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Are Out-Of-Period Adjustments a Type of Stealth Restatement? An Examination of Non-Audit Services, Clawback Provisions, and Out-Of-Period Adjustments

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AND OUT-OF-PERIOD ADJUSTMENTS
By
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SIGNATURE PAGE

DEDICATION

I would like to dedicate this to the most important people in my life: my family. To my parents, thank you for instilling a love of learning in me. To my father, I am honored to follow in your footsteps and hope to be as good an educator as you. To my mother, you always make learning a fun, imaginative, and memorable experience and I hope to exude that same creativity in my career. To my husband, your adventurous spirit in uncharted waters and encouragement in times of need will bolster me through this new adventure. To my son, the joy of my heart, may your inquisitive nature grow to be a lifelong passion for knowledge. To you all, thank you for your unwavering love and support.

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ABSTRACT

ARE OUT-OF-PERIOD ADJUSTMENTS A TYPE OF STEALTH RESTATEMENT?
AN EXAMINATION OF NON-AUDIT SERVICES, CLAWBACK PROVISIONS,
AND OUT-OF-PERIOD ADJUSTMENTS
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Over the last decade, out-of-period adjustments (OOPAs) have risen in popularity in direct contrast to the simultaneous decreasing trend in restatements. This could indicate an improvement in financial reporting quality or could indicate the use of a type of stealth restatement for opportunistic purposes. These less prominent restatements are more likely to go undetected and would be an apt way to perpetuate opportunistic disclosure and to mitigate the likelihood of unfavorable market reactions.

The purpose of this study is to investigate (1) the association between non-audit services (NAS) and OOPAs, (2) the association between clawback provisions and OOPAs, and (3) the interaction of NAS with clawback provisions on OOPAs. An auditor providing NAS could create an economic bond with the client that weakens the auditor's independence and enables management to opportunistically record an OOPA. Alternately, an auditor providing NAS could exhibit knowledge spillover preventing accounting misconduct and improving financial reporting quality. Another facet that could impact the trend in OOPAs is the initiation of clawback provisions. These provisions could be triggered by material restatements but not by OOPAs. This provides further incentive for managerial opportunism.

The research is an archival study with a sample consisting of U.S. publicly listed companies for the period 2007 through 2014. The final sample consists of 20,332 firm-year observations. The results show that NAS has a negative and highly statistically significant association with the existence of OOPAs. Supplemental analyses examining the type of NAS (tax NAS, audit-related NAS, and other NAS) further support these findings showing this same negative relationship. In addition, NAS is negatively and statistically significantly related to other types of stealth restatements. These findings indicate that NAS does not impair auditor independence. Rather, greater amounts of NAS contribute to knowledge spillover, which leads to higher financial reporting and audit quality.

I also find that firms with clawback provisions have a positive and highly statistically significant association with the existence and number of OOPAs. The same findings are indicated for clawback firms with previous restatements and clawback firms with future restatements. Supplemental analyses show these same relationships are indicated when other stealth restatements are the dependent variable. Overall, these results indicate that management may be opportunistically recording OOPAs. The interaction of clawbacks and NAS reveal that greater purchases of NAS shortens the length of the adjustment period, decreases the number of OOPAs, and lessens the likelihood of a revision restatement. The results raise interesting implications for regulators, executives, auditors, investors and future research.

Keywords: out-of-period adjustments, stealth restatements, non-audit services, clawback provisions, auditor independence, financial reporting quality, knowledge spillover

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

The purpose of this study is to investigate (1) the association between non-audit

services (NAS) and out-of-period adjustments (OOPAs), (2) the association between

clawback provisions and OOPAs, and (3) the interaction of NAS with clawback

provisions on OOPAs. In the last decade, there has been a sharp increase in the number of

OOPAs as reported by Audit Analytics. In 2003, there was only one OOPA. However,

by 2009, OOPAs had increased each year to 153 (512% growth rate over 2008). In 2012,

the number of adjustments was a record 306 (46% growth rate over 2011). During this

same time frame, restatements exhibit an overall declining trend. Specifically, there were

789 restatements in 2003. Restatements peaked at 1,842 in 2006 before declining to 851

in 2012. The decline in restatements could indicate firms are improving the quality of

their financial reporting process. An alternative view is that firms correct misstatements

in a way that may be less likely to be noticed by investors. Material restatements garner

negative reactions from investors (Palmrose, Richardson, & Scholz, 2004) and this

reaction lessens in direct relation to the level of prominence of the disclosure (Files,

Swanson, & Tse, 2009). Knowing the market reacts negatively to such restatements,

firms have incentives to report material restatements using disclosures that convey

misstatements less prominently. These less prominent disclosures can be referred to as

stealth restatements. An OOPA is one vehicle firms have at their disposal.

The correction of error, fraud, or misapplication of GAAP in a company's financial statements falls into one of three categories: Non-reliance restatement, revision restatement, or OOPA. A non-reliance restatement is a material misstatement that requires restatement of the prior financials, the filing of a form 8-K item 4.02 with the U.S. Securities and Exchange Commission (SEC), and disclosure of the restatement. A revision restatement is an immaterial misstatement that requires restatement of the prior financials and disclosure of the restatement, but does not require filing item 4.02. An OOPA is an immaterial misstatement that does not require a restatement of the financials but rather a correction in the current period financials along with a disclosure.[1] For comparison of each type of correction, see Table 1.[2]

Because non-reliance restatements require the filing of Item 4.02, they are much more prominent to financial statement users than those restatements that do not require such filing (revision restatements and OOPAs). Hence, Item 4.02 restatements can cause a negative market reaction and increase the chances of litigation (Palmrose et al., 2004; Files et al., 2009). Because both revision restatements and OOPAs are immaterial and fall outside of the purview of Item 4.02, the prominence of these types of restatements is different. The decreased prominence of both revision restatements and OOPAs can enable them to "fly under the radar" in a stealth-like manner. As such, these are referred

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[1] The determination of materiality can be made by one or a combination of the following groups: management, board of directors, or auditor(s).

[2] Item 4.02, titled "Non-reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review," alerts financial statement users to an accounting error. This Item requires firms to (1) identify the financial statements that can no longer be relied upon, (2) disclose the date the firm concluded or was made aware by their auditor that these financials could no longer be relied upon, (3) describe the information surrounding the accounting error, and (4) state whether the firm discussed the details of Item 4.02 with its auditor. If the firm was made aware of the error by its auditor, Item 4.02 also requires an amended 8-K as well as a letter from the auditor to the SEC stating concurrence or objection to the firm's statements in the Item.

Table 1
Correction Comparison

Correction Type	Alternate Names	Correction Period	Materiality to Prior Period	Materiality to Current Period	Filings/Disclosures
Non-reliance restatement	8-K restatement Material restatement Big R restatement	Prior period	Material	Material	8-K, Item 4.02 Restated financials Revised audit opinion Disclosure
Revision restatement	Immaterial restatement Little r restatement	Prior period	Immaterial	Material	Restated financials Disclosure
Out-of-period adjustment (OOPA)	Catch-up adjustment	Prior period	Immaterial	Immaterial	Current period adjustment Disclosure

to as stealth restatements (Reilly, 2006). Because OOPAs are the least prominent, they could result in less negative market reaction and less concern for litigation than revision restatements.

One key difference in the type of restatement a company files is the materiality of the misstatement. However, materiality is a multi-faceted concept that is subject to judgment. The Financial Accounting Standards Board's (FASB) Statement of Financial Accounting Concepts No. 8 states, "information is material if omitting it or misstating it could influence decisions that users make on the basis of the financial information of a specific reporting entity" and continues on to state that this is based on "the nature or magnitude or both" of the related items.[3] Therefore, materiality decisions involve both

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[3] However, changes to this definition have been proposed in an exposure draft that would alter this definition to read "information is material if there is a substantial likelihood that the omitted or misstated

quantitative and qualitative aspects. A commonly used quantitative method involves the comparison of items to net income and using this percentage as the basis for materiality decisions. Historically, a general rule of thumb used by accountants and auditors is that items less than 5% of net income are immaterial, items greater than 10% of net income are material, and items in between 5% and 10% require judgment. The SEC's Staff Accounting Bulletin No.99 emphasizes that such quantitative considerations should not be the sole basis in materiality decisions. Qualitative considerations are also required in such a determination to assess the surrounding circumstances of restatements and if users would consider such an item important or material to their interpretation of or reliance on the financial statements.

While deemed immaterial, OOPAs can serve as a red flag or indication of further issues that may be material. It could also be a means by which a firm can conceal a material misstatement. For example, KBR, Inc. instituted several changes in revenue recognition and percentage-of-completion estimates in response to an SEC comment letter received in 2013. The following year, the company made an OOPA to revenue recognition of $17 million (reported net income of $327 million) in its 2013 annual financials. The $17 million amounts to just over 5% of net income so, by conservative standards, it could be considered material, but the auditors supported the classification as an OOPA. However, the company eventually made a material (non-reliance) restatement of $154 million to the 2013 financials, which reduced the 2013 net income to a level that would have made the OOPA nearly 10% of net income (Coleman, 2014).[4]

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item would have been viewed by a reasonable resource provider as having significantly altered the total mix of information" (FASB, 2015).

[4] Based on the information here, the net income after the material restatement would be $173 million, thus the $17 million OOPA would be closer to the 10% materiality threshold at 9.83%.

Because OOPAs do not require firms to file an item 4.02, the financial statements are not restated, and the disclosures are less prominent, they may not be noticed or scrutinized to the same degree as restatements and may exist somewhat undetected by users of financial statements. Therefore, OOPAs could provide an opportunity for management to negotiate with auditors on the extent and nature of corrections to make to the financial statements. When auditors are also providing NAS to firms, management could have greater bargaining power to report misstatements as OOPAs rather than a non-reliance or revision restatement. Hence, examining OOPAs as a vehicle for mitigating the visibility and economic consequences of a restatement could provide new insights on impression management, opportunistic disclosures, and threats to auditor independence.

Two opposing views exist in regards to auditor independence and NAS. One view is that independence is maintained and knowledge gained from the audit provides knowledge spillover that enables better financial reporting quality through the provision of NAS. The other view is that the economic incentives tied to the NAS relationship impairs independence and could provide the opportunity for accounting misconduct.

The topic of auditor independence and NAS has been researched for more than 30 years and has provided mixed results (Schneider, Church, & Ely, 2006; Sharma, 2014). For example, the restatement literature provides evidence of no relationship between restatements and NAS (Raghunandan, Read, & Whisenant, 2003; Knechel and Sharma, 2012), a positive relationship between restatements and NAS (Bloomfield & Shackman, 2008), a negative relationship between restatements and NAS (Seetharaman, Sun, & Wang, 2011), and mixed results dependent on the type of NAS (Kinney, Palmrose, &

Scholz, 2004; Paterson & Valencia, 2011). The extant literature has not examined if a relationship exists between NAS and OOPAs. As previously highlighted, OOPAs during the period of this study are steadily increasing, while restatements are decreasing. A relationship between NAS and OOPAs could suggest issues with auditor independence whereby auditors concede to management in the decision to strategically shift correction classifications from restatements to OOPAs. This shifting could indicate the use of impression management. In addition, these corrections may be strategically timed for such reasons as a more favorable (less negative) market reaction.

Another important factor that could explain the increasing use of OOPAs is the increase in compensation clawback provisions that are tied to financial reporting. Clawback provisions are a component of employment contracts that require money or benefits be returned to the employer under certain circumstances. One such circumstance is a restatement. Only a handful of studies examine clawback provisions. For example, following the implementation of clawback provisions, research provides evidence of decreases in restatements and audit fees (Chan, Chen, Chen, & Yu, 2012; DeHaan, Hodge, & Shevlin, 2013) as well as evidence of shifting from accruals earnings management to real earnings management (Chan, Chen, Chen, & Yu, 2015). Other evidence conflicts and shows that restatements are not associated with clawback adoptions (Brown, Davis-Friday, Guler, & Marquardt, 2015). However, no prior research examines the impact of clawbacks on OOPAs.

Because restatements have decreased and OOPAs have increased over the research period, this could indicate management incentive to curtail restatements in favor of OOPAs in response to clawbacks. DeHaan et al. (2013) references this possibility

when interpreting their restatement results stating, "this result should be interpreted with caution as adopting a clawback provision decreases managers' incentives to file amended financial statements" (1028). Most clawback provisions are triggered by material financial restatements, but have no stipulations as to OOPAs because these are immaterial corrections. While the literature shows clawbacks decrease restatements, this may not be an indication of increased accounting quality or decreased incentives for earnings manipulations as suggested in prior studies. A relationship between clawbacks and OOPAs could unravel similar financial reporting problems that existed before clawbacks, but these problems may not be revealed to the market through restatements. This may be an impression management tactic of shifting away from restatements and towards OOPAs because the use of OOPAs would not trigger clawback provisions.

Regulations such as SOX and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank) have impacted both NAS and clawbacks. For example, SOX requires additional disclosure of NAS and imposes restrictions on providing NAS. Similarly, Dodd-Frank requires mandatory clawback provisions for executive officers of public companies with the provisions triggered by material restatement. While this is a required provision, this section of Dodd-Frank is still in the last proposal phase with the SEC and all clawback provisions implemented to date have been voluntary.

Using a sample of 20,332 firm-year observations for the years 2007-2014, I examine the association of NAS and clawback provisions on OOPAs. Results of the main analyses show that both NAS and clawbacks have a statistically significant association with OOPAs. NAS is negatively associated while clawbacks are positively associated. In

addition, clawback firms with previous restatements as well as clawback firms with future restatements are positively associated with OOPAs. These results support the view that NAS does not impair auditor independence and that clawbacks may incentivize management to opportunistically record OOPAs.

Supplemental analyses seek to validate and extend these findings by using alternate measures of NAS as well as multiple characteristics of OOPAs. Using the types of NAS (tax NAS, audit-related NAS, and other NAS) as well as the ratio of NAS (and each type of NAS) to total fees, the results show the same negative and significant relationship to OOPAs as observed in the main analyses. There is no significant relationship between NAS and the multiple characteristics of OOPA such as OOPA materiality, length of the adjustment and disclosure period, income effect of OOPA, and the number of OOPAs. These findings support the main analyses and imply that NAS does not impair auditor independence but, rather, exhibit a benefit of knowledge spillover and increases financial reporting quality. Additional analyses further support these findings when using other stealth restatements as the dependent variable.

Supplemental analyses of clawbacks report similar results to the main analyses when examining the relationship of clawbacks with the number of OOPAs. Clawbacks are negatively and statistically significantly associated with the length of the adjustment period and the length of time to disclose OOPAs. This negative association is also observed for clawback firms with a future restatement. Further, clawback firms with a future restatement have a significant positive association with income-decreasing OOPAs and a significant negative association with income-increasing OOPAs. Additional analyses using other stealth restatements as the dependent variable substantiate the main

findings. Overall, these results imply that firms may be using impression management and opportunistically recording restatements as OOPAs. With regards to timing, management may be making adjustments with expediency to prevent further inquiry on such corrections in order to record restatements as OOPAs to prevent clawback initiation and avoid or lessen negative market reaction. However, these recorded OOPAs may ultimately result in a future restatement.

The interaction of clawbacks and NAS on OOPAs indicates that the level of NAS does have an impact on the association of clawbacks and OOPAs in relation to the length of the adjustment period, the number of OOPAs, and the existence of a revision restatement. Greater purchases of NAS by clawback firms further shortens the length of the adjustment period, decreases the number of OOPAs, and lessens the likelihood of a revision restatement.

This research makes several contributions to the current literature. First, this study contributes to the NAS literature by examining the relationship between NAS and OOPAs. The extant literature thus far focuses on the relationship of NAS and restatements and this literature provides mixed results. Hence, the impact of NAS on auditor independence is not clear in the existing literature. This study provides evidence that NAS does not impair auditor independence. On the contrary, the results imply that greater purchases of NAS improve financial reporting quality due to the benefits of knowledge spillover. Second, this research contributes to the emerging clawback literature. In this context, clawback implementation appears to be ineffective and creates incentives for management to report OOPAs. These results add to the understanding and implications of implementing clawback provisions and help clarify the mixed results in

this literature. Third, this study contributes to the disclosure literature. The results

indicate that the simultaneous decrease in restatements and increase in OOPAs may be a

case of management opportunism or strategic disclosure practices. Because OOPAs may

be initiated by many parties (i.e. executive officers, board of directors, audit committees,

auditors, and regulators), the relationship of both NAS and clawback provisions with

OOPAs provide additional insight on motivations for such adjustments. The study shows

that NAS lessens the ineffective nature of clawbacks by reducing the number of OOPAs

recorded as well as reducing the existence of revision restatements.

Further, the aforementioned regulations (SOX and Dodd-Frank) provide a

different context in which to study such relationships. The observed trend in OOPAs

occurs after the enactment of SOX and Dodd-Frank. These regulations have changed the

landscape in the post-enactment setting as compared to the pre-enactment setting by

restricting NAS and requiring restatement initiated clawbacks. My findings provide

support that the restrictions placed on NAS may be unbeneficial. Also, the requirement to

trigger clawback provisions by restatements may have the unintended consequence of

trading restatements for OOPAs.

The results of this study could have implications for multiple users. Regulators

and standard setting bodies may have reason to revise current guidelines on the treatment

and/or presentation of OOPAs. OOPAs are not given as much prominence or publicity as

restatements. Therefore, investors and financial statement users may overlook such

adjustments. This could influence their interpretation of the financial information and

ultimately, their economic decision-making. In addition, the results provide further

evidence of the benefit of NAS and justification for lessening existing restrictions against

such services. Finally, because the SEC is still finalizing its requirements for clawback provisions as part of Dodd-Frank, these results suggest possible revisions may need to be considered.

The remainder of this paper is organized as follows: In Chapter 2, I review the literature and propose hypotheses. In Chapter 3, I discuss the research method used and the data collection process. In Chapter 4, I present results of the hypotheses testing as well as supplemental analyses. In Chapter 5, I conclude with a summary of results, limitations of the study, and implications of the findings.

CHAPTER 2

LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

Restatement Categories

A correction to the financial statements falls into one of three categories: (1) non-reliance restatement, (2) revision restatement, or (3) OOPA (Coleman, 2014). Each category has different characteristics and disclosure requirements. The first category, non-reliance restatement, is also known as 8-K restatement, material restatement, and Big R restatement (Irani & Xu, 2011; Tan & Young, 2015). Non-reliance restatements occur when a company discovers a material misstatement related to prior period financial statements. Those prior period financial statements are restated, the restatement is disclosed, and a form 8-K is required to be filed with the SEC alerting financial statement users to the restatement. In addition, the audit opinion for these previous periods must be revised to disclose the restatement(s) made.

The second category is a revision restatement. Other terms used for this type of restatement include immaterial restatement and "Little r" restatement (Tan & Young, 2015). Revision restatements are less prominent than non-reliance restatements. Revision restatements occur when a company discovers an immaterial misstatement related to prior period financials and such misstatement(s) would cause a material adjustment in the current period. Revision restatements must be disclosed and prior financials are restated but there is no requirement to amend prior financial statements or file a form 8-K.

The third and final category is an OOPA. OOPAs are less prominent than either non-reliance restatements or revision restatements. An OOPA occurs when a company classifies a misstatement related to a prior period financial statement as immaterial and such a misstatement(s) is deemed to not cause a material adjustment in the current period. The correction is made in the current period and a disclosure is made but prior financials are not restated.[5] Neither revision restatements nor OOPAs require filing with the SEC. No audit opinion must be revised. As such, these corrections are less prominent than non-reliance restatements. Because both revision restatements and OOPAs are less prominent, they can be referred to as stealth restatements.

The observed trend in restatements shows a shift away from non-reliance restatements. According to Audit Analytics' 2014 Restatement Report, the number of total restatements has primarily leveled off. However, the number of non-reliance restatements has decreased while the number of revision restatements and OOPAs has simultaneously increased. Figure 1 displays this trend and details the change in each category of correction.

Stealth restatements have been receiving greater attention over the last several years by the accounting profession and the research community. Files et al. (2009) investigate the impact of restatements on market returns and the likelihood of lawsuits. They find that the associations are contingent on the level of prominence given the restatement disclosure. They define three levels of restatement disclosure prominence. The high prominence level describes restatements disclosed in the headline of a press release. The

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[5] Examples of regulations and authoritative guidance concerning restatements and correction of errors include SFAS No. 154, ASC 270-10-45-16, SAB 99, SAB 108, the SEC's (2004) *Final rule: Additional Form 8-K disclosure requirements on acceleration of filing date*, and the SEC's (2008) *Final report of the advisory committee on improvements to financial reporting.*

medium prominence level describes restatements disclosed in the body of a press release. The low prominence level describes restatements disclosed in an earnings release footnote. They find that all three categories experience a negative relationship between restatement disclosure and market returns. However, high prominence restatements experience the greatest negative return, while low prominence experiences the lowest negative return. Further, the relationship between restatement disclosure prominence and the likelihood of lawsuits is positively associated. The more prominent the disclosure, the more likely the firm will face litigation charges. Therefore, their results suggest that firms who issue less prominent restatement disclosures experience less negative market reaction and lower likelihood of litigation.

