOSS_SWITCH = 1		*PPROFIT_SWITCH* = 1			
Variable	N	Mean	N	Mean	Difference	T-statistic
Dependent Variable						
LAF	1,908	13.196	1,586	13.306	-0.110	-2.419
Control Variables						
DACC	1,908	0.015	1,586	0.012	0.003	0.425
LOSS	1,908	0.516	1,586	0.428	0.088	5.185***
LTA	1,908	5.208	1,586	5.340	-0.132	-1.776*
LIQ	1,908	2.426	1,586	2.034	0.391	4.164***
ROA	1,908	-0.042	1,586	-0.018	-0.024	-3.165***
LEV	1,908	0.191	1,586	0.214	-0.023	-2.666***
RECINV	1,908	0.281	1,586	0.279	0.003	0.412
FOREIGN	1,908	0.338	1,586	0.368	-0.030	-1.851*
EXORD	1,908	0.004	1,586	0.005	-0.001	-0.368
SQSEG	1,908	0.635	1,586	0.634	0.001	0.027
BIG 4	1,908	0.373	1,586	0.441	-0.068	-4.051***
GC	1,908	0.055	1,586	0.047	0.008	1.037
MW	1,908	0.118	1,586	0.100	0.018	1.722*
D_MW	1,908	0.930	1,586	0.927	0.002	0.260

Panel D: OLS regression of equation (2) with pseudo-switchers based on losses

	Model 1: Full Sample	Model 2: Big 4 Sample	Model 3: Non-Big 4 Sample
Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)

PLOSS_SWITCH	0.053* (1.738)	0.053 (1.003)	0.045 (1.176)
PPROFIT_SWITCH	0.077** (2.273)	0.111** (2.235)	0.069 (1.52)
PHIGH = PLOW?	Z = -0.642	Z = -0.903	Z = -0.479
DACC	0.143*** (6.792)	0.138** (2.182)	0.141*** (6.332)
LOSS	0.149*** (8.963)	0.075*** (2.708)	0.152*** (7.214)
LTA	0.516*** (67.549)	0.518*** (43.413)	0.518*** (53.312)
LIQ	-0.025*** (-8.020)	-0.016** (-2.337)	-0.028*** (-8.435)
ROA	-0.241*** (-10.545)	-0.536*** (-5.536)	-0.222*** (-9.217)
LEV	0.038 (1.012)	0.106 (1.477)	0.043 (1.001)
RECINV	0.266*** (4.068)	0.645*** (4.573)	0.140** (1.978)
FOREIGN	0.184*** (8.022)	0.135*** (4.396)	0.193*** (5.983)
EXORD	0.098 (1.079)	0.141 (1.243)	0.089 (0.655)
SQSEG	0.040*** (3.013)	0.066*** (3.645)	-0.001 (-0.038)
BIG 4	0.358*** (12.405)		
GC	0.028 (0.931)	0.141** (2.066)	0.019 (0.578)
MW	0.068*** (2.694)	0.283*** (6.478)	-0.001 (-0.024)
D_MW	0.380*** (11.022)	0.491*** (5.600)	0.395*** (8.860)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year
N	16,318	7,414	8,904
Adj. R^2	0.874	0.770	0.763

Notes: This table presents descriptive statistics and OLS regressions for pseudo-switchers that we identify by defining the fourth year of auditor tenure as a pseudo-switching year. Panel A (C) presents comparisons of means and t-test results for differences in means between the pseudo-high and pseudo-low switchers based on discretionary accruals (losses). Panel B presents OLS regressions of audit fees on pseudo-high (*PHIGH_DACC*) and pseudo-low (*PLOW_DACC*) switchers that we identify based on discretionary accruals. Panel D presents OLS regressions of audit fees on pseudo-high (*PLOSS_SWITCH*) and pseudo-low (*PPROFIT_SWITCH*) switchers that we identify based on transitory losses (see Appendix A for detailed variable definitions). In Panels B and D, Model 1 uses the full sample, Model 2 uses only Big 4 audits, and Model 3 uses only Non-Big 4 audits. Continuous variables are winsorized at the 1st and 99th percentile. Appendix A contains variable definitions. Standard errors are heteroskedasticity-robust and clustered at the firm level. T-values marked with *, **, and *** are significant at the 10-, 5-, and 1-percent levels, respectively.