FIGURE 1: Trends in Correction Type
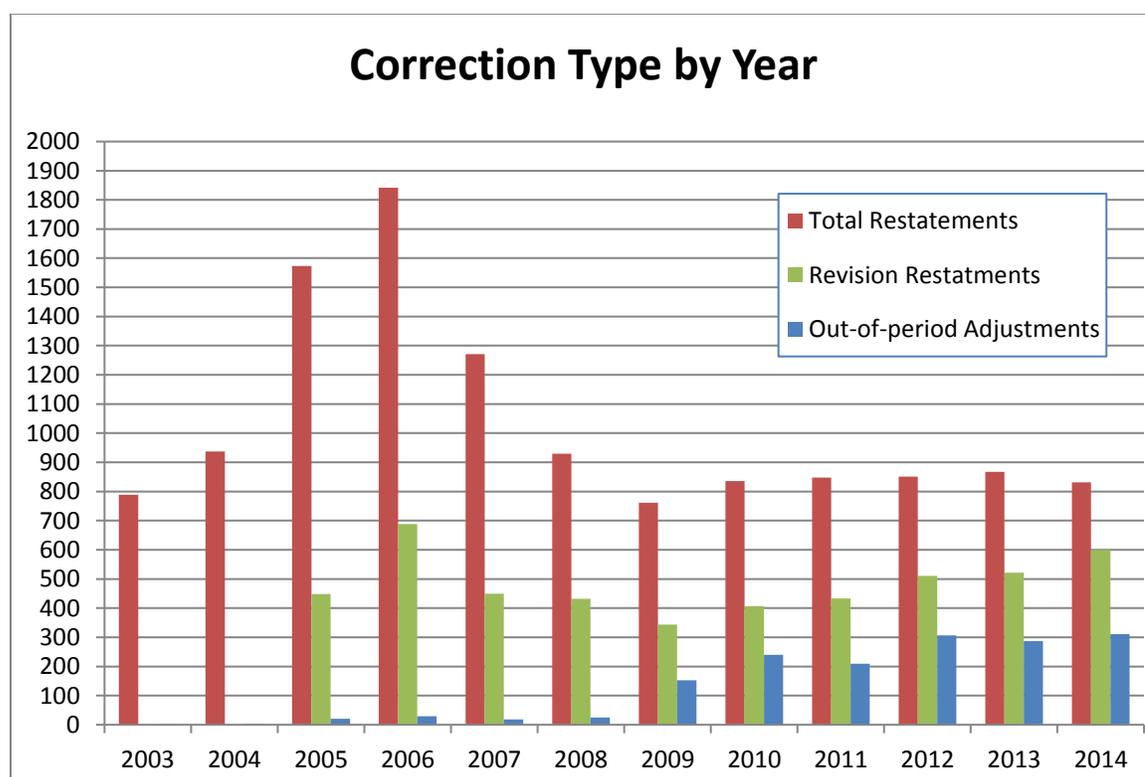
Irani and Xu (2011) find similar results for market reactions to different types of restatement disclosures. They compare restatement disclosures made in a form 8-K filing with restatement disclosures made in the annual financial report (10-K) or quarterly financial report (10-Q). They refer to stealth restatements as those not disclosed in an 8-K filing. Therefore, their definition of stealth restatement refers to revision restatements. Restatements disclosed in a form 8-K filing (non-reliance restatements) have a significant negative market reaction in a short return window (the day of disclosure and the day following the disclosure). Revision restatements, on the other hand, have no significant negative market reaction in a short or long return window. In addition, the study examines attributes that impact the likelihood of revision restatements. They find that revision restatements are more likely for those restatements that do not affect net income, restatements that are not under SEC investigation, and restatements with longer filing delays. Revision restatements are also more likely for firms with continuing auditors (no change in auditors), firms with non-Big 4 auditors, and firms with higher book to market ratios.

Tan and Young (2015) further investigate stealth restatements, specifically Little r restatements, citing beneficial implications of such restatements. The study examines differences between Little r firms, Big R firms, and non-Little r firms (firms with no financial data revisions/restatements).[6] They find that, compared to Big R firms, Little r firms tend to be larger, more complex, have better financial results, and have stronger

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[6] Little r firms are defined as those firms making immaterial or revision restatements which do not require amended financial statements or a revised audit opinion. When an error is "not material, but correcting it in the current period would materially misstate the current-period financial statements, the error is corrected in the current-period financial statements by adjusting prior-period information" (Tan & Young, 2015). Big R firms are defined as those firms making material misstatements, which require a form 8-K Item 4.02 filing and a revised audit opinion. Non-Little r firms are defined as "firms that have no differences in reported numbers across years" (Tan & Young, 2015).

aspects of corporate governance. They interpret these results as a sign of greater transparency. That is, these Little r firms are being conscientious and are concerned with presenting accurate numbers to their financial statement users rather than being an indication of deceitful practices or earnings management.

Tan and Young (2015) also analyze disclosure presentation for Little r firms. Only 15.3% of their overall sample of Little r firms disclose the reason for the restatement. Of those firms that do provide disclosure, the prominence and detail provided in the disclosure varies. For example, some provide supplemental schedules as explanation while others provide only a single reference to the restatement. In supplemental analysis, they find that those firms that disclose restatements have comparatively lower return on assets, lower free cash flows, and longer tenure of the CEO and CFO than those firms that do not disclose restatements. Further, Little r firms without disclosures are statistically significantly different from Big R firms and non-Little r firms as in previous analysis, thus supporting the authors' claim that these disclosures are not initiated by management with the intention of earnings management. Even in light of the authors' positive interpretation of the Little r data, they find the lack of disclosure concerning. "Overall, it is quite a puzzling phenomenon that these audited financial data have changed (albeit immaterially) for a given fiscal year and no explanation for the change is provided for a large proportion of these firms" (Tan & Young, 2015, 687).

Prior restatement literature focuses on non-reliance restatements (8-K restatements) and revision restatements (Little r restatements) but little research exists on the third category of correction – out of period adjustments (OOPAs). Acito, Burks, and

Johnson (2009) examine OOPAs (termed "catch-up" adjustments) in the context of operating lease accounting errors. The research investigates the determinants of the decision to correct such errors with a formal restatement or with a "catch-up" adjustment. The focus of the research is the decision behind the correction method chosen and the quantitative and qualitative considerations that influence the materiality decision. The sample consists of 244 firms that disclosed lease accounting errors from August 2004 through August 2006. The results show that, in addition to the accounting guidance quantitative and qualitative considerations, firms tend to act in kind with other firms. If other firms have used "catch-up" adjustments (restatements) in the past, then "catch-up" adjustments are more (less) likely. Also, the timing of adjustments is related to clerical issues rather than strategic positioning. The results further show that those firms with accounting errors in addition to lease errors are more likely to have restatements and delayed announcements of the accounting correction. Those firms with a greater number of announcements, however, are less likely to have restatements. Acito et al. (2009) find no statistical difference between the average returns of restatement firms and catch-up firms.

Two emerging studies also include OOPAs in their analyses. Acito, Burks, and Johnson (2016) continue their investigation of "catch-up adjustments" by examining the managerial considerations in materiality decisions. The study finds that managers use multiple benchmarks in their materiality determinations and frequently classify errors as immaterial that exceed the unofficial 5 percent rule. Choudhary, Merkly, and Schipper (2016) investigate OOPAs in relation to market responses and predictability of future

reporting outcomes. The study finds that OOPAs have a small negative market reaction and have predictive value for future revisions and future OOPAs.

An OOPA is a type of restatement that is even more discrete than a revision restatement. This would make it more difficult for financial statement users to be aware of such corrections to the financial data. This can be true for research findings as well. For example, Tan and Young (2015) gathered their information by comparing key financial line items and noting changes in values for subsequent filings containing the same year's data (ex. 2012 annual report compared to 2012 data in 2013 comparative financial statements). This method examines changes in values. However, with an OOPA, no change will exist. Therefore, these corrections would not be distinguished from non-revision companies. In the Tan and Young (2015) research, companies with an OOPA would be included in the non-Little r or no differences designation. Any impact these OOPAs may make or any differences between these companies and companies without any corrections are diluted and lost.

This lower prominence could be advantageous to managers as an impression management tool considering the negative market reaction to restatements (Palmrose et al., 2004). The restatement literature also highlights the negative market reaction to more prominent correction disclosures and greatly diminished or lack of reaction to less prominent correction disclosures (Files et al., 2009; Irani & Xu, 2011). OOPAs are the least prominent of the three corrections and, as such, should have the lowest impact on the market and risk of litigation, comparatively. The lower prominence can incentivize managers to shift corrections away from non-reliance restatements and revision restatements to OOPAs.

Hypothesis Development – NAS and OOPAs

Thus, OOPAs provide a unique setting to investigate the relation between NAS and auditor independence. The provision of NAS has been a concern for researchers, regulators, and financial statement users with conflicting views concerning its impact on auditor independence (Schneider et al., 2006; Sharma, 2014; Tepalagul & Lin, 2015). Some contend that NAS is beneficial for both auditors and clients. This viewpoint argues that NAS creates a knowledge spillover effect that, in turn, increases audit effectiveness and efficiency (Knechel and Sharma 2012). Others contend that the provision of NAS is detrimental because it creates an economic bond between auditor and client, which makes the auditor dependent upon the client and deteriorates the auditor's objectivity. Critics of NAS also argue that NAS puts the auditor in a management position and creates the instance of the auditor being the author and reviewer of audited information (Frankel, Johnson, and Nelson 2002).

Regulators have implemented several regulations in response to the concerns of NAS. In 1978, the SEC began requiring NAS fee disclosures including the ratio of NAS fees to audit fees with the implementation of Accounting Series Release (ASR) No. 250. ASR 250 was retracted in 1982 with the SEC citing lack of investor interest in such information (Schneider et al., 2006). The SEC re-implemented disclosure requirements in 2000 with the issuance of Final Rule S7-13-00, *Revision of the Commission's Auditor Independence Requirements*. This pronouncement required the disclosure of audit fees and two types of NAS: Information Systems (IS) and Other. Frankel et al. (2002) sampled these disclosures in the proxy statements immediately following the implementation of these requirements. These disclosures revealed median NAS fees were

approximately 50 percent of total fees and 115 percent of audit fees with 96 percent of the sample reporting that they had purchased NAS. The SEC took further action in 2002 with the enactment of SOX. SOX restricted NAS by prohibiting auditors from performing most types of NAS and tasking the audit committee with pre-approving NAS as well as selecting, compensating, and terminating the external auditor providing NAS. With the 2003 amendment to SOX, companies must now disclose fees for audit services, audit-related services, tax services, and all other NAS.

Critics of NAS regulations implemented by SOX cite a lack of evidence to support the assumption that NAS impairs auditor independence (Sharma, 2014) and researchers have attempted to provide evidence to support or refute such claims. Measuring auditor independence is difficult because this is an unobservable trait consisting of an auditor's ability to make objective judgments and decisions (Sharma, 2014). Therefore, researchers utilize measures of audit quality as proxies for auditor independence. High audit quality requires auditors to both discover accounting errors and report those errors (DeAngelo, 1981). The extant literature finds mixed results on the association of NAS and auditor independence using such proxies as going concern opinions (Sharma & Sidhu, 2001; DeFond, Raghunandan, & Subramanyam, 2002; Geiger & Rama, 2003; Fargher & Jiang, 2008; Robinson, 2008; Callaghan, Parkash, & Singhal, 2009; Li, 2009; Hope & Langli, 2010; Blay & Geiger, 201), earnings management (Frankel et al., 2002; Ashbaugh, LaFond, & Mayhew, 2003; Krishnan, Su, & Zhang, 2011; Knechel & Sharma, 2012), and restatements (Raghunandan et al., 2003; Bloomfield & Shackman, 2008; Knechel & Sharma, 2012).

Knechel and Sharma (2012) use restatements as a proxy for audit quality (audit effectiveness). The association between higher NAS with shorter audit report lags and restatements is significant and negative, suggesting that higher NAS improves audit quality and does not impair auditor independence. Raghunandan et al. (2003) compare unexpected NAS amounts between restatement firms and control firms. The difference between the groups is not statically significant, which suggests that the amount of NAS provided is not associated with restatements. Further, Bloomfield and Shackman (2008) find a positive association between higher NAS fees and restatements.

Studying OOPAs can provide further insight into auditor independence and the relationship with NAS. On one hand, the economic bond created by providing NAS to audit clients may create economic incentives that influence the auditor to support or not disagree with management's proposal to recognize a correction as an OOPA rather than a revision or non-reliance restatement (Schneider et al., 2006; Sharma, 2014; Tepalagul & Lin, 2015). Because an OOPA is still a correction to the financial statements, the auditor could argue s/he discharged her/his responsibility by correcting the financial statements, but does so in a discreet manner.

On the other hand, an auditor providing NAS could use knowledge spillover from the NAS to benefit the audit and provide higher reporting quality (Schneider et al., 2006; Sharma, 2014; Tepalagul & Lin, 2015). This is consistent with the interpretation of Tan and Young (2015) that firms with revision restatements are being more transparent and conscientious in their reporting. The study did not investigate if this is different for firms purchasing NAS compared to those not purchasing NAS. Due to conflicting arguments

on the merits and consequences of NAS, and mixed research findings, I present the following null hypothesis.

H1: There is no association between NAS and OOPAs.

Hypotheses Development – Clawbacks and OOPAs

The second part of this study examines compensation clawback policies. Clawback provisions (clawbacks) are clauses included in employment contracts that require the repayment of employee compensation due to financial inaccuracies. Several regulations (SOX, Emergency Economic Stabilization Act, Dodd-Frank Wall Street Reform Act) have impacted the characteristics of clawbacks as well as the parties involved and the specific action(s) that would initiate a clawback.

Clawbacks were first introduced in 2002 in Section 304 of SOX. These clawback regulations apply to public company CEOs and CFOs. The clawbacks are initiated by material restatements of the financials due to misconduct. The applicable time frame covers the 12-month period preceding the restatement.

In 2008, the Emergency Economic Stabilization Act provided further clawback regulation for firms involved in the financial crisis bailout. Section 111(b)(3)(B) addresses clawbacks and is applicable to institutions receiving Troubled Asset Relief Program (TARP) funds. The regulation widens the scope of responsible parties from only CEOs and CFOs, as was stipulated in SOX, to senior executive officers and the next 20 most highly compensated employees.

In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) sought to strengthen the clawback regulations contained within SOX. Section 954 of the Dodd-Frank Act addresses clawbacks. The scope of responsible

parties is expanded to now include all executive officers. The definition of executive

officer is intended to include "the company's president, principal financial officer,

principal accounting officer, any vice-president in charge of a principal business unit,

division or function, and any other person who performs policy-making functions for the

company" (SEC, 2015). The period covered is also increased to include the three year

period preceding restatement. At the time of writing, these regulations have not yet been

enacted. Firms following these provisions are doing so on a voluntary basis (DeHaan et

al., 2013; Chan et al., 2015).

In July of 2015, the SEC proposed new rules to finalize Section 954 of the Dodd-

Frank Act. These proposed rules are referred to as Rule 10D-1. All listed companies

would be required to adopt and disclose a clawback provision or be subject to delisting.

This proposal would revise the requirements for initiation of the clawback. Clawbacks

would no longer be limited to material restatements due to misconduct. Rather, the

proposal adopts a "no-fault" policy to include material restatements for any reason. The

proposal also requires disclosure in the annual report and any proxy statements detailing

any initiated clawback and the firm's action to recover the compensation. This proposal is

still pending and has not yet been adopted at the time of writing.

Clawbacks and the related regulations have garnered attention and criticism in the

public eye. Since the passage of SOX, there have been several instances where the SEC

could have enforced the clawback regulations but did not. In cases where the SEC has

pursued clawback enforcement, only about 25% have resulted in the repayment of a

clawback (McKenna, 2015). Proponents state that the proposed regulations in Rule 10D-

1 to encompass a wider net of individuals held responsible will help correct the previous

shortfalls of the SOX regulations. Others say the proposed regulations could result in even fewer initiated clawbacks. Both the increased number of executives held responsible as well as the "no fault" rules could lead to resistance and impact materiality decisions. "Academics and others who have studied these trends believe companies are increasingly just deciding not to consider a restatement material enough to warrant a revision of financial statements" (McKenna, 2015, np).

Current research supports a relationship between clawbacks and decreased restatements. Chan et al. (2012) as well as DeHaan et al. (2013) find a decrease in restatements for those firms adopting clawback provisions. Firms with clawbacks are inferred as having higher financial reporting quality and accounting integrity. In addition, Chan et al. (2012) investigates investor perceptions of earnings quality as proxied by the earnings response coefficient for those firms adopting clawbacks. Adopting firms have higher earnings response coefficients when compared with their pre-adoption earnings response coefficients as well as compared with non-adopting firms. DeHaan et al. (2013) also support these findings. From the investor's perspective, clawbacks are interpreted as a signal of more credible financial reporting by management. Overall, the researchers take these findings as support for clawback regulations and their effectiveness. Iskandar-Datta and Jia (2013) further support the investor perception findings by documenting significant positive stock returns for clawback adopting firms. Those with previous restatements receive the largest economic gains. This is interpreted as signs of reducing managerial opportunistic behavior.

However, research also shows evidence of earnings management in relation to clawbacks. Chan et al. (2015) find that firms substitute real transactions management for

accruals earnings management after adopting a clawback provision. This is especially

true for firms under pressure to meet certain earnings goals. Firms also receive rewards

for such substitution in the form of short-term increases in ROA and stock returns.

Further, Brown et al. (2015) provide contradictory evidence on the relationship between

clawbacks and restatements finding no relationship.

      I attempt to reconcile these conflicting results by investigating OOPAs, which

would not initiate or trigger a clawback provision. Clawbacks are usually initiated by

material restatements per the guidance of SOX and Dodd-Frank but very few firms

actually clawback executive compensation (McKenna, 2015; Pyzhoa, 2015). Therefore,

management would have incentives to treat an identified material restatement as

immaterial and recognize an OOPA. Management and the auditor could support this

treatment by referring to materiality standards that afford flexibility. Such treatment

could explain the reduction in restatements for those companies with clawbacks. Denis

(2012) supports this view, stating that an unintended consequence of clawback

regulations is that they reduce likelihood of recording restatements. Pyzoha (2015) adds

to this point by exhibiting that executives are incentivized to decrease restatements in the

presence of clawback provisions. This experimental study finds that executives with

higher incentive-based compensation are less likely to agree to restatements when they

have a lower quality auditor (measured by auditor specialization and experience).

      Further incentive to recognize an OOPA instead of a restatement comes from

investors' reactions. Research shows that there is a negative market reaction to

restatement announcements (Palmrose et al., 2004). However, research on clawbacks

shows that clawback adopting firms experience a positive market reaction to the

announcement of a clawback provision and that reaction is more pronounced for those who have previously restated financial statements (Chan et al., 2012; DeHaan et al., 2013; Iskandar-Datta & Jia, 2013). This would provide further incentive to treat restatements as OOPAs. Therefore, I propose the following hypotheses:

H2: There is a positive association between the existence of clawback provisions and OOPAs.

H3: There is a positive association between the existence of clawback provisions and OOPAs for firms that previously reported a non-reliance or revision restatement.

H4: There is a positive association between the existence of clawback provisions and OOPAs for firms that report a non-reliance or revision restatement following an OOPA.

Further, Chan et al. (2012) find that audit fees are lower and audit report lag is shorter for firms with clawback provisions. These findings suggest higher financial reporting quality and lower audit risk when a firm has adopted a clawback provision. However, Chan et al. (2012) do not examine NAS, which can have alternative effects on financial reporting quality. One view is that higher NAS fees can offset lower audit fees. That is, the client compensates the auditor for low audit fees by purchasing more NAS. If the NAS incentive is to not report a material misstatement but to shift that to an OOPA, and if clawbacks are designed to deter managers from misreporting, then one likely outcome is that higher NAS could impair auditor independence and create incentives and opportunities to engage in opportunistic disclosure. In such a case, higher levels of NAS could mitigate any financial reporting improvements created by clawbacks.

Another view is that NAS provides beneficial knowledge spillover. The decrease in audit report lags evidenced for clawback firms by Chan et al. (2012) could evidence knowledge spillover provided by NAS that lead to audit efficiencies and higher reporting quality. Knechel and Sharma's (2012) findings provide support for this showing that firms purchasing higher amounts of NAS have shorter audit report lags. Also, restatements are less likely for firms that purchase higher amounts of NAS and have shorter audit lags. Thus, higher purchases of NAS could provide increased reporting quality for clawback firms due to knowledge spillover, which could lower the likelihood of an OOPA. Hence, there may be an interaction effect between NAS and clawbacks for those firms with an OOPA. Therefore, I propose the following hypothesis.

H5: The association between clawback provisions and OOPAs is conditional on the level of NAS.

CHAPTER 3

METHODOLOGY

Sample Selection

The sample for the study includes U.S. publicly listed companies for the period 2007 to 2014. This sample period encompasses changes due to both SOX and Dodd-Frank, and begins in 2007 because both OOPAs and clawbacks are negligible in prior years. I obtain data on NAS fees from Audit Analytics. I obtain data on clawbacks from proxy statements. I obtain control variable data from a variety of databases. Specifically, I obtain audit fee data and auditor data from Audit Analytics, financial data from Compustat, and governance and executive compensation data from MSCI, Capital IQ and Execucomp.

Panel A of Table 2 details the sample selection process. The sample begins with publicly traded U.S. companies that have data provided by Compustat for the period 2007 to 2014. This yields an initial sample of 64,548 firm-year observations. Once this sample from Compustat was merged with data from Audit Analytics, I eliminated an additional 14,166 observations due to missing fee data. I further reduced the sample due to missing governance data (n=29,651) and firm control data (n=399). The resulting final sample equals 20,332 firm-year observations. This sample is made up of 3,895 unique firms.[7]

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[7] When dividing the sample between firms with an OOPA and firms without an OOPA, the sample consists of 629 unique firms with an OOPA.

Table 2
Sample Selection

Panel A: Sample Selection

	Observations
Firm-years in Compustat 2007-2014	64,548
Firm-years missing Audit Analytics data	(14,166)
Firm-years missing governance data	(29,651)
Firm-years missing firm control data	(399)
Final Sample	20,332
Total Firms	3,895

Panel B: Sample by Year

	Full Sample		Firms without OOPA		Firms with OOPA	
Year	n	%	n	%	n	%
2007	2,604	12.81	2,573	98.81	31	1.19
2008	2,683	13.20	2,601	96.94	82	3.06
2009	2,666	13.11	2,569	96.36	97	3.64
2010	2,427	11.94	2,287	94.23	140	5.77
2011	2,537	12.48	2,416	95.23	121	4.77
2012	2,509	12.34	2,347	93.54	162	6.46
2013	2,623	12.90	2,485	94.74	138	5.26
2014	2,283	11.23	2,160	94.61	123	5.39
Final Sample	20,332	100.00	19,438	95.60	894	4.40

Panel C: Industry Composition

	Full Sample		Firms without OOPA		Firms with OOPA	
Industry (Two-Digit SIC)	n	%	n	%	n	%
Business Services (73)	1,933	9.51	1,849	95.65	84	4.35
Chemicals And Allied Products (28)	1,696	8.34	1,625	95.81	71	4.19
Depository Institutions (60)	1,624	7.99	1,585	97.60	39	2.40
Holding And Other Investment Offices (67)	1,381	6.79	1,331	96.38	50	3.62
Electronic And Other Electrical Equipment And Components, Except Computer Equipment (36)	1,339	6.59	1,256	93.80	83	6.20
Industrial And Commercial Machinery And Computer Equipment (35)	1,019	5.01	946	92.84	73	7.16
Measuring, Analyzing, And Controlling Instruments; Photographic, Medical And Optical Goods; Watches And Clocks (38)	980	4.82	931	95.00	49	5.00
Electric, Gas, And Sanitary Services (49)	801	3.94	780	97.38	21	2.62
Oil And Gas Extraction (13)	754	3.71	740	98.14	14	1.86
Insurance Carriers (63)		3.44	661	94.56		5.44

	699				38	
Communications (48)	585	2.88	554	94.70	31	5.30
Transportation Equipment (37)	493	2.42	460	93.31	33	6.69
Security And Commodity Brokers, Dealers, Exchanges, And Services (62)	414	2.04	390	94.20	24	5.80
Food And Kindred Products (20)	394	1.94	372	94.42	22	5.58
Wholesale Trade-durable Goods (50)	325	1.60	320	98.46	5	1.54
Health Services (80)	307	1.51	295	96.09	12	3.91
Engineering, Accounting, Research, Management, And Related Services (87)	304	1.50	292	96.05	12	3.95
17 Specific Industries	15,048	74.01	14,387	95.61	661	4.39
51 Other Industries	5,284	25.99	5,051	95.59	233	4.41
Total Sample	20,332	100.00	19,438	95.60	894	4.40

Panel B of Table 2 details the sample by year. The full sample as just described contains 20,332 firm-year observations. This sample includes 2,604 observations from 2007, 2,683 observations from 2008, 2,666 observations from 2009, 2,427 observations from 2010, 2,537 observations from 2011, 2,509 observations from 2012, 2,623 observations from 2013, and 2,283 observations from 2014. This sample is then sub-divided based on those firms without an OOPA and those with an OOPA. About 96% of the sample firm-years (19,438 firm-years) do not report an OOPA. The OOPA sample contains 894 firm-year observations accounting for approximately 4.40 percent of the full sample. The number of observations in each year for these sub-samples is also shown in Panel B of Table 2.

Panel C of Table 2 details the industry composition of the sample. Industry composition is based on two-digit SIC codes. The full sample encompasses a total of 68 industry classifications. The table displays those industries that compose the largest percentages of the full sample. A total of 17 industry classifications are detailed. This accounts for approximately 74 percent of the full sample. Of those observations with an

OOPA, firms in industrial and commercial machinery and computer equipment industry are more likely to have an OOPA (7.05% of sample) while firms in the wholesale trade-durable goods industry are least likely to have an OOPA (1.53% of sample).

Research Method and Measurement of Variables

I use a multivariate regression model to test the hypotheses. This is consistent with prior research on NAS, clawbacks, and restatements (e.g. Bloomfield & Shackman, 2008; Files et al., 2009; Chan et al., 2012; Knechel & Sharma, 2012; DeHaan et al., 2013; Tan & Young, 2015). This method of analysis is appropriate for a single, metric outcome (dependent) variable with multiple predictor (independent and control) variables. The general form of the regression models are presented below. The first equation represents the model that tests the association between NAS and OOPAs. The second equation represents the model that tests the association between clawbacks and OOPAs. The third equation represents the model that tests the interaction of NAS and clawbacks on OOPAs.

$$\text{OOPAEXIST} = f\{\text{NAS} + \text{CONTROL VARIABLES}\} \tag{1}$$

$$\text{OOPAEXIST} = f\{\text{CLAWBACK} + \text{CONTROL VARIABLES}\} \tag{2}$$

$$\text{OOPAEXIST} = f\{\text{CLAWBACK} + \text{NAS} + \text{CLAWBACK*NAS} + \text{CONTROL VARIABLES}\} \tag{3}$$

The choice of NAS provider as well as the adoption of clawback provisions may not be random. To address concerns of both selection bias and endogeneity, I utilize a two-stage approach (Klassen, Lisowsky, & Mescall, 2016). For Equation (1), the first stage (stage 1) uses NAS as the dependent variable. A predicted value is calculated based on this regression and then used in the second stage (stage 2) regression of Equation (1).

For Equations (2) and (3), I use a maximum likelihood treatment effects model. This method simultaneously estimates both the treatment model and the respective model from Equations (1) through (3) listed above. Stage 1 uses CLAWBACK as the dependent variable. A bias adjustment is calculated and included in the CLAWBACK variable used in stage 2.

Dependent variable. The dependent variable is OOPAEXIST. This is measured as an indicator variable equal to 1 if the firm reports an OOPA, and 0 otherwise. I perform supplemental analyses testing numerous characteristics of OOPA.[8] These variable measurement methods are motivated by those used in the restatement literature (Files et al., 2009; Badertscher & Burks, 2011; Irani & Xu, 2011; Hirschey, Smith & Wilson, 2015; Tan & Young, 2015). For those models where the dependent variable is measured as a dichotomous variable, logistic regression is used. For all other models, a continuous dependent variable is used and, as such, OLS regression is used.

Independent variables. The first variable of interest is NAS. The first hypothesis examines the association between NAS and the occurrence of OOPAs, where NAS is measured as the natural logarithm of NAS fees (Ragunandan et al. 2003; Knechel and Sharma 2012).

The second variable of interest is clawbacks. Hypotheses two through four examine the association between the existence of clawbacks and the occurrence of OOPAs. Clawbacks (CLAWBACK) are measured as an indicator variable equal to 1 if the firm has a clawback provision, and 0 otherwise, which is consistent with the

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[8] Supplemental OOPA characteristics include materiality measures (OOPAMAT, OOPAMAT5perc, OOPAMAT10perc), the length of the adjustment period (OOPALENGTH), the length of time to disclose the OOPA (OOPADISBEG), the increasing or decreasing impact on income (OOPA_NEG, OOPA_POS), and the number of OOPAs in the current year (NumOOPA_log).

clawback literature (Chan et al., 2012; Iskander-Datta & Jia, 2013; DeHann et al., 2013; Chan et al., 2015; Brown, Davis-Friday, Guler & Marquardt, 2015).

The third variable of interest is the interaction of NAS and clawbacks. Hypothesis five examines the interaction effect of these variables on the occurrence of OOPAs. NAS is mean centered when interacted with OOPA. Thus, both NAS and the interaction term used in Hypothesis 5 are mean centered variables. This is done to mitigate multicollinearity when NAS is used in the interaction term (Aiken & West, 1991).

Control variables. Control variables are included that have been shown in prior research to be associated with financial reporting quality. I include controls for audit characteristics, firm characteristics, and governance characteristics. I discuss these variables below. Please see Table 2 for a list of control variables that are utilized in the study along with their descriptions.

Audit Characteristics: I control for audit fees (AUDITFEE) measured as the natural logarithm of audit fees. Because prior research provides mixed evidence on the relationship between audit fees and restatements, (Bloomfield & Shackman, 2008; Paterson & Valencia, 2011; Lobo & Zhao, 2013), audit fees could either be positively or negatively associated with OOPAEXIST. I control for internal control weaknesses and going concern modifications based on the extant literature (Blankley, Hurtt, & MacGregor, 2012; Chan et al., 2012; DeHaan et al., 2013) and predict a positive association between each respective variable and OOPAEXIST. Internal control weaknesses (ICW) are measured as a dichotomous variable equal to 1 if the firm receives a material weakness opinion, and 0 otherwise. Going concern modifications (GCM) are

measured as a dichotomous variable equal to 1 if the firm receives a going concern

modification, and 0 otherwise.

I also control for other audit characteristics related to the audit firm. Because Big

4 auditors are associated with fewer restatements and less earnings management

(Paterson & Valencia, 2011; Chan et al., 2015) as well as higher probability of

restatement (Knechel & Sharma, 2012), I control for Big 4 but make no prediction on its

association with OOPAEXIST.[9] Big 4 auditor (BIG4) is measured as a dichotomous

variable equal to 1 if the firm employs a Big 4 audit firm, and 0 otherwise. Auditors can

also be a specialist in a particular industry, but the literature provides mixed evidence on

the association between auditor industry specialization and restatements (Bloomfield &

Shackman, 2008; Seetharaman, Sun, & Wang, 2011; Lobo & Zhao, 2013; Pyzoha, 2015).

Industry specialist auditor (SPECIALIST) is measured as a dichotomous variable equal to

1 if a firm's auditor has the largest percent market share based on audit fees in a two-digit

SIC code at the client national-level, and 0 otherwise (Francis, Reichelt, & Wang, 2005;

Reichelt & Wang, 2010; Lobo & Zhao, 2013). I make no prediction on SPECIALIST

because of the mixed evidence in the literature. Prior research indicates that auditor

tenure is negatively associated with restatements and earnings management (Knechel &

Sharma, 2012; Naiker et al., 2013; Chan et al., 2015). Other research, however, shows

evidence that shorter auditor tenure is associated with lower financial reporting quality

(Gaynor, Kelton, Mercer, & Yohn, 2016). Hence, I control for auditor tenure (INITIAL)

measured as a dichotomous variable equal to 1 if the auditor's tenure is two years or less,

and 0 otherwise, and make no prediction on its association with OOPAEXIST.

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[9] The use of a Big 4 auditor is also positively associated with NAS (i.e. Naiker et al., 2013) so controlling for a Big 4 auditor is important to avoid spurious effects.

Governance Characteristics: I control for governance characteristics related to the board of directors, the audit committee, and the CEO. The literature provides mixed findings on these characteristics in relation to restatements, earnings management, and the purchase of NAS (Chan et al., 2012; Iskandar-Datta & Jia, 2013; Lobo & Zhao, 2013; Naiker et al., 2013; Chan et al., 2015). Research shows that board independence provides increased oversight (Beasley, 1996). As such, this increase in monitoring could decrease the number of accounting corrections made by a firm. I control for board independence (BOARDIND) measured as the percentage of independent directors on the board and predict a negative coefficient on BOARDIND. The number of board meetings and board size can also have implications, but the direction is uncertain. The number of board meetings could indicate an effective board with greater oversight or could indicate a firm with ongoing problems that requires more frequent meetings and the need for further oversight (Jensen, 1993; Sharma et al., 2009). I control for board meetings (BOARDMEET) measured as the number of board meetings held in each respective year. I make no prediction on BOARDMEET due to the mixed evidence in the literature. A larger board has more resources available and could indicate better oversight or could indicate communication problems and inefficiencies leading to weakened oversight (Dechow, Sloan, & Sweeney, 1996; Abbott, Parker, & Peters, 2004; Cheng, 2008; Ghosh, 2010). I control for board size (BOARDSIZE) measured as the number of directors on the board. As with BOARDMEET, I make no prediction on BOARDSIZE.

In reference to the audit committee, I control for audit committee size and audit committee expertise. Similar to board size, audit committee size has mixed findings that could indicate stronger or weaker oversight (DeFond & Francis, 2005; Ghosh, 2010).

Audit committee size (ACSIZE) is measured as the number of audit committee members but no prediction is made as to its coefficient. The presence of an accounting expert on the audit committee has been shown to strengthen the committee's effectiveness and lower the likelihood of restatement (Abbott et al., 2004; Agrawal & Chadha, 2005; DeFond & Francis, 2005; Carcello, Neal, Palmrose, & Scholz, 2011). Consistent with the prior literature (e.g., DeFond et al. 2005; Hoitash et al. 2009; Naiker and Sharma 2009), audit committee expertise (ACEXPERT) is measured as the percentage of audit committee members who have accounting expertise, which includes members with the following attributes: Certified Public Accountant (CPA), Chief Financial Officer (CFO), Chief Accounting Officer (CAO), controller, or auditor. I predict a negative coefficient on ACEXPERT.

I also control for various effects of the CEO. I control for the tenure of the CEO but make no prediction because it has been shown to be negatively and positively associated with financial misstatements and earnings management (Beasley, 1996; Zhang, Bartol, Smith, Pfarrer, & Khanin, 2008; Ali & Zhang, 2015). CEO tenure (CEOTENURE) is measured as the natural logarithm of the number of years the CEO has been in this position. I also control for CEO duality (CEOCHAIR) measured as a dichotomous variable equal to 1 if the CEO is also the chair of the board, and 0 otherwise. Literature shows that when the CEO also holds the position of chairman of the board, this powerful position increases the likelihood of financial misstatements and fraud (Beasley, 1996; Sharma, 2004; Agrawal & Chadha, 2005; Efendi et al., 2007). However, other studies have shown no association between CEO duality and financial

reporting quality (Abbott et al., 2004; Agrawal & Chada, 2005; Tan & Young, 2015). Therefore, I make no prediction on the coefficient of CEOCHAIR.

Firm Characteristics: As the trend in an increased amount of OOPAs has occurred concurrently with a decreased amount of restatements, I include restatements (RESTATE) as a control variable. I also include variables that have been associated with financial reporting quality to minimize the effect of potential omitted variables (Paterson & Valencia, 2011; Seetharaman et al., 2011; Blankley et al., 2012; Chan et al., 2012; Knechel & Sharma, 2012; DeHaan et al., 2013; Lobo & Zhao, 2013; Chan et al., 2015; Tan & Young, 2015).[10] Those variables shown to have a positive association with financial reporting quality measures include leverage (LEVERAGE) measured as the ratio of total debt to total assets, growth opportunities measured as sales growth (SALEGR), litigation risk measured as firms operating in a litigious industry (LITIGATION) and firms involved in financial litigation (SUIT), and various firm complexity measures such as merger/acquisition activity (MERGACQ) and number of business segments (SEGBUS). I predict a positive association with these variables and OOPAEXIST. Prior research is mixed on the remainder of the firm characteristic control variables and, as such, no directional prediction is made. These variables include firm size measured as the natural logarithm of total assets (ASSETS), growth opportunities measured as market to book value of equity (MTB), firm profitability measured as presence of a net loss (LOSS) and return on assets (ROA), new debt and equity financing (FINANCE), age of the firm (AGE), firm complexity and involvement in foreign operations (FOREIGN), firm restructuring measured using presence of restructuring

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[10] Some of these variables have also been associated with restatements, earnings management in a clawback setting, and the purchase of NAS (Iskandar-Datta & Jia, 2013; Naiker et al., 2013). Controlling for these minimizes the effect of omitted variables.

charges (RESTRUCTURE), and the ownership control variable blockholders (BLOCK).

See Table 2 for definitions of each variable and each respective predicted sign.

Other Characteristics: I also include controls for year specific (YEAR) and industry specific (INDUSTRY) fixed effects to account for variations over time and across industries.

Table 3
Variable Definitions

Variable Name	Predicted Sign	Variable Definition	Data Source
Panel A: Dependent Variables			
OOPAEXIST		1 if firm has an out of period adjustment (OOPA), 0 otherwise	Audit Analytics
OOPAMAT		absolute value of OOPA divided by net income	Audit Analytics
OOPALENGTH		length of the adjustment period (OOPA end date - OOPA begin date) – this is averaged for those firms with multiple OOPAs in the same year	Audit Analytics
OOPADISBEG		length of time to disclose the adjustment from when the adjustment period began (OOPA disclosure date - OOPA begin date) - this is averaged for those firms with multiple OOPAs in the same year	Audit Analytics
OOPA_NEG		1 if adjustment is income-decreasing, 0 otherwise	Audit Analytics
OOPA_POS		1 if adjustment is income-increasing, 0 otherwise	Audit Analytics
OOPAMAT5perc		1 if adjustment is greater than or equal to 5% of net income, 0 otherwise	Audit Analytics
OOPAMAT10perc		1 if adjustment is greater than or equal to 10% of net income, 0 otherwise	Audit Analytics
NumOOPA_log		natural log of 1 plus the number of OOPA occurrences at time t	Audit Analytics
REVISION		1 if firm has revision restatement, 0 otherwise	Audit Analytics
REVOOPA		1 if firm has a revision restatement or OOPA, 0 otherwise	Audit Analytics
RESTATE_OOPA		1 if firm has a restatement (time t) that subsequently has an OOPA but no restatement (time t+1), 0 otherwise	Audit Analytics
Panel B: Test Variables			
NAS	+/-	natural logarithm of NAS fees	Audit Analytics
TAXNAS	-	natural logarithm of tax NAS fees	Audit Analytics
AUDITNAS	+/-	natural logarithm of audit-related NAS fees	Audit Analytics
OTHERNAS	+/-	natural logarithm of other NAS fees	Audit Analytics
NAS_TOTALFEES	+/-	ratio of NAS fees to total fees	Audit Analytics
TAXNAS_TOTALFEES	-	ratio of tax NAS fees to total fees	Audit Analytics

AUDITNAS_TOTALFEES	+/-	ratio of audit-related NAS fees to total fees	Audit Analytics
OTHERNAS_TOTALFEES	+/-	ratio of other NAS fees to total fees	Audit Analytics
CLAWBACK	+	1 if firm has a clawback provision, 0 otherwise	Proxy statements

Panel C: Control Variables

Audit Control Variables:

AUDITFEE	+/-	natural log of audit fees	Audit Analytics
ICW	+	1 if the firm receives a material weakness opinion, 0 otherwise	Audit Analytics
GCM	+	1 if the firm receives a going concern modification, 0 otherwise	Audit Analytics
BIG4	+/-	1 if auditor is Big 4, 0 otherwise	Audit Analytics
SPECIALIST	+/-	1 if auditor has largest percent market share based on audit fees in a two-digit SIC code at the client national-level, 0 otherwise	Audit Analytics
INITIAL	+/-	1 if the firm's tenure with the auditor is two years or less, 0 otherwise	Audit Analytics

Governance Control Variables:

BOARDIND	+	percentage of independent directors on the board	MSCI
BOARDMEET	+/-	number of board meetings	MSCI
BOARDSIZE	+/-	number of directors on the board	Capital IQ
ACSIZE	+/-	number of audit committee members	Capital IQ
ACEXPERT	-	percentage of audit committee members who have accounting expertise	Capital IQ
CEOTENURE	-	natural logarithm plus 1 of the number of years the CEO has been in this position, 0 if missing – averaged for firms with multiple CEOs in same year	Execucomp
CEOCHAIR	+/-	1 if the firm's CEO is the chair of the board, 0 otherwise	Capital IQ

Firm Control Variables:

$RESTATE_{t+1}$	+/-	1 if firm has restatement at time t+1, 0 otherwise	Audit Analytics
$RESTATE_{t-1}$	+/-	1 if firm has restatement at time t-1, 0 otherwise	Audit Analytics
ASSETS	+/-	natural logarithm of total assets	Compustat
LEVERAGE	+	ratio of total debt to total assets	Compustat
MTB	+/-	Market capitalization to book value of equity	Compustat

SALEGR	+	percentage change in sales from the prior year to the current year	Compustat
LOSS	+/-	1 if net income is negative, 0 otherwise	Compustat
ROA	+/-	Return on assets Compustat NI/AT	Compustat
FINANCE	+/-	1 if the firm experienced a change of at least 10 percent in debt (DLTT+DLC) or equity (CSHO), 0 otherwise	Compustat
LITIGATION	+	1 if firm operates in one of the following four-digit SIC industries that are considered high risk: Drugs (SIC 2833-2836), Computer Equipment (3570-3577), Electronics (3600-3674), Retail (5200-5961), and Computer Programming (7370-7374), 0 otherwise	Calculated based on SIC
SUIT	+	1 if firm is involved in financial litigation, 0 otherwise	Audit Analytics
AGE	+/-	natural logarithm of the number of years for which total assets is reported in Compustat since 1985	Compustat
MERGACQ	+	1 if firm engaged in an acquisition or merger, 0 otherwise	Compustat
SEGBUS	+	natural logarithm of the number of business segments	Compustat
FOREIGN	+/-	1 if firm reports foreign exchange income/loss, 0 otherwise	Compustat
RESTRUCTURE	+/-	1 if firm has a restructuring charge, 0 otherwise	Compustat
BLOCK	+/-	cumulative percentage shares held by blockholders owning at least 5 percent of outstanding shares	MSCI
Other Control Variables:			
YEAR	+/-	dummy variable for each year	
INDUSTRY	+/-	dummy variable for each one-digit SIC	

CHAPTER 4

RESULTS

Descriptive Statistics

Panel A of Table 4 reports descriptive statistics for the various OOPA variables

used as the dependent variable. The majority of these variables are dichotomous variables

for the entire sample. The number of firm-year observations that report an OOPA

(OOPAEXIST) is 894, which accounts for approximately 4.4 percent of the total sample.