Table 5: OLS Regressions: High and Low Switchers and Audit Fees			
Panel A: Identification of high and low switchers based on discretionary accruals			
	Model 1: Full Sample	Model 2: Big 4 Sample	Model 3: Non-Big 4 Sample
Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)
HIGH_DACC	-0.010 (-0.308)	0.063 (1.140)	-0.053 (-1.358)
LOW_DACC	-0.045 (-1.429)	-0.105** (-2.136)	-0.012 (-0.306)
HIGH = LOW?	Z = 0.893	Z = 2.370**	Z = -0.701
DACC	0.155*** (6.849)	0.249*** (3.944)	0.140*** (5.875)
LOSS	0.149*** (8.903)	0.079*** (2.702)	0.145*** (7.041)
LTA	0.514*** (68.185)	0.517*** (42.14)	0.513*** (54.595)
LIQ	-0.026*** (-7.623)	-0.020*** (-2.807)	-0.029*** (-7.755)
ROA	-0.259*** (-10.788)	-0.616*** (-6.252)	-0.238*** (-9.511)
LEV	0.043 (1.149)	0.142** (1.971)	0.035 (0.841)
RECINV	0.255*** (3.929)	0.632*** (4.471)	0.128* (1.862)
FOREIGN	0.187*** (8.208)	0.126*** (4.149)	0.203*** (6.406)
EXORD	-0.004 (-0.041)	0.082 (0.722)	-0.070 (-0.561)
SQSEG	0.031** (2.379)	0.054*** (2.970)	-0.002 (-0.093)
BIG 4	0.369*** (13.081)		
GC	0.025 (0.859)	0.110 (1.502)	0.026 (0.843)
MW	0.087*** (3.479)	0.318*** (7.156)	0.007 (0.225)
D_MW	0.345*** (10.485)	0.431*** (5.484)	0.373*** (8.836)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year
N	16,063	7,073	8,990
Adj. R^2	0.869	0.771	0.755
Panel B: Identification of high and low switchers based on losses			
	Model 1: Full Sample	Model 2: Big 4 Sample	Model 3: Non-Big 4 Sample

Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)
LOSS_SWITCH	0.127*** (4.667)	0.148*** (3.129)	0.118*** (3.746)
PROFIT_SWITCH	0.058** (2.011)	0.013 (0.282)	0.077** (2.135)
HIGH = LOW?	Z = 2.300**	Z = 2.430**	Z = 1.310
DACC	0.134*** (6.935)	0.145** (2.513)	0.130*** (6.379)
LOSS	0.145*** (9.313)	0.087*** (3.303)	0.142*** (7.294)
LTA	0.510*** (72.731)	0.515*** (45.848)	0.512*** (58.835)
LIQ	-0.023*** (-8.228)	-0.014** (-2.211)	-0.026*** (-8.794)
ROA	-0.237*** (-12.013)	-0.492*** (-5.691)	-0.223*** (-10.726)
LEV	0.052 (1.550)	0.099 (1.546)	0.061 (1.630)
RECINV	0.260*** (4.415)	0.613*** (4.730)	0.142** (2.251)
FOREIGN	0.185*** (8.680)	0.133*** (4.569)	0.194*** (6.574)
EXORD	0.033 (0.361)	0.152 (1.354)	-0.063 (-0.453)
SQSEG	0.035*** (2.869)	0.064*** (3.750)	-0.004 (-0.234)
BIG 4	0.379*** (14.385)		
GC	0.018 (0.681)	0.120** (1.972)	0.012 (0.429)
MW	0.065*** (2.868)	0.319*** (7.836)	-0.014 (-0.527)
D_MW	0.377*** (12.409)	0.495*** (6.837)	0.386*** (9.857)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year
N	18,219	8,010	10,208
Adj. R^2	0.869	0.771	0.755

Notes: This table presents OLS regressions of audit fees on high (*HIGH_DACC*) and low (*LOW_DACC*) switchers that we identify based on discretionary accruals in Panel A, and on high (*LOSS_SWITCH*) and low (*PROFIT_SWITCH*) switchers that we identify based on transitory losses in Panel B (see Appendix A for detailed variable definitions). In both Panels, Model 1 uses the full sample, Model 2 uses only Big 4 audits, and Model 3 uses only Non-Big 4 audits. Continuous variables are winsorized at the 1st and 99th percentile. Appendix A contains variable definitions. Standard errors are heteroskedasticity-robust and clustered at the firm level. We lose one singleton observation in Panel B, column 3. T-values marked with *, **, and *** are significant at the 10-, 5-, and 1-percent levels, respectively.