Approximately 0.5 percent of the sample firm years report both an OOPA in the current

year and a restatement in the previous year but no current restatement

(RESTATE_OOPA). Approximately 10.6 percent of the firms in the sample have a

revision (REVISION) in year t and approximately 14 percent of the firms in the sample

have either a revision or an OOPA in year t (REVOOPA).

Several dependent variables are a subset of the sample and contain only those

observations in which an OOPA exists in year t. For the dependent variables

OOPALENGTH and OOPADISBEG, subsample size equals 894 firm-year observations.

For the dependent variables OOPAMAT, OOPA_NEG, OOPA_POS, OOPAMAT5perc,

OOPAMAT10perc, and NumOOPA_log, subsample size equals 767 firm-year

observations. The reduction in sample size from 894 to 767 is due to missing OOPA

amount data. The average (median) value of OOPA as a proportion of net income

(OOPAMAT) for firms with an OOPA is approximately 6.9 (2.5). The average (median)

length of the adjustment period for OOPA (OOPALENGTH) for firms

Table 4
Descriptive Statistics

	Mean	Median	SD	Q1	Q3	n
Panel A: Dependent Variables						
Dependent Variables for full sample (n = 20,332)						
OOPAEXIST	0.044	0.000	0.205	0.000	0.000	20,332
REVISION	0.106	0.000	0.308	0.000	0.000	20,332
REVOOPA	0.140	0.000	0.347	0.000	0.000	20,332
RESTATE_OOPA	0.005	0.000	0.069	0.000	0.000	20,332
Dependent variables for supplemental sample - firms with OOPAs						
OOPAMAT	0.069	0.025	0.170	0.010	0.054	767
OOPALENGTH	175.718	91.000	191.687	90.000	272.000	894
OOPADISBEG	226.411	143.000	223.176	128.000	279.000	894
OOPA_NEG	0.490	0.000	0.500	0.000	1.000	767
OOPA_POS	0.379	0.000	0.486	0.000	1.000	767
OOPAMAT5perc	0.265	0.000	0.441	0.000	1.000	767
OOPAMAT10perc	0.129	0.000	0.336	0.000	0.000	767
NumOOPA_log	0.965	0.693	0.519	0.693	1.099	894
NumOOPA	2.111	1.000	2.232	1.000	2.000	894
Panel B: Test Variables						
NAS	11.142	12.039	3.766	10.645	13.201	20,332
totalnonauditfees_m	0.707	0.169	2.205	0.042	0.541	20,332
NAS_TOTALFEES	0.151	0.119	0.134	0.043	0.227	20,332
TAXNAS	8.685	11.050	5.397	0.000	12.502	20,332
taxrelatedfees_m	0.353	0.063	1.043	0.000	0.269	20,332
TAXNAS_TOTALFEES	0.083	0.044	0.103	0.000	0.128	20,332
AUDITNAS	7.822	10.434	5.568	0.000	12.093	20,332
auditrelatedfees_m	0.312	0.034	1.368	0.000	0.179	20,332
AUDITNAS_TOTALFEES	0.057	0.025	0.083	0.000	0.079	20,332
OTHERNAS	3.474	0.000	4.750	0.000	7.931	20,332
otherfees_m	0.041	0.000	0.295	0.000	0.003	20,332
OTHERNAS_TOTALFEES	0.011	0.000	0.040	0.000	0.002	20,332
CLAWBACK	0.105	0.000	0.307	0.000	0.000	20,332
Panel C: Audit Control Variables						
AUDITFEE	14.171	14.055	1.057	13.462	14.788	20,332
auditfees_m	2.798	1.271	5.614	0.702	2.644	20,332
ICW	0.038	0.000	0.190	0.000	0.000	20,332
GCM	0.013	0.000	0.113	0.000	0.000	20,332
BIG4	0.848	1.000	0.359	1.000	1.000	20,332
SPECIALIST	0.278	0.000	0.448	0.000	1.000	20,332
INITIAL	0.134	0.000	0.340	0.000	0.000	20,332
Panel D: Governance Control Variables						
BOARDIND	0.828	0.857	0.091	0.778	0.889	20,332
BOARDMEET	8.492	7.000	8.830	6.000	10.000	20,332
BOARDSIZE	7.963	8.000	2.834	6.000	10.000	20,332
ACSIZE	4.163	4.000	1.175	3.000	5.000	20,332
ACEXPERT	0.499	0.333	0.278	0.250	0.667	20,332
CEOTENURE	1.202	1.253	1.104	0.000	2.197	20,332
avgceotenure	4.993	2.500	6.796	0.000	8.000	20,332
CEOCHAIR	0.185	0.000	0.388	0.000	0.000	20,332

Table 4 (cont.)
Descriptive Statistics

	Mean	Median	SD	Q1	Q3	n
Panel E: Firm Control Variables						
RESTATE$_{t+1}$	0.130	0.000	0.336	0.000	0.000	19,512
RESTATE$_{t-1}$	0.148	0.000	0.355	0.000	0.000	20,332
ASSETS	21.177	21.126	1.815	19.864	22.311	20,332
totalassets_b	12.844	1.496	89.024	0.423	4.890	20,332
LEVERAGE	0.574	0.561	0.293	0.377	0.749	20,332
MTB	4.672	1.806	317.477	1.131	3.139	20,332
SALEGR	-0.118	0.053	7.245	-0.035	0.140	20,332
LOSS	0.255	0.000	0.436	0.000	1.000	20,332
ROA	-0.002	0.029	0.217	-0.001	0.069	20,332
FINANCE	0.588	1.000	0.492	0.000	1.000	20,332
LITIGATION	0.260	0.000	0.439	0.000	1.000	20,332
SUIT	0.011	0.000	0.106	0.000	0.000	20,332
AGE	2.957	2.944	0.685	2.485	3.466	20,332
age_comp	24.097	19.000	16.284	12.000	32.000	20,332
MERGACQ	0.482	0.000	0.500	0.000	1.000	20,332
SEGBUS	0.679	0.000	0.734	0.000	1.386	18,302
bussegnum	2.523	1.000	2.096	1.000	4.000	18,302
FOREIGN	0.299	0.000	0.458	0.000	1.000	20,332
RESTRUCTURE	0.324	0.000	0.468	0.000	1.000	20,332
BLOCK	0.256	0.232	0.176	0.126	0.358	20,332

Table 4 (cont.)
Descriptive Statistics

	Firms without OOPA (n = 19,438)		Firms with OOPA (n = 894)		Test of Differences			
	Mean	Median	Mean	Median	t-statistic		z-statistic	
Panel F: Univariate tests of differences in variables								
Test Variables								
NAS	11.112	12.018	11.799	12.567	-5.339	***	-20.091	***
totalnonauditfees_m	0.696	0.166	0.953	0.287	-3.410	***	-7.517	***
NAS_TOTALFEES	0.151	0.118	0.154	0.126	-0.713		-0.096	
TAXNAS	8.649	11.026	9.459	11.626	-4.388	***	-23.671	***
taxrelatedfees_m	0.348	0.061	0.452	0.112	-2.901	***	-3.026	***
TAXNAS_TOTALFEES	0.083	0.044	0.087	0.046	-1.033		-0.106	
AUDITNAS	7.802	10.404	8.254	10.871	-2.374	**	-13.218	***
auditrelatedfees_m	0.307	0.033	0.415	0.053	-2.310	**	-3.161	***
AUDITNAS_TOTALFEES	0.057	0.025	0.054	0.025	0.888		0.074	
OTHERNAS	3.418	0.000	4.680	0.000	-7.775	***	-36.877	***
otherfees_m	0.039	0.000	0.084	0.000	-4.467	***	-1.317	
OTHERNAS_TOTALFEES	0.010	0.000	0.013	0.000	-1.652	*	-0.066	
CLAWBACK	0.104	0.000	0.143	0.000	-3.780	***	-1.160	
Audit Control Variables								
AUDITFEE	14.153	14.035	14.572	14.459	-11.641	***	-12.267	***
auditfees_m	2.740	1.246	4.067	1.903	-6.919	***	-38.796	***
ICW	0.035	0.000	0.100	0.000	-9.976	***	-1.894	*
GCM	0.013	0.000	0.009	0.000	1.079		0.122	
BIG4	0.843	1.000	0.960	1.000	-9.519	***	-3.407	***
SPECIALIST	0.274	0.000	0.359	0.000	-5.556	***	-2.479	**
INITIAL	0.134	0.000	0.132	0.000	0.139		0.472	
Governance Control Variables								
BOARDIND	0.827	0.857	0.841	0.875	-4.280	***	-0.390	
BOARDMEET	8.476	7.000	8.836	8.000	-1.189		-10.499	***
BOARDSIZE	7.954	8.000	8.151	8.000	-2.029	**	-5.750	***
ACSIZE	4.160	4.000	4.232	4.000	-1.781	*	-2.092	**
ACEXPERT	0.498	0.333	0.527	0.400	-3.027	***	-0.843	
CEOTENURE	1.199	1.099	1.249	1.386	-1.316		-1.453	
avgceotenure	4.987	2.000	5.117	3.000	-0.558		-3.791	***
CEOCHAIR	0.187	0.000	0.147	0.000	3.014	***	1.170	
Firm Control Variables								
RESTATE$_{t+1}$	0.125	0.000	0.235	0.000	-9.324	***	-3.129	***
RESTATE$_{t-1}$	0.141	0.000	0.286	0.000	-12.010	***	-4.245	***
ASSETS	21.168	21.121	21.380	21.215	-3.413	***	-6.193	***
totalassets_b	12.454	1.489	21.329	1.636	-2.915	***	-2.60E+02	***
LEVERAGE	0.573	0.560	0.593	0.584	-1.970	**	-0.578	
MTB	4.734	1.811	3.322	1.708	0.130		41.305	***
SALEGR	-0.118	0.054	-0.122	0.037	0.014		0.104	
LOSS	0.255	0.000	0.268	0.000	-0.911		-0.397	
ROA	-0.002	0.030	0.004	0.023	-0.749		-0.162	
FINANCE	0.588	1.000	0.577	1.000	0.644		0.317	
LITIGATION	0.260	0.000	0.263	0.000	-0.194		-0.085	
SUIT	0.011	0.000	0.013	0.000	-0.626		-0.066	

Table 4 (cont.)
Descriptive Statistics

	Firms without OOPA (n = 19,438)		Firms with OOPA (n = 894)		Test of Differences			
	Mean	Median	Mean	Median	t-statistic		z-statistic	
AGE	2.953	2.944	3.037	2.996	-3.599	***	-2.465	**
age_comp	23.998	19.000	26.251	20.000	-4.046	***	-65.854	***
MERGACQ	0.478	0.000	0.551	1.000	-4.283	***	-2.139	**
SEGBUS	0.673	0.000	0.807	1.099	-5.172	***	-3.794	***
bussegnum	2.509	1.000	2.802	3.000	-3.961	***	-8.299	***
FOREIGN	0.294	0.000	0.391	0.000	-6.214	***	-2.841	***
RESTRUCTURE	0.318	0.000	0.466	0.000	-9.300	***	-4.345	***
BLOCK	0.255	0.231	0.280	0.251	-4.277	***	-0.751	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.
Variables that do not contain data for full sample include RESTATE$_{t+1}$ and SEGBUS. RESTATE$_{t+1}$ has n=18,655 for firms without OOPA and n=857 for firms with OOPA. SEGBUS has n=17,462 for firms without OOPA and n=840 for firms with OOPA.

with an OOPA is approximately 175.7 (91.0) days but can vary widely as indicated by

the standard deviation of 191.7. The average (median) length of time to disclose the

adjustment from when the adjustment period began (OOPADISBEG) for firms with an

OOPA averages 226.4 (143.0) days. Approximately 49.0 percent of the firms with an

OOPA report a negative value for OOPA (OOPA_NEG) and approximately 37.9 percent

of firms with an OOPA report a positive value (OOPA_POS) for OOPA. The remaining

13.1 percent of firms with an OOPA report a zero value for OOPA. Approximately 26.5

percent of firms with an OOPA report an OOPA that is 5 percent of net income or greater

(OOPAMAT5perc) and approximately 12.9 percent of firms with an OOPA report an

OOPA that is 10 percent of net income or greater (OOPAMAT10perc). Several firms

report multiple OOPAs per year (NumOOPA_log). The average number of OOPAs per

firm per year for those firms with an OOPA is approximately 2.11.

      Panel B of Table 4 reports descriptive statistics for the test variables. Firms

purchase an average (median) of $706,850 ($169,287) in total NAS fees per year. When

segregated into the various types of NAS firms purchase an average (median) of

$352,863 ($62,945) of tax NAS (TAXNAS), $311,787 ($3,400) of audit-related NAS

(AUDITNAS), and $41,191 ($0) of other NAS (OTHERNAS). Panel F of Table 4 shows

that firms with an OOPA purchase higher levels of NAS on average than firms without

an OOPA. Firms with an OOPA purchase NAS at an average (median) of $952,654

($286,857) compared to an average (median) of $695,545 ($165,635) for firms without

an OOPA. When segregated into the various types of NAS, firms with an OOPA

purchase more of each individual type of NAS as well. Firms with an OOPA purchase an

average (median) of $451,820 ($112,000) of tax NAS (TAXNAS), $415,150 ($52,611) of

audit-related NAS (AUDITNAS), and $84,251 ($0) of other NAS (OTHERNAS). Firms

without an OOPA purchase an average (median) of $348,311 ($61,440) of tax NAS

(TAXNAS), $307,034 ($33,000) of audit-related NAS (AUDITNAS), and $39,210 ($0)

of other NAS (OTHERNAS). While firms with an OOPA purchase greater amounts of

audit-related NAS (AUDITNAS) compared to firms without an OOPA, the opposite is

true when audit-related NAS is measured as the ratio to total fees. The differences

between the NAS and types of NAS values for firms with an OOPA and firms without an

OOPA are statistically significant. The test of differences statistics are displayed in Panel

F of Table 4 for these variables.

The second test variable is CLAWBACK. Panel B of Table 4 shows that

approximately 10.5 percent of the full sample has implemented executive compensation

clawback provisions. As shown in Panel F of Table 4, approximately 14.3 percent of

firms reporting an OOPA have clawback provisions while approximately 10.4 percent of

firms without an OOPA have clawback provisions. The difference in the incidence of

clawback provisions between firms with an OOPA and firms without an OOPA is

statistically significant.

Panel C of Table 4 reports descriptive statistics for the audit control variables.

Firms purchase an average (median) of $2,798,466 ($1,271,000) in audit fees per year

(AUDITFEE). Approximately 3.8 percent of the sample reports an ICW and

approximately 1.3 percent reports a GCM. The majority of the sample (approximately

84.8 percent) is audited by a Big 4 audit firm (BIG4) with approximately 27.8 percent of

the sample being audited by an industry specialist (SPECIALIST). Also, 13.4 percent of

the sample has an audit client relationship that is in the initial two years (INITIAL). Out

of the six audit control variables, AUDITFEE, ICW, BIG4, and SPECIALIST have a statistically significant difference between firms with an OOPA and firms without an OOPA. Firms with an OOPA have higher audit fees, a greater occurrence of ICW, and a greater occurrence of having both a Big 4 auditor and a specialist. See Panel F of Table 4 for test of differences statistics on these and other audit control variables.

Panel D of Table 4 reports descriptive statistics for the governance control variables. On average (median), 82.8 (85.7) percent of the sample's directors on the board of directors are independent (BOARDIND). Boards meet an average (median) of approximately 8.5 (7) times each year (BOARDMEET) and have an average (median) of approximately 7.9 (8) directors on the board (BOARDSIZE). The average (median) number of members on the audit committee (ACSIZE) is approximately 4.2 (4.0) and the average (median) percentage of audit committee members that have accounting expertise (ACEXPERT) is approximately 50.0 (33.3) percent. The average (median) CEO tenure (CEOTENURE) is approximately 5.0 (2.5) years for the sample and approximately 18.5 percent of the sample has a CEO who is also the chair of the board of directors (CEOCHAIR). Compared to firms without an OOPA, firms with an OOPA have statistically significantly greater percentage of independent board members, more board meetings per year, a larger board of directors, a larger audit committee, a greater percentage of accounting experts on the audit committee, and less occurrence of CEO duality. See Panel F of Table 4 for test of differences statistics on these and other governance control variables.

Panel E of Table 4 reports descriptive statistics for the firm control variables. Restatements are used as a control for both future restatements ($RESTATE_{t+1}$) and prior

restatements (RESTATE$_{t-1}$). Approximately 13 percent of the firms in the sample have a restatement in the subsequent year (time t+1) and approximately 14.8 percent have a restatement in the previous year (time t-1). When RESTATE$_{t+1}$ is used, the sample is reduced to 19,512 firm-year observations instead of 20,332 firm-year observations due to restatement data availability for the subsequent year. The average (median) total assets of the sample are \$12.8 (\$1.5) billion. The sample is slightly more debt leveraged with LEVERAGE at an average (median) of 57.4 (56.1) percent. The market to book (MTB) average (median) value is 4.7 (1.8) for the sample. Sales growth (SALEGR) is an average (median) of -11.8 (5.3) percent annually. Approximately 25.5 percent of the sample reports a net loss (LOSS). Return on assets (ROA) averages (median) -0.2 (2.9) percent. Approximately 58.8 percent of the sample experienced a change of at least 10 percent in debt or equity (FINANCE). Approximately 26.0 percent of the sample operates in a litigious industry (LITIGATION) and approximately 1.1 percent is involved in financial litigation (SUIT). The average (median) age of firms (AGE) in the sample is 24.1 (19.0) years. Approximately 48.2 percent of the sample was involved in a merger or acquisition (MERGACQ). The average (median) number of business segments (SEGBUS) reported is 2.5 (1). The inclusion of this variable reduces the sample to 18,302 firm-year observations from 20,332 firm-year observations. Approximately 29.9 percent of the sample reported foreign income (FOREIGN) and approximately 32.4 percent is involved in restructuring (RESTRUCTURE). The average (median) firm ownership held by blockholders (BLOCK) is approximately 25.6 (23.2) percent. When comparing firms with an OOPA to firms without an OOPA, there are several significant differences. For example, firms with an OOPA have a greater likelihood of a restatement, are larger in

size, have been in business longer, have more business segments, and are more likely to be involved in merger/acquisition activities, foreign transactions, and restructuring activities. These differences are statistically significant. See Panel F of Table 4 for test of differences statistics on these and other firm control variables.

Table 5 reports the Pearson correlation matrix for variables used in the main regressions for Hypotheses 1 through 5.[11] There are numerous significant correlations. Correlations with a significance at or below 0.05 ($p<=0.05$) are highlighted in bold in Table 5. However, no correlations are large enough to raise concerns of multicollinearity. All correlations are below the threshold of 0.80. Correlations above this amount would suggest multicollinearity may be a problem (Kennedy, 2008). Variance inflation factors (VIF) were also used as an additional assessment of multicollinearity. VIF results range from 1.00 to 4.70.[12] These factors are well below the maximum recommended threshold of 10 (Kennedy, 2008).

Results of Main Hypothesis 1

Coefficients for year and industry variables are included in the regression models but not reported in the tables to conserve space.[13] All regressions are based on heteroscedasticity-consistent robust standard errors (Petersen 2009). All regression tables are displayed at the end of Chapter 4. Panel A of Table 6 reports the results of the regression model for Hypothesis 1 for both stage 1 and stage 2 regressions. The stage 1 regression is the NAS model and is executed as an OLS regression. The stage 1

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[11] A Spearman correlation matrix was also constructed and provides similar results to the Pearson correlation matrix. Spearman correlations are not tabulated for brevity.

[12] H1 through H5 use two-stage regression analysis. VIF are calculated from H1 because OLS regression is used in the first stage of this model and H2 through H5 models use logistic regression in both stages.

[13] Some of the supplemental analyses do not contain controls for fixed year effects in both stages due to issues of nonconvergence.

Table 5
Pearson Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
OOPAEXIST (1)	1.000																
NAS (2)	**0.037**	1.000															
CLAWBACK (3)	**0.027**	**0.063**	1.000														
AUDITFEE (4)	**0.081**	**0.451**	**0.087**	1.000													
ICW (5)	**0.070**	**-0.032**	0.009	0.012	1.000												
GCM (6)	-0.008	**-0.048**	0.003	**-0.063**	0.051	1.000											
BIG4 (7)	**0.067**	**0.274**	-0.026	**0.418**	-0.024	**-0.038**	1.000										
SPECIALIST (8)	0.039	**0.098**	0.007	**0.146**	-0.012	-0.031	**0.262**	1.000									
INITIAL (9)	-0.001	**-0.117**	0.009	**-0.160**	**0.075**	**0.041**	**-0.211**	**-0.074**	1.000								
BOARDIND (10)	0.030	**0.154**	**0.069**	**0.251**	-0.020	-0.020	0.146	**0.048**	-0.070	1.000							
BOARDMEET (11)	0.008	**0.022**	**0.049**	**0.032**	0.025	0.030	-0.014	0.008	**0.021**	0.055	1.000						
BOARDSIZE (12)	**0.014**	**0.280**	**0.155**	**0.457**	**-0.060**	**-0.053**	**0.189**	**0.096**	**-0.079**	**0.448**	0.029	1.000					
ACSIZE (13)	0.013	**0.173**	**0.105**	**0.267**	**-0.028**	**-0.039**	**0.090**	**0.074**	**-0.035**	**0.256**	0.036	**0.561**	1.000				
ACEXPERT (14)	**0.021**	**0.069**	0.002	**0.176**	**-0.036**	**-0.029**	**0.114**	0.020	**-0.056**	**0.046**	0.000	**0.043**	**-0.129**	1.000			
CEOTENURE (15)	0.009	**0.155**	-0.002	**0.285**	**-0.046**	**-0.083**	**0.187**	**0.075**	**-0.094**	**0.060**	**-0.061**	**0.170**	**0.106**	**0.091**	1.000		
CEOCHAIR (16)	**-0.021**	**0.082**	0.022	**0.159**	**-0.031**	-0.015	**0.064**	0.027	-0.027	**0.051**	-0.032	**0.326**	**0.125**	-0.003	**0.133**	1.000	
RESTATE$_{t+1}$ (17)	**0.067**	**0.026**	0.023	**0.037**	**0.119**	0.003	**0.039**	**0.018**	0.000	-0.024	**0.010**	**-0.016**	**-0.017**	0.010	0.004	0.004	1.000
RESTATE$_{t-1}$ (18)	**0.084**	**0.024**	**0.023**	**0.058**	**0.226**	0.003	**0.052**	**0.010**	0.028	**-0.005**	0.019	**-0.026**	**-0.014**	0.004	-0.012	-0.008	**0.335**
ASSETS (19)	**0.024**	**0.414**	**0.180**	**0.731**	**-0.074**	**-0.116**	**0.280**	**0.146**	**-0.103**	**0.237**	**0.046**	**0.586**	**0.358**	**0.127**	**0.292**	**0.223**	-0.003
LEVERAGE (20)	0.014	**0.118**	**0.132**	**0.175**	0.018	**0.174**	**0.047**	**0.035**	**0.038**	**0.127**	**0.064**	**0.261**	**0.169**	0.005	**-0.076**	**0.116**	0.015
MTB (21)	-0.001	**-0.020**	-0.003	0.005	-0.002	-0.001	**-0.016**	-0.003	-0.004	-0.013	-0.007	-0.011	-0.007	0.005	-0.006	-0.003	-0.003
SALEGR (22)	0.000	**0.026**	0.001	**0.023**	-0.002	**-0.021**	**0.023**	0.009	**-0.021**	0.005	-0.005	0.008	0.006	0.008	**0.020**	0.007	0.006
LOSS (23)	0.006	**-0.122**	-0.009	**-0.136**	**0.089**	**0.187**	**-0.058**	-0.039	**0.057**	-0.025	**0.058**	**-0.144**	**-0.118**	**-0.051**	**-0.246**	**-0.080**	0.025
ROA (24)	0.005	**0.114**	0.017	**0.153**	**-0.054**	**-0.338**	**0.053**	0.040	**-0.067**	0.019	-0.042	**0.089**	**0.071**	0.048	**0.199**	0.039	-0.004
FINANCE (25)	-0.005	0.004	**0.028**	-0.028	0.003	0.034	-0.042	-0.006	0.041	-0.012	**0.031**	-0.009	-0.003	-0.012	**-0.054**	-0.016	0.013
LITIGATION (26)	0.001	**-0.068**	**-0.084**	**-0.084**	0.008	0.008	0.020	-0.033	-0.021	**-0.040**	0.001	**-0.164**	**-0.162**	0.005	-0.028	**-0.095**	-0.004
SUIT (27)	0.004	0.026	0.017	0.040	0.065	0.025	-0.007	-0.007	0.012	0.008	**0.014**	0.009	0.011	0.004	-0.009	0.002	**0.016**
AGE (28)	**0.025**	**0.191**	0.034	**0.340**	-0.043	**-0.054**	**0.103**	0.059	**-0.104**	0.193	-0.034	**0.381**	**0.297**	0.065	**0.310**	**0.196**	-0.012
MERGACQ (29)	**0.030**	**0.161**	**0.037**	**0.281**	0.005	**-0.066**	**0.079**	-0.004	-0.039	0.083	-0.007	**0.100**	0.049	0.069	**0.125**	0.003	**0.036**
SEGBUS (30)	**0.038**	**0.166**	**0.058**	**0.320**	-0.001	**-0.044**	**0.086**	0.031	-0.036	0.113	0.000	**0.213**	**0.179**	0.047	0.113	0.093	0.028
FOREIGN (31)	**0.044**	**0.122**	**-0.040**	**0.239**	0.019	0.015	**0.081**	-0.001	-0.042	0.039	-0.013	**-0.019**	-0.007	0.030	0.066	**-0.041**	0.013
RESTRUCTURE (32)	**0.065**	**0.154**	-0.002	**0.313**	0.014	0.017	**0.132**	0.028	**-0.064**	0.145	0.028	**0.123**	0.070	0.080	0.054	-0.002	0.033
BLOCK (33)	**0.030**	**-0.050**	**-0.033**	**-0.068**	0.022	-0.010	**0.063**	-0.012	**-0.030**	0.089	0.000	**-0.099**	**-0.089**	0.014	**-0.034**	**-0.074**	0.021

Correlations significant at or below the 0.05 level (2-tailed) are in bold.

Table 5 (cont.)
Pearson Correlation Matrix

	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
RESTATE$_{t+1}$ (17)	1.000																
RESTATE$_{t-1}$ (18)	**0.335**	1.000															
ASSETS (19)	-0.003	-0.014	1.000														
LEVERAGE (20)	**0.015**	**0.019**	**0.329**	1.000													
MTB (21)	-0.003	-0.006	0.008	0.001	1.000												
SALEGR (22)	0.006	0.004	**0.027**	0.006	0.000	1.000											
LOSS (23)	**0.025**	**0.038**	**-0.286**	**0.077**	-0.003	**-0.032**	1.000										
ROA (24)	**-0.004**	-0.015	**0.270**	**-0.206**	0.003	**0.040**	**-0.514**	1.000									
FINANCE (25)	0.013	-0.005	0.002	**0.058**	-0.009	-0.010	**0.038**	**-0.053**	1.000								
LITIGATION (26)	-0.004	0.009	**-0.266**	**-0.204**	-0.002	-0.009	**0.141**	**-0.125**	**-0.060**	1.000							
SUIT (27)	**0.016**	**0.050**	0.010	0.006	-0.001	**-0.019**	0.049	**-0.028**	0.002	0.004	1.000						
AGE (28)	-0.012	-0.013	**0.353**	**0.056**	-0.011	0.005	**-0.183**	**0.135**	**-0.065**	**-0.128**	-0.023	1.000					
MERGACQ (29)	**0.036**	**0.031**	**0.165**	**-0.029**	0.008	**0.021**	**-0.115**	**0.103**	**0.049**	0.005	-0.003	**0.069**	1.000				
SEGBUS (30)	**0.028**	**0.024**	**0.282**	**0.096**	**0.015**	**0.018**	**-0.128**	**0.103**	0.010	**-0.192**	0.006	**0.280**	**0.171**	1.000			
FOREIGN (31)	**0.013**	**0.021**	-0.006	**-0.116**	-0.005	0.005	0.013	**0.020**	-0.012	**0.084**	-0.003	**0.051**	**0.128**	**0.035**	1.000		
RESTRUCTURE (32)	**0.033**	**0.047**	**0.072**	**0.039**	-0.006	-0.007	**0.106**	**-0.050**	-0.023	**0.078**	0.016	**0.132**	**0.170**	**0.104**	**0.232**	1.000	
BLOCK (33)	**0.021**	**0.047**	**-0.150**	0.005	-0.003	-0.003	**0.110**	**-0.042**	**-0.021**	**0.040**	-0.009	**-0.094**	**-0.041**	**-0.071**	**0.019**	**0.073**	1.000

Correlations significant at or below the 0.05 level (2-tailed) are in bold.

regression is statistically significant with F-stat of 213.02 and R^2 of 0.2442 (p<0.001). This NAS model is comparable to prior studies such as Ashbaugh et al. (2003) and Naiker et al. (2013). Based on my stage 1 model, a predicted value of NAS is calculated and used in the stage 2 regression. The stage 2 regression is the OOPA model and is executed as a logistic regression. The model is statistically significant with Wald chi-square of 536.02, a pseudo-R^2 of 0.0845 and a log pseudo-likelihood of -3357.42. This model is comparable to other studies investigating stealth restatements such as Diehl (2012) and Tan and Young (2015). Hypothesis 1 predicts that there is no association between NAS and OOPAs. The results indicate that there is a significant negative relationship between NAS and OOPAEXIST (coef.=-1.895; p=0.011). Therefore, the null of Hypothesis 1 is rejected. This finding indicates that firms that purchase more NAS are less likely to report an OOPA. This supports the viewpoint that auditor-provided NAS does not appear to impair auditor independence. Rather, this lends support for the notion that purchasing greater amounts of NAS increases reporting quality though knowledge spillover.

To provide further details, I examine the marginal effects of a change in NAS on OOPAEXIST. All marginal effects for this research are calculated by using the margins command in STATA and by holding all variables at means. At the mean, the marginal effect of NAS on OOPAEXIST is to reduce the probability of firms reporting an OOPA by 5.63 percentage points (p=0.011). I also calculate the marginal effect of moving from the mean of NAS to the mean of the third quartile (Q3) as well as moving from the mean of the first quartile (Q1) to the mean of Q3. Moving from the mean of NAS to the mean of Q3 reduces the probability of firms reporting an OOPA by 6.72 percentage points.

Moving from the mean of Q1 to the mean of Q3 reduces the probability of firms

reporting an OOPA by 13.62 percentage points.

Results for the control variables for the OOPA model[14] show that the majority of

the control variables are statistically significantly associated with OOPAEXIST. The

signs of the coefficients for these control variables are consistent with their expected

signs with the exception of LITIGATION. This difference could be due to the immaterial

nature of OOPA. INITIAL, CEOTENURE and SUIT are not statistically significant.

Results of Main Hypothesis 2

Panel B of Table 6 reports the results of the regression model for Hypothesis 2 for

both stage 1 and stage 2 regressions. Hypotheses 2 through 5 use a simultaneous

treatment effects regression model. The lambda is statistically significant in the H2

through H5 regressions signifying that there is an endogenous relationship between

CLAWBACK and OOPAEXIST, and that the two-stage simultaneous treatment effect

model is the correct methodology to utilize. The H2 model is statistically significant with

a Wald chi-square of 2647.94 and a log pseudo-likelihood of -1522.15. Hypothesis 2

predicts that there is a positive association between clawback provisions and OOPAs.

The results indicate that there is a significant positive relationship between CLAWBACK

and OOPAEXIST (coef.=0.302; p<0.001). Therefore, Hypothesis 2 is supported. Firms

that have clawback provisions in place are more likely to report an OOPA. This provides

support to the belief that management may be using OOPAs opportunistically. An

analysis of the marginal effects of CLAWBACK on OOPAEXIST reveals that, on

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[14] Results for the control variables for each model of H2-H5 are reported on the respective tables for each regression model.

average, the probability of firms with clawback provisions recording an OOPA is 30.21

(p<0.01) percentage points higher than for firms without clawback provisions.

Results for the control variables for the OOPA model show that AUDITFEE,

ICW, BIG4, SPECIALIST, INITIAL, CEOCHAIR, RESTATE$_{t-1}$, ASSETS,

LEVERAGE, ROA, and RESTRUCTURE are statistically significantly associated with

OOPAEXIST. The signs of the coefficients for these control variables are consistent with

their expected signs. All other control variables are not statistically significant.

Results of Main Hypothesis 3

Panel C of Table 6 reports the results of the regression model for Hypothesis 3 for

both stage 1 and stage 2 regressions. The model is statistically significant with a Wald

chi-square of 2646.08 and a log pseudo-likelihood of -1519.14. Hypothesis 3 predicts that

there is a positive association between clawback provisions and OOPAs for firms that

previously reported a restatement. The results indicate that there is a significant positive

relationship between CLAWBACK*RESTATE$_{t-1}$ and OOPAEXIST (coef.=0.030;

p=0.096), which provides support for Hypothesis 3. Firms with clawback provisions in

place that previously reported a restatement are more likely to report an OOPA in the

current period. Taken with my H2 results as well as the extant literature that shows

clawback adopting firms with previous restatements receive the largest positive stock

returns (Iskandar-Data & Jia, 2013), these results provide further support for managerial

opportunism in the reporting of OOPAs.

Results for the control variables for the OOPA model show that AUDITFEE,

ICW, BIG4, SPECIALIST, INITIAL, CEOCHAIR, RESTATE$_{t-1}$, ASSETS,

LEVERAGE, ROA, and RESTRUCTURE are all statistically significantly associated

with OOPAEXIST. The signs of the coefficients for these control variables are consistent with their expected signs. All other control variables are not statistically significant.

Results of Main Hypothesis 4

Panel D of Table 6 reports the results of the regression model for Hypothesis 4 for both stage 1 and stage 2 regressions. The model is statistically significant with a Wald chi-square of 2545.17 and a log pseudo-likelihood of -1352.48. Hypothesis 4 predicts that there is a positive association between clawback provisions and OOPAs for firms that subsequently report a restatement. The results indicate that there is a significant positive relationship between CLAWBACK*RESTATE$_{t+1}$ and OOPAEXIST (coef.=0.033; p=0.099). Therefore, Hypothesis 4 is supported. Firms with clawback provisions in place that subsequently report a restatement are more likely to have an OOPA reported in the current period. These results may imply that management opportunistically records OOPAs, which may be red flags for decreased financial reporting quality in the current period and an indication of restatements in the future period. Management's intention may be to record restatements as OOPAs but these corrections later become restatements.

Results for the control variables for the OOPA model show that AUDITFEE, ICW, BIG4, SPECIALIST, INITIAL, CEOCHAIR, ASSETS, LEVERAGE, ROA, and RESTRUCTURE are all statistically significantly associated with OOPAEXIST. The signs of the coefficients for these control variables are consistent with their expected signs. All other control variables are not statistically significant.

Results of Main Hypothesis 5

Panel E of Table 6 reports the results of the regression model for Hypothesis 5 for both stage 1 and stage 2 regressions. The model is statistically significant with a Wald

chi-square of 2647.40 and a log pseudo-likelihood of -1520.36. Hypothesis 5 predicts that the association between clawback provisions and OOPA is conditional on the level of NAS. The results indicate that there is not a significant relationship between the interaction of CLAWBACK and NAS (coef.=0.002; p=0.65) and OOPAEXIST. Therefore, Hypothesis 5 is not supported.

Results for the control variables for the OOPA model show that AUDITFEE, ICW, BIG4, SPECIALIST, BOARDIND, CEOCHAIR, RESTATE$_{t-1}$, LEVERAGE, LOSS, ROA, FOREIGN, and RESTRUCTURE are statistically significantly associated with OOPAEXIST. The signs of the coefficients for these control variables are consistent with their expected signs. All other control variables are not statistically significant.

Supplemental Analyses

I employ a number of additional variable measures and additional tests for supplemental analyses. First, I utilize alternate measures of NAS in the main hypotheses that investigate associations with NAS. Next, I examine several properties of OOPAs. I also test alternate dependent variables utilizing other stealth restatements. Further, I incorporate restatements into the dependent variable.

Alternate measures of NAS. Hypotheses 1 and 5 investigate relationships related to NAS. However, NAS is composed of three different types of consulting services each of which could have varying associations with OOPAs. Specifically, prior literature separates NAS into tax NAS, audit-related NAS, and other NAS. However, these studies overall still produce varying results. Seetharaman et al. (2011) and Diehl (2012) investigate how tax NAS is related to restatements. While Seetharaman et al. (2011) show no association between tax NAS and restatements, they do show a negative

association between tax NAS and tax-related restatements. Diehl (2012) provides further support for these tax NAS studies finding a significant negative relationship between tax NAS and both restatements generally and tax-related restatements, with a stronger relationship detected with tax-related restatements. Knechel and Sharma (2012) provide evidence of a negative association between restatements and both tax NAS and non-tax NAS.

For supplemental analyses, I investigate the same relationships hypothesized for NAS in relation to OOPAs by using the separate types of NAS. Tax NAS (TAXNAS) is measured as the natural logarithm of tax NAS fees.[15] Audit-related NAS (AUDITNAS) is measured as the natural logarithm of audit-related NAS fees. Other NAS (OTHERNAS) is measured as the natural logarithm of other NAS fees. Additional supplemental analyses are performed using the ratio of NAS fees and each respective type of NAS fees to total fees.

Tables 7 through 9 report the results of regressions using the separate types of NAS (TAXNAS, AUDITNAS, OTHERNAS). The main H1 regression reports a negative and statistically significant association between NAS and OOPAEXIST. TAXNAS has similar results reporting a negative and significant association between TAXNAS (coef.=-0.461; p=0.024) and OOPAEXIST (Panel A - Table 7). There is also a negative and significant association between OTHERNAS (coef.=-0.703; p=0.007) and OOPAEXIST (Panel A -Table 9). When using AUDITNAS, however, no statistically significant association is found (Panel A - Table 8).

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[15] The components of tax NAS (compliance tax NAS and planning tax NAS) are not used in supplemental analyses due to insufficient data.

For the H5 regression model, the main results show no statistical significance between CLAWBACK*NAS and OOPAEXIST. The supplemental analyses using the three types of NAS result in the same conclusion. TAXNAS, AUDITNAS, and OTHERNAS are not statistically significant in the H5 model (Panel B - Tables 7-9).

Tables 10 through 13 report the results of the relevant main regressions using the ratio of NAS fees to total fees (NAS_TOTALFEES) and each type of NAS as a ratio of total fees (TAXNAS_TOTALFEES, AUDITNAS_TOTALFEES, OTHERNAS_TOTALFEES). The results substantiate the findings of the main regressions and the supplemental analyses using the types of NAS. NAS_TOTALFEES (coef.=-27.044; p=0.007; Panel A - Table 10), TAXNAS_TOTALFEES (coef.=-44.315; p=0.008; Panel A - Table 11), and OTHERNAS_TOTALFEES (coef.=-111.553; p=0.008; Panel A - Table 13) are negatively and statistically significantly associated with OOPAEXIST in the H1 regression model. When used as a ratio of total fees, AUDITNAS is also negatively and statistically significantly associated with OOPAEXIST (coef.=-183.234; p=0.017; Panel A - Table 12). This result differs from using AUDITNAS when measured as the natural logarithm of audit-related NAS because the ratio captures the relative amount of audit-related services provided. In the H5 regression model, none of the NAS ratio variables are statistically significant (Panel B - Tables 10-13), which is consistent with the main results and the preceding supplementary analyses.

Overall, firms that purchase higher amounts of NAS are less likely to have an OOPA. When segregated by the type of NAS, firms that purchase higher amounts of tax NAS as well as higher amounts of other NAS are also less likely to have an OOPA.

Results also provide support for this relationship in firms that purchase higher amounts of audit-related NAS when this measure is examined as a ratio of total fees. Collectively, these results provide support that the purchase of NAS does not impair auditor independence. Instead, auditor-provided NAS increases financial reporting quality through knowledge spillover.

Properties of OOPAs. The main dependent variable (OOPAEXIST) is a dichotomous variable coded as 1 for firm-year observations that report an OOPA in year t and 0 for firm-year observations that do not report an OOPA in year t. Supplemental analyses are performed to examine properties of OOPAs that include both continuous and dichotomous variables. These properties of OOPAs include the absolute value of OOPAs divided by net income (OOPAMAT), the length of the adjustment period (OOPALENGTH), the length of time to disclose the OOPA from when the adjustment period began (OOPADISBEG), an indication of an income-decreasing adjustment (OOPA_NEG), an indication of an income-increasing adjustment (OOPA_POS), an indication that the OOPA makes up a minimum of 5 percent of net income (OOPAMAT5perc), an indication that the OOPA makes up a minimum of 10 percent of net income (OOPAMAT10perc), and the natural logarithm value of 1 plus the number of occurrences of OOPA at time t (NumOOPA_log).[16] It is to be noted that for all analyses related to properties of OOPA, the sample comprises only firms reporting an OOPA.