Table 6: OLS Regressions: Audit Fees of High and Low Switchers Before the Switch

Panel A: Identification of high and low switchers based on discretionary accruals

	Model 1: Full Sample	Model 2: Big 4 Sample	Model 3: Non-Big 4 Sample
Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)
HIGH_DACC	-0.010 (-0.308)	0.063 (1.140)	-0.053 (-1.358)
LOW_DACC	-0.045 (-1.429)	-0.105** (-2.136)	-0.012 (-0.306)
HIGH = LOW?	Z = 0.996	Z = -0.010	Z = 1.180
DACC	0.155*** (6.849)	0.249*** (3.944)	0.140*** (5.875)
LOSS	0.149*** (8.903)	0.079*** (2.702)	0.145*** (7.041)
LTA	0.514*** (68.185)	0.517*** (42.14)	0.513*** (54.595)
LIQ	-0.026*** (-7.623)	-0.020*** (-2.807)	-0.029*** (-7.755)
ROA	-0.259*** (-10.788)	-0.616*** (-6.252)	-0.238*** (-9.511)
LEV	0.043 (1.149)	0.142** (1.971)	0.035 (0.841)
RECINV	0.255*** (3.929)	0.632*** (4.471)	0.128* (1.862)
FOREIGN	0.187*** (8.208)	0.126*** (4.149)	0.203*** (6.406)
EXORD	-0.004 (-0.041)	0.082 (0.722)	-0.070 (-0.561)
SQSEG	0.031** (2.379)	0.054*** (2.970)	-0.002 (-0.093)
BIG 4	0.369*** (13.081)		
GC	0.025 (0.859)	0.110 (1.502)	0.026 (0.843)
MW	0.087*** (3.479)	0.318*** (7.156)	0.007 (0.225)
D_MW	0.345*** (10.485)	0.431*** (5.484)	0.373*** (8.836)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year
N	16,063	7,073	8,990
Adj. R^2	0.869	0.771	0.755

Panel B: Identification of high and low switchers based on losses

	Model 1: Full Sample	Model 2: Big 4 Sample	Model 3: Non-Big 4 Sample

Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)
LOSS_SWITCH	0.127*** (4.667)	0.148*** (3.129)	0.118*** (3.746)
PROFIT_SWITCH	0.058** (2.011)	0.013 (0.282)	0.077** (2.135)
HIGH = LOW?	Z = -0.398	Z = -0.741	Z = 0.246
DACC	0.134*** (6.935)	0.145** (2.513)	0.130*** (6.379)
LOSS	0.145*** (9.313)	0.087*** (3.303)	0.142*** (7.294)
LTA	0.510*** (72.731)	0.515*** (45.848)	0.512*** (58.835)
LIQ	-0.023*** (-8.228)	-0.014** (-2.211)	-0.026*** (-8.794)
ROA	-0.237*** (-12.013)	-0.492*** (-5.691)	-0.223*** (-10.726)
LEV	0.052 (1.550)	0.099 (1.546)	0.061 (1.630)
RECINV	0.260*** (4.415)	0.613*** (4.730)	0.142** (2.251)
FOREIGN	0.185*** (8.680)	0.133*** (4.569)	0.194*** (6.574)
EXORD	0.033 (0.361)	0.152 (1.354)	-0.063 (-0.453)
SQSEG	0.035*** (2.869)	0.064*** (3.750)	-0.004 (-0.234)
BIG 4	0.379*** (14.385)		
GC	0.018 (0.681)	0.120** (1.972)	0.012 (0.429)
MW	0.065*** (2.868)	0.319*** (7.836)	-0.014 (-0.527)
D_MW	0.377*** (12.409)	0.495*** (6.837)	0.386*** (9.857)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year
N	18,219	8,010	10,208
Adj. R^2	0.869	0.771	0.755

Notes: This table presents OLS regressions of audit fees on high (*HIGH_DACC*) and low (*LOW_DACC*) switchers that we identify based on discretionary accruals in Panel A, and on high (*LOSS_SWITCH*) and low (*PROFIT_SWITCH*) switchers that we identify based on transitory losses in Panel B (see Appendix A for detailed variable definitions), using all years before the switch to the new auditor. In both Panels, Model 1 uses the full sample, Model 2 uses only Big 4 audits, and Model 3 uses only Non-Big 4 audits. Continuous variables are winsorized at the 1st and 99th percentile. Appendix A contains variable definitions. Standard errors are heteroskedasticity-robust and clustered at the firm level. T-values marked with *, **, and *** are significant at the 10-, 5-, and 1-percent levels, respectively.