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[16] OOPALENGTH and OOPADISBEG are calculated as stated in the variable definitions using the applicable and respective dates given in Audit Analytics. The length of time depends on when the error is discovered and corrected. OOPAs are recorded in the current financial statements and can be recorded any time during the period. OOPAs can be disclosed in an annual filing, quarterly filing, other filing, or press releases. For example, Olympic Steel Inc. recorded an OOPA in 2013 for approximately 16.15% of net income due to an inventory or cost of sales issue. The adjustment period began on 1/1/2013 and the adjustment period ended on 3/31/2013 for an OOPALENGTH = 89 days. The OOPA was disclosed on 2/27/2014 in the 10-K filing yielding an OOPADISBEG = 422 days.

Sample sizes vary in the relevant tables due to availability of data in Audit Analytics on the various properties of OOPA.

OOPAMAT. Table 14 reports the results of the main regressions using OOPAMAT as the dependent variable. Panel A displays that there is no statistically significant association between NAS and OOPAMAT. Panels B through D show that when H2 to H4 relating to clawbacks are investigated using OOPAMAT as the dependent variable, there is no statistically significant association between CLAWBACK and OOPAMAT. The association between CLAWBACK*NAS and OOPAMAT is also not statistically significant (Panel E). These nonfindings show that, regardless of the materiality of OOPAs, firms that purchase greater amounts of NAS are less likely to record OOPAs.

OOPALENGTH. Table 15 reports the results of the regressions using OOPALENGTH as the dependent variable.[17] Panel A reports that there is no statistically significant association between NAS and OOPALENGTH. CLAWBACK, however, is negatively and statistically significantly associated (coef.=-44.189; p=0.007) with OOPALENGTH (Panel B). Firms with clawback provisions report shorter OOPA periods when compared to firms without clawback provisions. This period is the length of time from the OOPA begin date until the OOPA end date (in days). This negative relationship is not detected for firms with clawback provisions and a prior restatement (Panel C), but is detected for firms with clawback provisions and a subsequent restatement (Panel D). This could be an indication that, while management find and corrects the error in a timely

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[17] Tables 15-21 do not show the Stage 1 regression results for each respective H1(Panel A). The NAS variable in Stage 2 of these regressions is the predicted NAS from H1 of the Main Hypotheses Stage 1 (Panel A of Table 6). As regressions containing CLAWBACK are simultaneous treatments effects models, both stages are reported for these regressions.

manner, this may be an effort to conceal such a correction. This could be done in order to dissuade any questioning from the board or auditors, prevent the initiation of a clawback, and/or mitigate investor reactions. These results may also suggest the intention to record a restatement as an OOPA that, in the end, does indeed become a restatement. This relationship is also impacted by the level of NAS showing a significant negative relationship with OOPALENGTH (Panel E). As shown in the results examining the relationship between CLAWBACK and OOPALENGTH, clawback firms have shorter adjustment periods than firms without clawbacks. For clawback firms that purchase greater amounts of NAS, the length of the adjustment period is even shorter.

OOPADISBEG. Table 16 reports the results of the regressions using OOPADISBEG as the dependent variable. The results are similar to those using OOPALENGTH as the dependent variable. There is no significant association between NAS and OOPADISBEG Panel A). CLAWBACK is negatively and statistically significantly (coef.=-50.857; p=0.008) associated with OOPADISBEG (Panel B – Table 16). Firms with clawback provisions disclose OOPA sooner than firms without clawback provisions. This relationship is not detected for firms with clawback provisions and a prior restatement (Panel C), but is detected for firms with clawback provisions and a subsequent restatement (Panel D). This relationship, unlike that shown with OOPALENGTH, is not impacted by the level of NAS as shown by the lack of statistical significance of CLAWBACK*NAS with OOPADISBEG (Panel E). These results further substantiate the results given when using OOPALENGTH as the dependent variable.

OOPA_NEG. Table 17 reports the results of the regressions using OOPA_NEG as the dependent variable. In only one regression is OOPA_NEG is statistically significant

with the test variable. There is a positive and statistically significant (coef.=0.289; p=0.009) association between CLAWBACK*RESTATE$_{t+1}$ and OOPA_NEG (Panel D). Firms with clawback provisions and a subsequent restatement are more likely to report an income-decreasing OOPA. There is no significant association between all remaining test variables and OOPA_NEG (Panels A-C and E).

OOPA_POS. Table 18 reports the results of the main regressions using OOPA_POS as the dependent variable. There is a negative and statistically significant (coef. -0.277; p=0.009) association between CLAWBACK*RESTATE$_{t+1}$ and OOPA_POS (Panel D). Firms with clawback provisions and a subsequent restatement are less likely to report an income-increasing OOPA. There is no significant association between all remaining test variables and OOPA_POS (Panels A-C and D). These findings along with those of OOPA_NEG indicate that clawback firms previously reported greater amounts of income, required a correction in the current period of an income-decreasing adjustment, and then reported a restatement in the future. This provides additional support to the suspicion of management using OOPAs in place of restatements.

OOPAMAT5perc. Table 19 reports the results of the regressions using OOPAMAT5perc as the dependent variable. There is no significant association between NAS and OOPAMAT5perc (Panel A). There is no significant relationship between CLAWBACK and OOPAMAT5perc (Panel B). Further, the remaining test variables do not have a significant relationship with OOPAMAT5perc (Panels C-E).

OOPAMAT10perc. Table 20 reports the results of the regressions using OOPAMAT10perc as the dependent variable. The results are similar to those using OOPAMAT5perc as the dependent variable. There is no significant association between

NAS and OOPAMAT10perc (Panel A). There is no significant relationship between CLAWBACK and OOPAMAT10perc (Panel B). Further, the remaining test variables do not have a significant relationship with OOPAMAT10perc (Panels C-E).

NumOOPA_log. Table 21 reports the results of the regressions using NumOOPA_log as the dependent variable. There is no significant relationship between NAS and NumOOPA_log (Panel A). CLAWBACK is positively and statistically significantly (coef.=0.829; p<0.001) associated with NumOOPA_log (Panel B). Firms with clawback provisions have a greater number of OOPAs reported each year than firms without clawback provisions. This further supports the main findings. This relationship, however, is not detected for firms with clawback provisions and a prior restatement (Panel C) or for firms with clawback provisions and a subsequent restatement (Panel D). The association of CLAWBACK and NumOOPA_log, however, is impacted by the level of NAS as shown by the negative and statistically significant association (coef.=-0.050; p=0.063) of CLAWBACK*NAS with NumOOPA_log (Panel E). Without considering NAS, clawback firms have a positive and statistically significant relationship with the number of OOPAs. With the interaction of NAS, the severity is lessened. Clawback firms that purchase larger amounts of NAS reduce the number of OOPAs recorded each year. This indicates that NAS is beneficial. Auditor independence is not impaired and NAS contributes to improved financial reporting quality.

Other stealth restatements. The focus of this paper is on whether OOPAs are a form of stealth restatement. As such, my main analyses examine OOPAs. However, revision restatements can also be a type of stealth restatement. Therefore, additional analyses are performed using the dependent variable of revision restatements

(REVISION) in similar fashion and measurement as the OOPA variables utilized in the main analyses. I also combine the two measures of OOPAs and revision restatements as a third major class of the dependent variable (REVOOPA).

REVISION. Table 22 reports the results of the regressions using REVISION as the dependent variable.[18] There is a negative and statistically significant (coef.=-0.962; p=0.085) association between NAS and REVISION (Panel A). Firms that purchase greater amounts of NAS are less likely to report a revision restatement. CLAWBACK is positively and statistically significantly (coef.=0.029; p=0.02) associated with REVISION (Panel B). Firms with clawback provisions are more likely to report a revision restatement. This relationship is detected for firms with clawback provisions and a prior restatement (Panel C) as well as for firms with clawback provisions and a subsequent restatement (Panel D). These results concur with the main results and provide further substantiation of those results when examining other stealth restatements. The association of CLAWBACK and RESTATEMENT is also impacted by the level of NAS showing a significant negative relationship with REVISION (Panel E). Clawback firms purchasing greater amounts of NAS are less likely to record revision restatements. This is further evidence to support the position that NAS does not impair auditor independence but provides knowledge spillover to help improve financial reporting quality.

REVOOPA. Table 23 reports the results of the regressions using REVOOPA as the dependent variable. NAS is negatively and statistically significantly coef.=-1.490; p=0.002) associated with REVOOPA (Panel A). Firms that purchase greater amounts of

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[18] Similar to the tables referenced in footnote #17, Tables 22-24 do not show the Stage 1 regression results for each respective H1(Panel A). The NAS variable in Stage 2 of these regressions is the predicted NAS from H1 of the Main Hypotheses Stage 1 (Panel A of Table 14). As regressions containing CLAWBACK are simultaneous treatments effects models, both stages are reported for these regressions.

NAS are less likely to report a type of stealth restatement (revision restatement and/or

OOPA). CLAWBACK is positively and statistically significantly (coef.=0.501; p<0.001)

associated with REVOOPA (Panel B). Firms with clawback provisions are more likely to

report a type of stealth restatement than firms without clawback provisions. This

relationship is detected for firms with clawback provisions and a prior restatement (Panel

C) as well as for firms with clawback provisions and a subsequent restatement (Panel D).

The association of CLAWBACK and REVOOPA, however, is not impacted by the level

of NAS as shown by the lack of statistical significance of CLAWBACK*NAS with

REVOOPA (Panel E). Once again, these results confirm the main results.

Restatements. The trend in restatements shows that these are leveling off with a

slight increase during the time period under study. In addition to the existence of

OOPAs, I also investigate firms with a restatement that subsequently have an OOPA but

no restatement (RESTATE_OOPA) to help ensure a likely restatement is not skewing the

results. Table 24 reports the results of the main regressions (H1, H2, & H5) using

RESTATE_OOPA as the dependent variable. NAS is negatively and significantly

(coef.=-4.152; p=0.04) associated with RESTATE_OOPA (Panel A). Firms that purchase

greater amounts of NAS are less likely to report an OOPA subsequent to reporting a

restatement while reporting no restatement in the current year. CLAWBACK is positively

and statistically significantly (coef.=0.085; p<0.001) associated with RESTATE_OOPA

(Panel B). Firms with clawback provisions are more likely to report an OOPA subsequent

to reporting a restatement while reporting no restatement in the current year than firms

without clawback provisions. The association of CLAWBACK and RESTATE_OOPA,

however, is not impacted by the level of NAS as shown by the lack of statistical

significance of CLAWBACK*NAS with RESTATE_OOPA (Panel C).

Table 6
Main Hypotheses

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and NAS				H2: Regression of OOPAEXIST and CLAWBACK			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
NAS			-1.895	-2.530 ***				
CLAWBACK							0.302	50.180 ***
AUDITFEE	0.710	13.980 ***	1.876	3.460 ***			0.018	6.080 ***
ICW	-0.237	-1.670 *	0.327	1.410 *	0.071	0.92	0.052	3.970 ***
GCM	0.004	0.020						
BIG4	1.132	11.690 ***	3.232	3.750 ***	-0.087	-2.31 **	0.028	6.990 ***
SPECIALIST			0.244	3.290 ***			0.012	3.330 ***
INITIAL	-0.368	4.330 ***	-0.416	-1.410			0.008	1.680 *
BOARDIND	0.538	1.710 **	1.415	2.450 ***	0.030	0.19	0.012	0.610
BOARDMEET	0.003	1.350 *	0.007	2.420 ***	0.001	0.85	0.000	-0.720
BOARDSIZE	0.036	2.970 ***	0.062	1.840 **	0.011	1.54	-0.001	-1.190
ACSIZE	0.031	1.410	0.076	1.780 **	0.023	1.67 *	0.000	-0.040
ACEXPERT	-0.199	-2.350 **	-0.316	-1.590 *	-0.016	-0.34	0.005	0.730
CEOTENURE			-0.006	-0.170	-0.014	-1.07	0.001	0.550
CEOCHAIR	-0.144	-2.360 **	-0.560	-3.730 ***	-0.052	-1.52	-0.010	-2.230 **
RESTATE$_{t-1}$			0.609	7.090 ***	0.024	0.62	0.031	5.270 ***
ASSETS	0.426	14.110 ***	0.582	1.810 *	0.085	7.80 ***	-0.012	-6.520 ***
LEVERAGE	0.200	2.150 **	0.630	3.510 ***	0.122	2.32 **	0.010	1.520 *
MTB	0.000	-19.420 ***	0.000	-2.340 ***	0.000	-0.44	0.000	1.530
SALEGR	0.005	1.940 **	0.007	1.560 *	-0.001	-1.34 *	0.000	-0.740
LOSS	-0.157	-2.250 **	-0.277	-1.720 **	0.093	2.71 ***	-0.003	-0.650
ROA	0.123	0.720	0.588	2.990 ***	-0.013	-0.22	0.015	2.270 **
FINANCE	0.112	2.380 ***	0.229	2.020 **			0.000	-0.120
LITIGATION	-0.153	-2.290 **	-0.224	-1.570 *	-0.033	-0.92	0.004	0.850
SUIT			-0.162	-0.500	0.266	2.32 **	-0.012	-0.700
AGE					-0.015	-0.70		
MERGACQ	0.262	5.250 ***	0.540	2.580 ***	0.057	2.11 **	-0.004	-1.090
SEGBUS					0.045	2.64 ***		
FOREIGN	0.386	7.480 ***	0.761	2.560 **	-0.072	-2.50 **	0.004	0.960
RESTRUCTURE	0.246	4.650 ***	0.679	3.550 ***			0.010	2.830 ***
BLOCK	-0.276	-1.950 **						
Constant	-8.583	-16.120 ***	-24.480	-3.730 ***	-3.930	-11.10 ***	0.051	0.920
Lambda							-0.161	-26.750 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	213.02 ***							
R^2	24.42%							
Wald Chi-square			536.02 ***				2647.94 ***	
Pseudo-R^2			8.45%					
Log Pseudo-Likelihood			-3357.42				-1522.15	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS variable in Stage 2 is the predicted NAS from Stage 1

Table 6 (cont.)
Main Hypotheses

	Panel C				Panel D			
	H3: Regression of OOPAEXIST and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPAEXIST and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							0.033	1.290 *
CLAWBACK*RESTATE$_{t-1}$			0.030	1.310 *				
CLAWBACK			0.297	43.970 ***			0.298	43.270 ***
RESTATE$_{t+1}$							0.027	4.970 ***
AUDITFEE			0.018	6.060 ***			0.018	6.080 ***
ICW	0.072	0.930	0.052	3.950 ***	0.057	0.710	0.057	4.330 ***
BIG4	-0.087	-2.320 **	0.028	7.020 ***	-0.098	-2.540 **	0.031	7.690 ***
SPECIALIST			0.012	3.330 ***			0.012	3.290 ***
INITIAL			0.008	1.690 *			0.009	1.760 *
BOARDIND	0.029	0.180	0.012	0.610	-0.025	-0.150	0.010	0.490
BOARDMEET	0.001	0.850	0.000	-0.730	0.001	0.790	0.000	-0.620
BOARDSIZE	0.010	1.520	-0.001	-1.220	0.013	1.830 *	-0.001	-1.520
ACSIZE	0.023	1.690 *	0.000	0.000	0.026	1.860 *	0.001	0.280
ACEXPERT	-0.016	-0.350	0.004	0.700	-0.009	-0.200	0.006	0.870
CEOTENURE	-0.014	-1.060	0.001	0.550	-0.014	-1.040	0.001	0.500
CEOCHAIR	-0.051	-1.500	-0.010	-2.200 **	-0.055	-1.550	-0.009	-2.010 **
RESTATE$_{t-1}$	0.007	0.200	0.028	4.770 ***	0.082	2.280 **		
ASSETS	0.084	7.780 ***	-0.012	-6.510 ***	0.087	7.730 ***	-0.013	-6.590 ***
LEVERAGE	0.123	2.340 **	0.010	1.550 *	0.127	2.330 **	0.010	1.500 *
MTB	0.000	-0.470	0.000	1.520	0.000	-0.410	0.000	1.560
SALEGR	-0.001	-1.330 *	0.000	-0.730	0.000	-0.320	0.000	0.090
LOSS	0.093	2.710 ***	-0.003	-0.640	0.087	2.410 **	-0.003	-0.620
ROA	-0.012	-0.200	0.015	2.290 **	-0.013	-0.210	0.017	2.410 **
FINANCE			0.000	-0.100			-0.001	-0.420
LITIGATION	-0.032	-0.910	0.004	0.860	-0.026	-0.710	0.003	0.660
SUIT	0.266	2.310 **	-0.012	-0.720	0.267	2.220 **	-0.008	-0.480
AGE	-0.015	-0.720			-0.022	-1.010		
MERGACQ	0.057	2.110 **	-0.004	-1.090	0.046	1.650 *	-0.004	-1.060
SEGBUS	0.045	2.640 ***			0.041	2.370 ***		
FOREIGN	-0.072	-2.510 **	0.004	0.980	-0.073	-2.480 **	0.003	0.840
RESTRUCTURE			0.010	2.850 ***			0.013	3.460 ***
Constant	-3.911	-11.090 ***	0.053	0.960	-3.888	-10.810 ***	0.058	1.020
Lambda			-0.162	-26.925 ***			-0.162	-26.582 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations			18,302				17,564	
Wald Chi-square			2646.08 ***				2545.17 ***	
Log Pseudo-Likelihood			-1519.14				-1352.48	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 6 (cont.)
Main Hypotheses

	Stage 1		Stage 2		
	Coeff.	z-stat	Coeff.	z-stat	
CLAWBACK*NAS			0.002	0.450	
CLAWBACK			0.301	47.330	***
NAS			-0.054	-1.670	*
AUDITFEE			0.057	2.400	**
ICW	0.0701	0.910	0.039	2.540	***
BIG4	-0.0892	-2.290 **	0.089	2.410	**
SPECIALIST			0.012	3.350	***
INITIAL			-0.012	-0.910	
BOARDIND	0.0287	0.180	0.036	1.520	*
BOARDMEET	0.0009	0.850	0.000	0.520	
BOARDSIZE	0.0104	1.520	0.001	0.570	
ACSIZE	0.0229	1.680 *	0.002	0.810	
ACEXPERT	-0.0155	-0.340	-0.006	-0.680	
CEOTENURE	-0.0139	-1.070	0.001	0.540	
CEOCHAIR	-0.0523	-1.520	-0.017	-2.720	***
RESTATE$_{t-1}$	0.0237	0.610	0.031	5.230	***
ASSETS	0.0842	8.100 ***	0.011	0.790	
LEVERAGE	0.1203	2.270 **	0.020	2.240	**
MTB	-3E-05	-0.420	0.000	-1.520	
SALEGR	-0.0012	-1.330 *	0.000	1.160	
LOSS	0.0936	2.710 ***	-0.012	-1.660	*
ROA	-0.0138	-0.220	0.021	2.840	***
FINANCE			0.006	1.210	
LITIGATION	-0.0319	-0.900	-0.004	-0.650	
SUIT	0.2659	2.310 **	-0.012	-0.690	
AGE	-0.0143	-0.690			
MERGACQ	0.0565	2.080 **	0.010	1.120	
SEGBUS	0.045	2.660 ***			
FOREIGN	-0.0725	-2.530 **	0.025	1.870	*
RESTRUCTURE			0.023	2.730	***
Constant	-3.912	-11.330 ***	-1.024	-1.580	
Lambda			-0.161	-26.767	***
Year Controls	Included		Included		
Industry Controls	Included		Included		
Observations			18,302		
Wald Chi-square			2647.40	***	
Pseudo-R^2			-1520.36		

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.
The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.
NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate multicollinearity.