Table 7: Robustness Tests: High and Low Switchers and Audit Fees

	Model 1: Accruals-Based, Consecutive Positive Accruals	Model 2: Loss-Based, Consecutive Losses	Model 3: Accruals-Based, Sample with Switches before 2003	Model 4: Loss-Based, Sample with Switches before 2003	Model 5: Accruals-Based, Sample with Tenure ≤ 5	Model 6: Loss-Based, Sample with Tenure ≤ 5	Model 7: Accruals-Based, *HIGH* and *LOW* entropy balanced	Model 8: Loss-Based, *HIGH* and *LOW* entropy balanced
Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)
HIGH[a]	0.082	0.141***	0.067	0.156***	0.073	0.166***	0.057	0.152***
	(1.149)	(2.692)	(1.478)	(4.196)	(1.452)	(3.518)	(1.069)	(3.298)
LOW[b]	-0.132*	0.009	-0.059	-0.004	-0.085	0.072	-0.103**	0.009
	(-1.732)	(0.143)	(-1.379)	(-0.097)	(-1.612)	(1.568)	(-2.027)	(0.211)
HIGH = LOW?	Z = 2.240**	Z = 2.050**	Z = 2.550**	Z = 4.070***	Z = 2.650***	Z = 1.850*	Z = 2.270**	Z = 2.510**
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Industry, Year	Industry, Year	Industry, Year	Industry, Year	Industry, Year	Industry, Year	Industry, Year	Industry, Year
N	7,073	8,010	10,953	13,047	3,601	4,134	7,073	8,010
Adj. R^2	0.770	0.762	0.792	0.786	0.726	0.716	0.770	0.763

Notes: This table presents OLS regressions of audit fees on high (*HIGH*[a]) and low (*LOW*[b]) switchers that we identify as discussed below. Appendix A contains all remaining variable definitions. All Models only use Big 4 observations. Models 3 and 4 relax the restriction to auditor switches after 2002 and include a larger sample with earlier switches. Models 5 and 6 restrict the maximum auditor tenure of included observations to 5 years. Models 7 and 8 use entropy balancing to balance the first and second moment of all covariates between high and low switchers, where all control observations (neither high nor low switchers) keep a weight of one. Continuous variables are winsorized at the 1st and 99th percentile. Standard errors are heteroskedasticity-robust and clustered at the firm level. T-values marked with *, **, and *** are significant at the 10-, 5-, and 1-percent levels, respectively.

[a] In models 3, 5, and 7, *HIGH* is a dummy variable coded as one for the entire tenure of an auditor-client pairing if the discretionary accruals rank highest among the five discretionary accruals from the five-year window ending in the initial year of the auditor-client pairing and those five discretionary accruals comprise at least two income-increasing (positive sign) and two income-decreasing (negative sign) discretionary accruals. In model 1, *HIGH* is a dummy variable coded as one if, in addition to the mentioned criteria, the client has positive discretionary accruals in the year before the initial year of the auditor-client pairing.

In models, 4, 6, and 8, *HIGH* is a dummy variable coded as one for the entire tenure of an auditor-client pairing if *LOSS* = 1 in the initial year of the auditor-client pairing and *LOSS* = 1 and *LOSS* = 0 at least two times in the client's five consecutive years ending in the initial year of the auditor-client pairing. In model 2, *HIGH* is a dummy variable coded as one if, in addition to the mentioned criteria, *LOSS* = 1 in the year before the initial year of the auditor-client pairing.

[b] In models 3, 5, and 7, *LOW* is a dummy variable coded as one for the entire tenure of an auditor-client pairing if the discretionary accruals rank lowest among the five discretionary accruals from the five-year window ending in the initial year of the auditor-client pairing and those five discretionary accruals comprise at least two income-increasing (positive sign) and two income-decreasing (negative sign) discretionary accruals. In model 1, *LOW* is a dummy variable coded as one if, in addition to the mentioned criteria, the client has negative discretionary accruals in the year before the initial year of the auditor-client pairing.

In models, 4, 6, and 8, *LOW* is a dummy variable coded as one for the entire tenure of an auditor-client pairing if *LOSS* = 0 in the initial year of the auditor-client pairing and *LOSS* = 1 and *LOSS* = 0 at least two times in the client's five consecutive years ending in the initial year of the auditor-client pairing. In model 2, *LOW* is a dummy variable coded as one if, in addition to the mentioned criteria, *LOSS* = 0 in the year before the initial year of the auditor-client pairing.

Table 8: OLS Regressions: High and Low Switchers and Audit Fees of Former Arthur Andersen Clients

	Model 1: Accruals-Based, Full Sample	Model 2: Loss-Based, Full Sample	Model 3: Accruals-Based, Big 4 Sample	Model 4: Loss-Based, Big 4 Sample
Variable	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)	Coefficient (T-Statistic)
HIGH_DACC	0.074 (0.865)		0.079 (0.828)	
LOW_DACC	-0.100* (-1.708)		-0.087 (-1.355)	
LOSS_SWITCH		0.129** (2.321)		0.140** (2.369)
PROFIT_SWITCH		-0.036 (-0.550)		-0.025 (-0.362)
HIGH = LOW?	Z = 1.640*	Z = 2.020**	Z = 1.220	Z = 1.990**
DACC	0.100 (1.329)	0.095 (1.365)	0.102 (1.125)	0.098 (1.189)
LOSS	0.086** (2.424)	0.059* (1.836)	0.113*** (3.077)	0.077** (2.296)
LTA	0.544*** (37.186)	0.546*** (39.121)	0.553*** (36.799)	0.555*** (38.413)
LIQ	-0.021* (-1.908)	-0.011 (-1.257)	-0.020* (-1.722)	-0.011 (-1.143)
ROA	-0.604*** (-5.301)	-0.706*** (-6.993)	-0.509*** (-4.11)	-0.624*** (-5.665)
LEV	-0.050 (-0.557)	-0.055 (-0.664)	-0.028 (-0.272)	-0.049 (-0.519)
RECINV	0.475*** (3.140)	0.688*** (4.740)	0.652*** (3.972)	0.794*** (5.167)
FOREIGN	0.189*** (4.516)	0.187*** (4.778)	0.174*** (4.096)	0.178*** (4.453)
EXORD	0.045 (0.462)	0.075 (0.915)	0.131* (1.715)	0.089 (1.292)
SQSEG	0.090*** (3.865)	0.089*** (4.233)	0.086*** (3.523)	0.080*** (3.623)
BIG4	0.210*** (2.953)	0.241*** (3.545)		
GC	0.215*** (3.312)	0.229*** (3.697)	0.174** (2.326)	0.185** (2.521)
MW	0.336*** (5.621)	0.350*** (6.729)	0.354*** (5.610)	0.376*** (6.893)
D_MW	0.454*** (9.714)	0.442*** (10.785)	0.449*** (8.451)	0.442*** (9.579)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year	Industry, Year
N	4,161	5,198	3,781	4,769