Panel E — H5: Regression of OOPAEXIST and CLAWBACK*NAS

Table 7
Supplemental Analyses: TAXNAS

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and TAXNAS				H5: Regression of OOPAEXIST and CLAWBACK*TAXNAS			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*TAXNAS							0.000	0.130
CLAWBACK							0.302	47.780 ***
TAXNAS			-0.461	-2.250 **			-0.014	-1.550
AUDITFEE	0.813	11.560 ***	0.904	4.860 ***			0.029	3.590 ***
ICW	-0.125	-0.660	0.717	4.950 ***	0.071	0.920	0.050	3.800 ***
GCM	-0.397	-1.120						
BIG4	2.117	17.810 ***	2.068	4.420 ***	-0.088	-2.240 **	0.057	2.960 ***
SPECIALIST			0.244	3.290 ***			0.012	3.350 ***
INITIAL	-0.465	-4.120 ***	0.066	0.460			0.002	0.260
BOARDIND	0.271	0.610	0.538	1.130	0.030	0.180	0.011	0.600
BOARDMEET	0.002	1.270	0.002	1.240	0.001	0.850	0.000	-0.430
BOARDSIZE	-0.025	-1.330 *	-0.017	-0.860	0.010	1.530	-0.001	-1.520
ACSIZE	0.121	3.400 ***	0.073	1.660 *	0.023	1.680 *	0.002	0.790
ACEXPERT	0.136	1.070	0.125	0.960	-0.016	-0.350	0.007	1.010
CEOTENURE			-0.006	-0.170	-0.014	-1.080	0.001	0.530
CEOCHAIR	-0.026	-0.280	-0.301	-2.850 ***	-0.053	-1.530	-0.010	-2.250 **
RESTATE$_{t-1}$			0.611	7.110 ***	0.024	0.620	0.031	5.240 ***
ASSETS	0.381	8.710 ***	-0.048	-0.540	0.085	8.070 ***	-0.007	-1.700 *
LEVERAGE	-0.319	-2.160 **	0.098	0.650	0.122	2.300 **	0.004	0.570
MTB	0.000	-9.590 ***	0.000	-0.980	0.000	-0.420	0.000	-0.650
SALEGR	0.003	0.910	-0.001	-0.450	-0.001	-1.330 *	0.000	-0.250
LOSS	-0.431	-4.290 ***	-0.176	-1.250	0.094	2.710 ***	-0.009	-1.480
ROA	0.085	0.370	0.428	2.370 **	-0.014	-0.230	0.016	2.480 **
FINANCE	0.137	1.930 **	0.077	0.990			0.002	0.480
LITIGATION	-0.194	-2.030 **	-0.025	-0.240	-0.032	-0.900	0.001	0.290
SUIT			-0.170	-0.520	0.266	2.310 **	-0.012	-0.690
AGE					-0.014	-0.680		
MERGACQ	0.232	3.080 ***	0.151	1.690 **	0.057	2.100 **	-0.001	-0.150
SEGBUS					0.045	2.660 ***		
FOREIGN	0.877	11.150 ***	0.433	2.240 **	-0.072	-2.520 **	0.016	1.810 *
RESTRUCTURE	0.465	5.650 ***	0.429	3.690 ***			0.016	3.120 ***
BLOCK	-0.996	-4.800 ***						
Constant	-10.773	-13.070 ***	-13.171	-5.350 ***	-3.930	-11.320 ***	-0.224	-1.200
Lambda							-0.161	-26.772 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	135.70 ***							
R^2	17.49%							
Wald Chi-square			534.70 ***				2650.54 ***	
Pseudo-R^2			8.43%					
Log Pseudo-Likelihood			-3358.08				-1520.81	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

For H1, TAXNAS variable in Stage 2 is the predicted TAXNAS from Stage 1

For H5, TAXNAS is mean-centered and used in the calculation of interaction term CLAWBACK*TAXNAS to mitigate multicollinearity.

Table 8
Supplemental Analyses: AUDITNAS

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and AUDITNAS				H5: Regression of OOPAEXIST and CLAWBACK*AUDITNAS			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*AUDITNAS							0.002	0.700
CLAWBACK							0.301	47.820 ***
AUDITNAS			0.009	0.030			0.005	0.290
AUDITFEE	0.859	13.570 ***	0.516	1.700 *			0.013	0.920
ICW	-0.083	-0.430	0.778	5.470 ***	0.070	0.900	0.052	4.000 ***
GCM	0.821	2.410 **						
BIG4	-0.734	-6.410 ***	1.119	3.550 ***	-0.087	-2.310 **	0.032	2.440 **
SPECIALIST			0.239	3.230 ***			0.012	3.330 ***
INITIAL	-0.438	-3.980 ***	0.280	1.510			0.010	1.180
BOARDIND	1.175	2.650 ***	0.547	0.840	0.027	0.170	0.005	0.190
BOARDMEET	0.004	2.080 **	0.001	0.420	0.001	0.850	0.000	-0.780
BOARDSIZE	0.071	3.690 ***	-0.008	-0.240	0.010	1.530	-0.001	-0.980
ACSIZE	0.137	4.090 ***	0.012	0.200	0.023	1.670 *	-0.001	-0.260
ACEXPERT	-0.303	-2.400 **	0.065	0.390	-0.015	-0.330	0.006	0.760
CEOTENURE			-0.005	-0.140	-0.014	-1.070	0.001	0.570
CEOCHAIR	0.015	0.160	-0.294	-2.780 ***	-0.052	-1.520	-0.010	-2.220 **
RESTATE$_{t-1}$			0.618	7.190 ***	0.023	0.600	0.031	5.270 ***
ASSETS	0.895	21.650 ***	-0.239	-0.750	0.083	8.080 ***	-0.017	-1.100
LEVERAGE	0.844	6.080 ***	0.276	0.780	0.120	2.260 **	0.005	0.300
MTB	0.000	-6.210 ***	0.000	0.400	0.000	-0.430	0.000	0.620
SALEGR	0.005	1.870 **	-0.002	-0.700	-0.001	-1.330 *	0.000	-0.620
LOSS	-0.118	-1.210	0.040	0.390	0.093	2.700 ***	-0.002	-0.480
ROA	0.040	0.200	0.388	2.200 **	-0.013	-0.210	0.015	2.410 **
FINANCE	0.213	3.050 ***	0.010	0.090			-0.001	-0.310
LITIGATION	-0.368	-3.730 ***	0.059	0.360	-0.032	-0.910	0.006	0.730
SUIT			-0.174	-0.530	0.266	2.310 **	-0.012	-0.700
AGE					-0.015	-0.710		
MERGACQ	0.613	8.340 ***	0.033	0.140	0.056	2.070 **	-0.007	-0.640
SEGBUS					0.045	2.640 ***		
FOREIGN	0.260	3.250 ***	0.029	0.240	-0.072	-2.530 **	0.003	0.410
RESTRUCTURE	0.341	4.200 ***	0.222	1.510			0.008	1.180
BLOCK	0.190	0.920						
Constant	-24.307	-27.250 ***	-7.801	-0.910	-3.887	-11.280 ***	0.218	0.400
Lambda							-0.161	-26.772 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	256.55 ***							
R^2	24.68%							
Wald Chi-square			530.79 ***				2643.27 ***	
Pseudo-R^2			8.36%					
Log Pseudo-Likelihood			-3360.69				-1521.32	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

For H1, AUDITNAS variable in Stage 2 is the predicted AUDITNAS from Stage 1

For H5, AUDITNAS is mean-centered and used in the calculation of interaction term CLAWBACK*AUDITNAS to mitigate multicollinearity.

Table 9

Supplemental Analyses: OTHERNAS

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and OTHERNAS				H5: Regression of OOPAEXIST and CLAWBACK*OTHERNAS			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*OTHERNAS							0.004	0.680
CLAWBACK							0.300	44.070 ***
OTHERNAS			-0.703	-2.700 ***			-0.019	-1.740 *
AUDITFEE	0.871	11.590 ***	1.144	4.730 ***			0.034	3.350 ***
ICW	0.006	0.030	0.783	5.540 ***	0.069	0.900	0.052	3.990 ***
GCM	0.410	1.410						
BIG4	0.725	7.840 ***	1.596	6.180 ***	-0.090	-2.340 **	0.041	4.720 ***
SPECIALIST			0.244	3.290 ***			0.012	3.340 ***
INITIAL	0.142	1.460	0.383	3.380 ***			0.011	2.130 **
BOARDIND	0.072	0.180	0.448	0.930	0.028	0.180	0.009	0.460
BOARDMEET	0.000	0.120	0.001	0.820	0.001	0.850	0.000	-0.640
BOARDSIZE	0.066	3.610 ***	0.041	1.540	0.010	1.510	0.000	0.150
ACSIZE	0.027	0.780	0.036	0.990	0.023	1.670 *	0.000	0.260
ACEXPERT	-0.248	-2.050 **	-0.114	-0.790	-0.015	-0.330	0.000	-0.020
CEOTENURE			-0.006	-0.160	-0.014	-1.070	0.001	0.540
CEOCHAIR	-0.112	-1.210	-0.365	-3.350 ***	-0.052	-1.520	-0.011	-2.540 **
RESTATE$_{t-1}$			0.609	7.080 ***	0.023	0.600	0.031	5.220 ***
ASSETS	0.019	0.440	-0.212	-5.070 ***	0.084	7.970 ***	-0.012	-6.200 ***
LEVERAGE	-0.504	-3.650 ***	-0.089	-0.480	0.121	2.290 **	0.000	0.000
MTB	0.000	-1.700 **	0.000	-0.120	0.000	-0.430	0.000	0.290
SALEGR	-0.002	-0.530	-0.004	-1.480 *	-0.001	-1.330 *	0.000	-1.170
LOSS	-0.108	-1.250	-0.057	-0.540	0.094	2.720 ***	-0.006	-1.120
ROA	-0.343	-2.090 **	0.075	0.360	-0.012	-0.200	0.006	0.810
FINANCE	-0.041	-0.620	-0.012	-0.170			-0.001	-0.320
LITIGATION	0.481	5.240 ***	0.404	2.440 ***	-0.033	-0.940	0.013	1.810 **
SUIT			-0.153	-0.470	0.266	2.310 **	-0.012	-0.680
AGE					-0.015	-0.700		
MERGACQ	0.252	3.570 ***	0.220	2.190 **	0.056	2.060 **	0.001	0.200
SEGBUS					0.045	2.650 ***		
FOREIGN	0.242	2.970 ***	0.202	2.020 **	-0.073	-2.550 **	0.009	1.760 *
RESTRUCTURE	0.043	0.530	0.243	3.120 ***			0.011	2.970 ***
BLOCK	-0.740	-3.930 ***						
Constant	-10.149	-11.470 ***	-15.340	-5.390 ***	-3.901	-11.310 ***	-0.208	-1.280
Lambda							-0.161	-26.791 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	37.12 ***							
R^2	7.52%							
Wald Chi-square			537.31 ***				2637.05 ***	
Pseudo-R^2			8.46%					
Log Pseudo-Likelihood			-3357.06				-1519.95	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

For H1, OTHERNAS variable in Stage 2 is the predicted OTHERNAS from Stage 1

For H5, OTHERNAS is mean-centered and used in the calculation of interaction term CLAWBACK*OTHERNAS to mitigate multicollinearity.

Table 10
Supplemental Analyses: NAS Ratio

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and NAS_TOTALFEES				H5: Regression of OOPAEXIST and CLAWBACK*NASratio			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*NASratio							-0.095	-0.390
CLAWBACK							0.302	49.490 ***
NAS_TOTALFEES			-27.044	-2.690 ***			-0.730	-1.690 *
AUDITFEE	-0.031	-15.480 ***	-0.308	-0.990			-0.005	-0.350
ICW	-0.001	-0.190	0.754	5.320 ***	0.070	0.910	0.051	3.910 ***
GCM	0.009	1.080						
BIG4	0.031	11.100 ***	1.923	5.390 ***	-0.086	-2.220 **	0.050	3.640 ***
SPECIALIST			0.244	3.290 ***			0.012	3.340 ***
INITIAL	-0.001	-0.360	0.255	2.380 **			0.007	1.530
BOARDIND	0.007	0.570	0.576	1.210	0.030	0.180	0.012	0.630
BOARDMEET	0.000	1.420 *	0.006	2.400 **	0.001	0.850	0.000	0.300
BOARDSIZE	-0.001	-1.560 *	-0.027	-1.320	0.010	1.520	-0.002	-1.720 *
ACSIZE	0.000	0.440	0.028	0.780	0.023	1.680 *	0.000	0.180
ACEXPERT	-0.003	-0.970	-0.029	-0.220	-0.016	-0.350	0.002	0.330
CEOTENURE			-0.006	-0.160	-0.014	-1.080	0.001	0.510
CEOCHAIR	0.007	2.830 ***	-0.093	-0.730	-0.052	-1.520	-0.004	-0.780
RESTATE$_{t-1}$			0.609	7.080 ***	0.024	0.620	0.031	5.230 ***
ASSETS	0.026	21.400 ***	0.477	1.800 *	0.086	8.170 ***	0.007	0.630
LEVERAGE	-0.008	-2.120 **	0.052	0.340	0.121	2.300 **	0.004	0.500
MTB	0.000	-8.470 ***	0.000	-1.120	0.000	-0.420	0.000	-0.620
SALEGR	0.000	2.930 ***	0.001	0.200	-0.001	-1.340 *	0.000	0.230
LOSS	-0.008	-3.130 ***	-0.194	-1.470	0.093	2.700 ***	-0.009	-1.560
ROA	0.000	-0.070	0.313	1.720 *	-0.014	-0.230	0.012	1.920 *
FINANCE	0.011	6.020 ***	0.319	2.350 **			0.008	1.380
LITIGATION	-0.001	-0.390	0.038	0.400	-0.032	-0.900	0.003	0.730
SUIT			-0.154	-0.470	0.265	2.310 **	-0.012	-0.690
AGE					-0.014	-0.680		
MERGACQ	0.017	8.440 ***	0.491	2.690 ***	0.058	2.140 **	0.008	1.030
SEGBUS					0.045	2.640 ***		
FOREIGN	0.012	5.520 ***	0.367	2.500 **	-0.071	-2.480 **	0.013	1.930 *
RESTRUCTURE	0.017	7.750 ***	0.675	3.730 ***			0.022	2.830 ***
BLOCK	-0.019	-3.620 ***						
Constant	0.033	1.380	-7.305	-8.310 ***	-3.953	-11.310 ***	-0.041	-0.530
Lambda							-0.161	-26.734 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	44.49 ***							
R^2	7.60%							
Wald Chi-square			537.13 ***				2652.77 ***	
Pseudo-R^2			8.45%					
Log Pseudo-Likelihood			-3357.08				-1520.40	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

For H1, NAS_TOTALFEES variable in Stage 2 is the predicted NAS_TOTALFEES from Stage 1

For H5, NAS_TOTALFEES is mean-centered and used in the calculation of interaction term
   CLAWBACK*NASratio to mitigate multicollinearity.

Table 11
Supplemental Analyses: TAXNAS Ratio

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and TAXNAS_TOTALFEES				H5: Regression of OOPAEXIST and CLAWBACK*TAXNASratio			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*TAXNASratio							-0.501	-1.520
CLAWBACK							0.303	49.940 ***
TAXNAS_TOTALFEES			-44.315	-2.670 ***			-1.179	-1.650 *
AUDITFEE	-0.015	-9.120 ***	-0.126	-0.510			0.000	-0.020
ICW	-0.008	-2.410 **	0.434	2.240 **	0.068	0.880	0.042	2.960 ***
GCM	0.004	0.720						
BIG4	0.038	18.610 ***	2.760	4.250 ***	-0.076	-1.960 *	0.073	2.690 ***
SPECIALIST			0.244	3.290 ***			0.012	3.310 ***
INITIAL	-0.003	-1.310	0.159	1.380			0.005	0.910
BOARDIND	-0.006	-0.680	0.110	0.220	0.025	0.160	-0.001	-0.040
BOARDMEET	0.000	-1.000	-0.001	-0.450	0.001	0.850	0.000	-1.060
BOARDSIZE	-0.001	-3.060 ***	-0.059	-2.190 **	0.010	1.460	-0.003	-2.080 **
ACSIZE	0.000	0.340	0.028	0.770	0.023	1.700 *	0.000	0.200
ACEXPERT	0.004	1.360	0.223	1.600 *	-0.015	-0.330	0.009	1.330 *
CEOTENURE			-0.006	-0.160	-0.014	-1.090	0.001	0.490
CEOCHAIR	0.004	2.200 **	-0.095	-0.740	-0.052	-1.510	-0.004	-0.780
RESTATE$_{t-1}$			0.609	7.080 ***	0.024	0.610	0.031	5.220 ***
ASSETS	0.009	9.360 ***	0.172	1.110	0.086	7.910 ***	-0.001	-0.140
LEVERAGE	-0.017	-5.910 ***	-0.477	-1.530 *	0.117	2.220 **	-0.011	-0.800
MTB	0.000	-3.290 ***	0.000	-0.350	0.000	-0.400	0.000	0.100
SALEGR	0.000	1.080	-0.001	-0.420	-0.001	-1.350 *	0.000	-0.260
LOSS	-0.012	-6.550 ***	-0.533	-2.250 **	0.089	2.600 ***	-0.019	-1.810 *
ROA	0.005	1.120	0.557	2.880 ***	-0.015	-0.240	0.019	2.650 ***
FINANCE	0.004	2.430 ***	0.173	1.830 *			0.004	1.000
LITIGATION	-0.008	-3.840 ***	-0.287	-1.840 **	-0.035	-0.990	-0.006	-0.810
SUIT			-0.156	-0.480	0.265	2.300 **	-0.012	-0.700
AGE					-0.014	-0.680		
MERGACQ	0.001	0.990	0.110	1.370 *	0.057	2.100 **	-0.002	-0.560
SEGBUS					0.044	2.600 ***		
FOREIGN	0.013	7.210 ***	0.605	2.660 ***	-0.068	-2.380 **	0.020	1.950 *
RESTRUCTURE	0.010	5.710 ***	0.651	3.740 ***			0.022	2.890 ***
BLOCK	-0.012	-2.940 ***						
Constant	0.140	7.000 ***	-2.011	-0.840	-3.938	-11.120 ***	0.117	1.730 *
Lambda							-0.161	0.006 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	29.39 ***							
R^2	5.12%							
Wald Chi-square			536.92 ***				2646.27 ***	
Pseudo-R^2			8.45%					
Log Pseudo-Likelihood			-3357.13				-1517.69	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

For H1, TAXNAS_TOTALFEES variable in Stage 2 is the predicted TAXNAS_TOTALFEES from Stage 1

For H5, TAXNAS_TOTALFEES is mean-centered and used in the calculation of interaction term
CLAWBACK*TAXNASratio to mitigate multicollinearity.

Table 12
Supplemental Analyses: AUDITNAS Ratio

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and AUDITNAS_TOTALFEES				H5: Regression of OOPAEXIST and CLAWBACK*AUDITNASratio			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*AUDITNASratio							0.283	0.760
CLAWBACK							0.301	49.600 ***
AUDITNAS_TOTALFEES			-183.234	-2.400 **			-4.053	-1.440
AUDITFEE	-0.013	-10.440 ***	-1.858	-1.870 *			-0.034	-0.940
ICW	0.004	1.500	1.606	4.310 ***	0.070	0.900	0.070	3.810 ***
GCM	0.003	0.660						
BIG4	-0.003	-1.910 **	0.486	1.570	-0.087	-2.310 **	0.014	1.370
SPECIALIST			0.242	3.260 ***			0.012	3.320 ***
INITIAL	-0.001	-0.600	0.086	0.650			0.004	0.670
BOARDIND	0.009	1.230	2.025	2.640 ***	0.031	0.190	0.044	1.510 *
BOARDMEET	0.000	2.050 **	0.034	2.440 **	0.001	0.850	0.001	1.240
BOARDSIZE	0.000	1.470 *	0.084	1.960 **	0.010	1.530	0.001	0.540
ACSIZE	0.000	0.020	0.017	0.490	0.023	1.680 *	0.000	0.000
ACEXPERT	-0.004	-1.730 *	-0.609	-1.970 **	-0.015	-0.330	-0.010	-0.830
CEOTENURE			-0.005	-0.150	-0.014	-1.070	0.001	0.560
CEOCHAIR	0.004	2.380 **	0.404	1.310	-0.053	-1.550	0.006	0.490
RESTATE$_{t-1}$			0.610	7.090 ***	0.024	0.620	0.031	5.240 ***
ASSETS	0.016	20.220 ***	2.619	2.200 **	0.083	8.040 ***	0.050	1.150
LEVERAGE	0.007	3.310 ***	1.615	2.850 ***	0.119	2.250 **	0.039	1.780 **
MTB	0.000	-7.700 ***	0.000	-2.080 **	0.000	-0.430	0.000	-1.160
SALEGR	0.000	2.570 ***	0.010	1.590 *	-0.001	-1.340 *	0.000	0.930
LOSS	0.004	2.830 ***	0.837	2.400 **	0.093	2.700 ***	0.014	1.100
ROA	-0.006	-1.800 **	-0.807	-1.630	-0.012	-0.200	-0.012	-0.630
FINANCE	0.007	6.260 ***	1.330	2.400 **			0.029	1.400
LITIGATION	0.006	3.830 ***	1.143	2.440 ***	-0.034	-0.950	0.028	1.580 *
SUIT			-0.146	-0.450	0.266	2.310 **	-0.012	-0.680
AGE					-0.014	-0.690		
MERGACQ	0.012	9.930 ***	2.258	2.430 ***	0.055	2.030 **	0.045	1.310 *
SEGBUS					0.045	2.650 ***		
FOREIGN	-0.001	-0.690	-0.140	-1.330	-0.071	-2.490 **	0.000	0.030
RESTRUCTURE	0.007	4.690 ***	1.411	2.830 ***			0.036	1.950 *
BLOCK	-0.002	-0.620						
Constant	-0.120	-9.050 ***	-30.219	-3.250 ***	-3.892	-11.230 ***	-0.663	-1.330
Lambda							-0.1613	-26.7 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	47.72 ***							
R^2	8.74%							
Wald Chi-square			537.25 ***				2640.34 ***	
Pseudo-R^2			8.44%					
Log Pseudo-Likelihood			-3357.47				-1520.17	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

For H1, AUDITNAS_TOTALFEES variable in Stage 2 is the predicted AUDITNAS_TOTALFEES from Stage 1

For H5, AUDITNAS_TOTALFEES is mean-centered and used in the calculation of interaction term
   CLAWBACK*AUDITNASratio to mitigate multicollinearity.