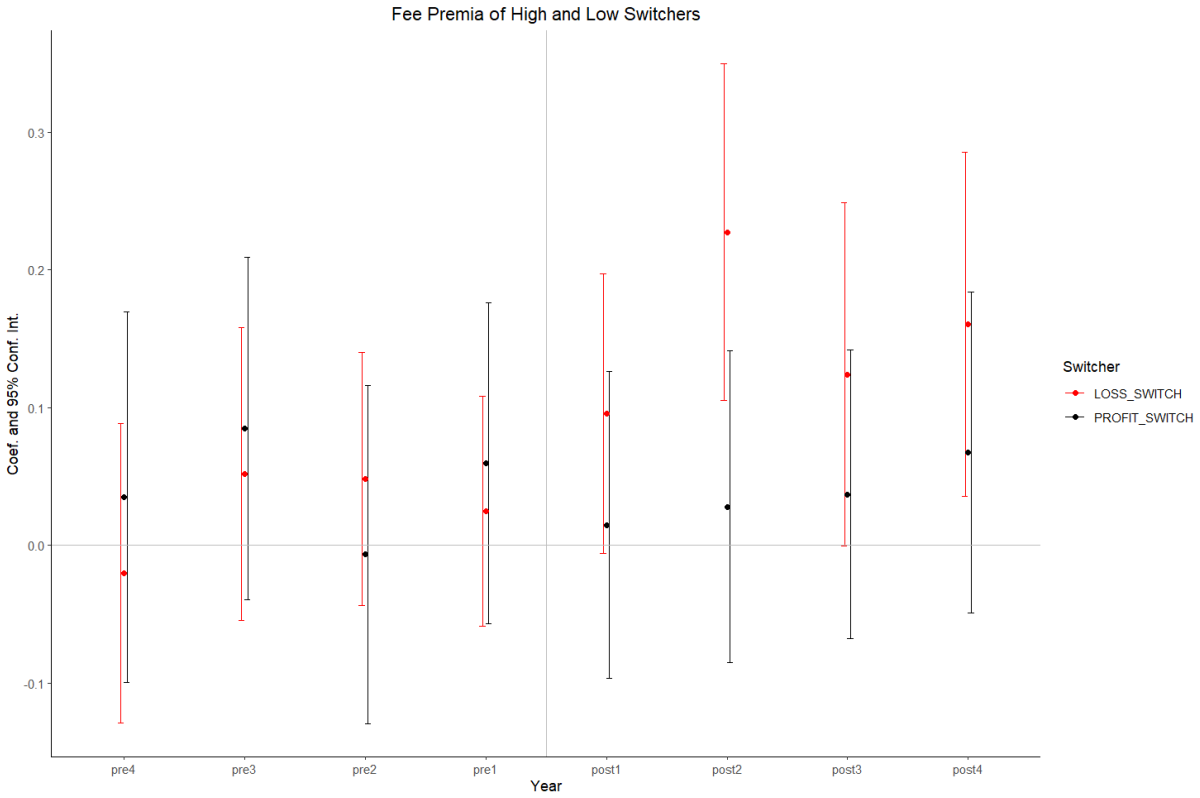
Adj. R^2	0.869	0.858	0.856	0.845

Notes: This table presents OLS regressions of audit fees on high (*HIGH_DACC*) and low (*LOW_DACC*) switchers that we identify based on discretionary accruals in columns 1 and 3, and on high (*LOSS_SWITCH*) and low (*PROFIT_SWITCH*) switchers that we identify based on transitory losses in columns 2 and 4 (see Appendix A for detailed variable definitions). Columns 1 and 2 (3 and 4) contain all former Arthur Andersen clients that switched to new auditor (Big 4 auditor) in 2002 or 2003. Continuous variables are winsorized at the 1st and 99th percentile. Appendix A contains variable definitions. Standard errors are heteroskedasticity-robust and clustered at the firm level. We lose one singleton observation in Panel B, column 3. T-values marked with *, **, and *** are significant at the 10-, 5-, and 1-percent levels, respectively

Figure 1: Fee Premia of High and Low Switchers around the Switching Year for the Big 4 Sample.

Panel A: Identifying High (*HIGH_DACC*) and Low (*LOW_DACC*) Switchers Based on Discretionary Accruals

Panel B: Identifying High (*LOSS_SWITCH*) and Low (*PROFIT_SWITCH*) Switchers Based on Transitory Losses



Notes: This Figure presents on the right side of the vertical line results from estimating equation (1) on our primary Big 4 sample after differentiating the dummies *HIGH* and *LOW* into a series of dummies coded as one if the switcher is in the first, second, third, or fourth full year after the switch (post1, post2, post3, post4). On the left side of the vertical line, it presents results from estimating equation (1) on a sample of firm-years of firms in our Big 4 sample before they switched auditors, after differentiating the dummies *HIGH* and *LOW* into a series of dummies coded as one if the switcher is four, three, two, or one year(s) before the switch (pre4, pre3, pre2, pre1). Panel A (Panel B) uses our Big 4 samples for our accruals-based (loss-based) test variables. The black (red) graph plots coefficients and 95 percent confidence intervals for the respective yearly dummies for high switchers (low switchers).

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