Table 13

Supplemental Analyses: OTHERNAS Ratio

	Panel A				Panel B			
	H1: Regression of OOPAEXIST and OTHERNAS_TOTALFEES				H5: Regression of OOPAEXIST and CLAWBACK*OTHERNASratio			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*OTHERNASratio							-0.027	-0.010
CLAWBACK							0.302	49.900 ***
OTHERNAS_TOTALFEES			-111.553	-2.660 ***			-3.102	-1.700 *
AUDITFEE	-0.003	-3.940 ***	0.208	1.590			0.009	1.580
ICW	0.003	1.590	1.061	6.090 ***	0.071	0.920	0.060	4.330 ***
GCM	0.001	0.570						
BIG4	-0.003	-2.840 ***	0.765	3.550 ***	-0.087	-2.320 **	0.018	2.670 ***
SPECIALIST			0.244	3.290 ***			0.012	3.340 ***
INITIAL	0.003	2.770 ***	0.586	3.730 ***			0.017	2.420 **
BOARDIND	0.004	1.170	0.836	1.720 **	0.031	0.190	0.019	0.990
BOARDMEET	0.000	0.720	0.004	2.060 **	0.001	0.850	0.000	0.000
BOARDSIZE	0.000	-1.000	-0.023	-1.150	0.010	1.540	-0.002	-1.650 *
ACSIZE	0.000	0.470	0.032	0.890	0.023	1.680 *	0.000	0.240
ACEXPERT	-0.003	-3.660 ***	-0.312	-1.620 *	-0.016	-0.350	-0.006	-0.650
CEOTENURE			-0.006	-0.170	-0.014	-1.080	0.001	0.530
CEOCHAIR	-0.001	-1.200	-0.380	-3.430 ***	-0.053	-1.530	-0.012	-2.620 ***
RESTATE$_{t-1}$			0.609	7.080 ***	0.024	0.620	0.031	5.230 ***
ASSETS	0.001	3.470 ***	-0.062	-0.840	0.085	7.820 ***	-0.007	-2.290 **
LEVERAGE	0.001	0.860	0.392	3.080 ***	0.121	2.310 **	0.013	1.910 **
MTB	0.000	-2.430 ***	0.000	-0.140	0.000	-0.420	0.000	0.250
SALEGR	0.000	1.330 *	-0.001	-0.380	-0.001	-1.340 *	0.000	-0.220
LOSS	0.000	0.390	0.052	0.520	0.094	2.720 ***	-0.003	-0.570
ROA	0.001	0.380	0.395	2.180 **	-0.014	-0.220	0.015	2.320 **
FINANCE	0.000	0.810	0.067	0.890			0.001	0.370
LITIGATION	0.001	1.520	0.198	1.760 **	-0.032	-0.900	0.008	1.500 *
SUIT			-0.157	-0.480	0.266	2.310 **	-0.012	-0.680
AGE					-0.014	-0.680		
MERGACQ	0.003	4.980 ***	0.388	2.590 ***	0.057	2.160 **	0.006	0.850
SEGBUS					0.045	2.650 ***		
FOREIGN	0.001	0.800	0.089	1.110	-0.072	-2.500 **	0.005	1.340
RESTRUCTURE	0.001	1.240	0.305	3.710 ***			0.012	3.280 ***
BLOCK	-0.005	-2.820 ***						
Constant	0.011	1.930 *	-6.977	-7.560 ***	-3.938	-11.150 ***	0.047	0.850
Lambda							-0.161	-26.720 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations	20,332		20,332				18,302	
F-stat	5.14 ***							
R^2	1.28%							
Wald Chi-square			536.81 ***				2648.41 ***	
Log Pseudo-Likelihood			-3357.16				-1520.62	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

For H1, OTHERNAS_TOTALFEES variable in Stage 2 is the predicted OTHERNAS_TOTALFEES from Stage 1

For H5, OTHERNAS_TOTALFEES is mean-centered and used in the calculation of interaction term
  CLAWBACK*OTHERNASratio to mitigate multicollinearity.

Table 14

Supplemental Analyses: OOPAMAT

	Panel A				Panel B			
	H1: Regression of OOPAMAT and NAS				H2: Regression of OOPAMAT and CLAWBACK			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK							-0.003	-0.120
NAS			0.022	1.060				
AUDITFEE	0.627	3.170 ***	-0.043	-2.400 **			-0.040	-2.880 ***
ICW	0.069	0.200	0.003	0.100	0.292	1.440 *	0.010	0.320
GCM	2.089	2.890 ***						
BIG4	-0.008	-0.010	0.045	2.050 **	-0.103	-0.270	0.051	2.220 **
SPECIALIST			0.007	0.520			0.009	0.660
INITIAL	-0.337	-0.840	0.011	0.520			0.013	0.580
BOARDIND	1.178	0.820	-0.003	-0.040	-0.872	-1.000	0.024	0.290
BOARDMEET	-0.037	-1.410 *	0.001	0.450	0.011	0.790	0.001	0.290
BOARDSIZE	0.001	0.010	0.004	1.220	-0.018	-0.550	0.005	1.310
ACSIZE	-0.002	-0.020	-0.003	-0.600	0.129	2.140 **	-0.002	-0.420
ACEXPERT	-0.166	-0.460	0.016	0.740	-0.032	-0.140	0.011	0.500
CEOTENURE			-0.010	-1.890 **	0.004	0.070	-0.011	-1.920 **
CEOCHAIR	-0.576	-1.970 *	-0.010	-0.680	-0.119	-0.670	-0.024	-2.090 **
RESTATE$_{t-1}$			0.009	0.620	0.004	0.030	0.009	0.600
ASSETS	0.457	3.660 ***	-0.006	-0.480	0.185	3.830 ***	0.008	1.010
LEVERAGE	0.872	2.410 **	0.000	0.010	0.620	2.340 **	0.032	1.380 *
MTB	-0.001	-0.210	0.000	-1.940 *	0.000	-0.500	0.000	-2.380 **
SALEGR	-0.003	-0.290	0.000	-0.170	-0.388	-1.840 **	-0.001	-0.820
LOSS	-0.463	-1.630 *	0.137	3.720 ***	-0.148	-0.830	0.122	3.910 ***
ROA	1.111	0.990	0.215	3.010 ***	-0.365	-0.550	0.230	3.210 ***
FINANCE	-0.055	-0.280	-0.017	-1.200			-0.016	-1.140
LITIGATION	-0.027	-0.090	-0.029	-2.070 **	0.224	1.360	-0.029	-2.060 **
SUIT			0.094	0.660	1.049	2.350 **	0.096	0.710
AGE					-0.074	-0.670		
MERGACQ	0.306	1.450 *	-0.010	-0.790	0.039	0.290	0.002	0.150
SEGBUS					0.057	0.630		
FOREIGN	0.537	2.500 ***	0.008	0.550	-0.275	-2.010 **	0.023	1.530
RESTRUCTURE	0.128	0.560	-0.007	-0.470			-0.006	-0.400
BLOCK	-0.999	-1.640 *						
Constant	-8.142	-3.600 ***	0.590	2.550 **	-4.975	-4.510 ***	0.451	2.940 ***
Lambda							0.011	1.628
Year Controls	Included		Included				Included	
Industry Controls	Included		Included				Included	
Observations	894		767				723	
F-stat			1.73	***				
R^2	27.50%		0					
Wald Chi-square							69.06	***
Log Pseudo-Likelihood							41.66	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS variable in Stage 2 is the predicted NAS from Stage 1

Table 14 (cont.)
Supplemental Analyses: OOPAMAT

	Panel C				Panel D			
	H3: Regression of OOPAMAT and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPAMAT and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							-0.004	-0.090
CLAWBACK*RESTATE$_{t-1}$			-0.041	-0.980				
CLAWBACK			0.011	0.330			-0.008	-0.270
RESTATE$_{t+1}$							0.015	0.990
AUDITFEE			-0.038	-2.840 ***			-0.040	-2.830 ***
ICW	0.292	1.440 *	0.010	0.320	0.373	1.800 **	0.016	0.490
BIG4	-0.103	-0.270	0.049	2.100 **	0.098	0.200	0.057	2.350 **
SPECIALIST			0.009	0.660			0.006	0.450
INITIAL			0.013	0.580			0.018	0.770
BOARDIND	-0.872	-1.000	0.023	0.280	-0.821	-0.920	0.065	0.800
BOARDMEET	0.011	0.790	0.001	0.290	0.013	0.850	0.001	0.440
BOARDSIZE	-0.018	-0.550	0.005	1.350	-0.018	-0.530	0.004	1.120
ACSIZE	0.129	2.140 **	-0.002	-0.420	0.144	2.350 **	0.000	-0.100
ACEXPERT	-0.033	-0.140	0.011	0.500	0.015	0.060	0.015	0.680
CEOTENURE	0.004	0.070	-0.011	-1.960 **	0.022	0.330	-0.011	-1.760 **
CEOCHAIR	-0.119	-0.660	-0.025	-2.130 **	-0.097	-0.540	-0.024	-2.020 **
RESTATE$_{t-1}$	0.001	0.010	0.015	0.920	0.002	0.010		
ASSETS	0.185	3.830 ***	0.008	0.970	0.190	3.950 ***	0.009	1.120
LEVERAGE	0.620	2.340 **	0.032	1.360 *	0.580	2.080 **	0.026	1.120
MTB	0.000	-0.500	0.000	-2.390 **	-0.001	-0.530	0.000	-2.290 **
SALEGR	-0.388	-1.830 **	-0.001	-1.070	-0.394	-1.830 **	-0.010	-0.490
LOSS	-0.148	-0.830	0.122	3.920 ***	-0.156	-0.850	0.122	3.770 ***
ROA	-0.365	-0.550	0.231	3.200 ***	-0.275	-0.390	0.224	2.950 ***
FINANCE			-0.015	-1.120			-0.014	-1.020
LITIGATION	0.224	1.360	-0.030	-2.110 **	0.302	1.800 *	-0.029	-2.040 **
SUIT	1.049	2.350 **	0.097	0.720	1.076	2.390 **	0.102	0.770
AGE	-0.074	-0.670			-0.110	-0.960		
MERGACQ	0.039	0.290	0.002	0.150	0.015	0.110	0.000	0.010
SEGBUS	0.057	0.630			0.030	0.330		
FOREIGN	-0.275	-2.010 **	0.022	1.520	-0.305	-2.190 **	0.019	1.270
RESTRUCTURE			-0.006	-0.430			-0.007	-0.450
Constant	-4.974	-4.510 ***	0.445	2.860 ***	-5.319	-4.530 ***	0.393	2.600 ***
Lambda			0.010	1.514			0.011	1.593
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			723				701	
Wald Chi-square			69.33 ***				66.37 ***	
Log Pseudo-Likelihood			42.22				44.86	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 14 (cont.)
Supplemental Analyses: OOPAMAT

	Panel E				
	H5: Regression of OOPAMAT and CLAWBACK*NAS				
	Stage 1		Stage 2		
	Coeff.	z-stat	Coeff.	z-stat	
CLAWBACK*NAS			-0.005	-0.410	
CLAWBACK			0.001	0.040	
NAS			0.030	1.340	
AUDITFEE			-0.058	-2.800	***
ICW	0.292	1.440 *	0.007	0.220	
BIG4	-0.102	-0.270	0.049	2.210	**
SPECIALIST			0.008	0.610	
INITIAL			0.022	0.990	
BOARDIND	-0.872	-1.010	0.001	0.020	
BOARDMEET	0.011	0.790	0.002	0.850	
BOARDSIZE	-0.018	-0.550	0.005	1.290	
ACSIZE	0.129	2.130 **	-0.002	-0.460	
ACEXPERT	-0.032	-0.140	0.015	0.670	
CEOTENURE	0.004	0.060	-0.011	-1.850	**
CEOCHAIR	-0.119	-0.670	-0.008	-0.510	
RESTATE$_{t-1}$	0.004	0.030	0.010	0.630	
ASSETS	0.185	3.820 ***	-0.006	-0.440	
LEVERAGE	0.618	2.320 **	0.007	0.230	
MTB	0.000	-0.510	0.000	-1.690	*
SALEGR	-0.386	-1.830 **	0.000	0.260	
LOSS	-0.146	-0.820	0.137	3.730	***
ROA	-0.366	-0.550	0.208	2.910	***
FINANCE			-0.014	-1.050	
LITIGATION	0.222	1.350	-0.027	-1.950	**
SUIT	1.048	2.350 **	0.095	0.690	
AGE	-0.074	-0.670			
MERGACQ	0.038	0.280	-0.008	-0.590	
SEGBUS	0.058	0.630			
FOREIGN	-0.275	-2.010 **	0.007	0.430	
RESTRUCTURE			-0.009	-0.640	
Constant	-4.970	-4.490 ***	1.040	2.160	**
Lambda			0.009	1.458	
Year Controls			Included		
Industry Controls			Included		
Observations			723		
Wald Chi-square			68.64	***	
Log Pseudo-Likelihood			42.37		

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate
   multicollinearity.

Table 15

Supplemental Analyses: OOPALENGTH

	Panel A		Panel B			
	H1: Regression of OOPALENGTH and NAS		H2: Regression of OOPALENGTH and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					-44.189	-2.470 ***
NAS	-17.181	-0.900				
AUDITFEE	16.488	0.900			1.866	0.150
ICW	46.241	1.050	0.322	1.700 **	48.825	1.040
BIG4	-23.249	-0.980	0.005	0.010	-28.634	-1.090
SPECIALIST	5.018	0.400			3.747	0.310
INITIAL	-34.185	-2.160 **			-21.712	-1.310
BOARDIND	-10.821	-0.160	-0.725	-0.870	-26.861	-0.390
BOARDMEET	-0.950	-0.590	0.007	0.520	0.098	0.060
BOARDSIZE	1.388	0.490	-0.030	-0.900	3.069	1.010
ACSIZE	6.940	0.680	0.123	2.060 **	7.473	0.690
ACEXPERT	-30.183	-1.800 **	-0.084	-0.390	-27.633	-1.610 *
CEOTENURE	-6.744	-1.240	-0.011	-0.180	-6.134	-1.090
CEOCHAIR	-33.094	-2.280 **	-0.103	-0.600	-28.899	-2.070 **
RESTATE$_{t-1}$	11.096	0.670	0.036	0.260	10.732	0.650
ASSETS	11.039	1.120	0.201	4.360 ***	5.874	0.960
LEVERAGE	-8.989	-0.360	0.586	2.450 **	-14.384	-0.720
MTB	0.234	1.420	-0.001	-0.960	0.246	1.570
SALEGR	0.034	0.060	-0.068	-0.320	-0.047	-0.100
LOSS	-0.936	-0.050	-0.101	-0.620	5.234	0.280
ROA	46.393	1.090	-0.282	-0.510	33.937	0.850
FINANCE	6.653	0.430			7.097	0.440
LITIGATION	-4.842	-0.290	0.221	1.460	-1.445	-0.090
SUIT	26.301	0.530	0.765	1.750 *	33.707	0.700
AGE			0.001	0.010		
MERGACQ	7.945	0.600	0.037	0.290	4.753	0.340
SEGBUS			0.060	0.690		
FOREIGN	20.673	1.130	-0.321	-2.460 **	11.239	0.620
RESTRUCTURE	-8.427	-0.650			-15.356	-1.190
Constant	-97.447	-0.440	-5.607	-5.230 ***	32.616	0.240
Lambda					10.778	1.876 *
Year Controls	Included				Included	
Industry Controls	Included				Included	
Observations	894				840	
R^2	4.85%					
Log Pseudo-Likelihood					-5875.58	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 14

NAS variable in Stage 2 of H1 is the predicted NAS from Supplemental Hypotheses Stage 1 of H1 on Table 14

Table 15 (cont.)
Supplemental Analyses: OOPALENGTH

	Panel C				Panel D			
	H3: Regression of OOPALENGTH and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPALENGTH and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							-67.714	-2.550 ***
CLAWBACK*RESTATE$_{t-1}$			-19.278	-0.620				
CLAWBACK			-37.551	-1.890 **			-29.904	-1.430 *
RESTATE$_{t+1}$							26.367	1.090
AUDITFEE			2.273	0.190			-1.245	-0.100
ICW	0.322	1.700 **	48.744	1.040	0.368	1.890 **	53.662	1.080
BIG4	0.005	0.010	-29.403	-1.120	0.135	0.280	-1.446	-0.060
SPECIALIST			3.701	0.300			3.439	0.270
INITIAL			-21.953	-1.310			-16.785	-1.050
BOARDIND	-0.725	-0.870	-28.189	-0.410	-0.770	-0.890	-5.095	-0.070
BOARDMEET	0.007	0.520	0.098	0.060	0.006	0.410	0.537	0.320
BOARDSIZE	-0.030	-0.900	3.109	1.020	-0.025	-0.750	2.968	0.960
ACSIZE	0.123	2.060 **	7.433	0.690	0.137	2.290 **	8.646	0.770
ACEXPERT	-0.084	-0.390	-27.639	-1.610 *	-0.022	-0.100	-21.748	-1.280
CEOTENURE	-0.011	-0.180	-6.265	-1.110	-0.002	-0.030	-6.770	-1.140
CEOCHAIR	-0.103	-0.600	-29.287	-2.060 **	-0.079	-0.460	-27.887	-1.970 **
RESTATE$_{t-1}$	0.035	0.260	13.251	0.700	0.012	0.080		
ASSETS	0.201	4.360 ***	5.715	0.940	0.204	4.430 ***	6.361	1.070
LEVERAGE	0.586	2.450 **	-14.530	-0.730	0.550	2.130 **	-17.817	-0.910
MTB	-0.001	-0.960	0.246	1.590	-0.001	-0.940	0.246	1.820 *
SALEGR	-0.068	-0.320	-0.144	-0.310	-0.175	-0.740	2.323	0.160
LOSS	-0.101	-0.620	5.319	0.280	-0.153	-0.870	7.581	0.400
ROA	-0.282	-0.510	33.871	0.840	-0.188	-0.300	23.341	0.630
FINANCE			7.265	0.460			4.278	0.260
LITIGATION	0.221	1.460	-1.968	-0.120	0.279	1.790 *	-8.748	-0.530
SUIT	0.765	1.750 *	34.221	0.710	0.944	2.110 **	45.157	0.900
AGE	0.001	0.010			-0.042	-0.380		
MERGACQ	0.037	0.290	4.682	0.340	0.030	0.230	9.965	0.740
SEGBUS	0.060	0.690			0.036	0.400		
FOREIGN	-0.321	-2.460 **	10.813	0.610	-0.330	-2.460 **	10.417	0.570
RESTRUCTURE			-15.482	-1.200			-16.824	-1.280
Constant	-5.607	-5.230 ***	31.473	0.230	-5.749	-5.090 ***	18.042	0.130
Lambda			10.581	1.816 *			10.669	1.786 *
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			840				806	
Log Pseudo-Likelihood			-5875.48				-5631.42	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.
The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 15 (cont.)
Supplemental Analyses: OOPALENGTH

	Panel E				
	H5: Regression of OOPALENGTH and CLAWBACK*NAS				
	Stage 1			Stage 2	
	Coeff.	z-stat		Coeff.	z-stat
CLAWBACK*NAS				-14.037	-1.820 *
CLAWBACK				-25.166	-1.190
NAS				-6.549	-0.330
AUDITFEE				8.580	0.440
ICW	0.324	1.720 **		48.684	1.060
BIG4	0.004	0.010		-34.825	-1.320
SPECIALIST				4.022	0.330
INITIAL				-24.964	-1.560
BOARDIND	-0.728	-0.870		-17.646	-0.250
BOARDMEET	0.007	0.530		-0.124	-0.060
BOARDSIZE	-0.030	-0.890		2.952	0.970
ACSIZE	0.123	2.060 **		7.405	0.690
ACEXPERT	-0.086	-0.400		-28.635	-1.680 **
CEOTENURE	-0.011	-0.180		-6.604	-1.190
CEOCHAIR	-0.104	-0.610		-32.865	-2.180 **
RESTATE$_{t-1}$	0.037	0.270		10.887	0.650
ASSETS	0.201	4.360 ***		10.152	1.010
LEVERAGE	0.584	2.440 **		-12.148	-0.480
MTB	-0.001	-0.970		0.252	1.600
SALEGR	-0.068	-0.320		0.257	0.390
LOSS	-0.102	-0.620		0.393	0.020
ROA	-0.288	-0.520		34.252	0.790
FINANCE				6.867	0.440
LITIGATION	0.219	1.450		-1.392	-0.080
SUIT	0.766	1.750 *		26.247	0.550
AGE	0.003	0.030			
MERGACQ	0.038	0.300		6.456	0.490
SEGBUS	0.058	0.660			
FOREIGN	-0.320	-2.460 **		15.106	0.830
RESTRUCTURE				-13.680	-1.040
Constant	-5.594	-5.220 ***		-156.311	-0.360
Lambda				6.182	0.822
Year Controls			Included		
Industry Controls			Included		
Observations			840		
Log Pseudo-Likelihood			-5874.64		

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate
  mitigate multicollinearity.

Table 16
Supplemental Analyses: OOPADISBEG

	Panel A		Panel B				
	H1: Regression of OOPADISBEG and NAS		H2: Regression of OOPADISBEG and CLAWBACK				
	Stage 2		Stage 1		Stage 2		
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat	
CLAWBACK					-50.857	-2.410	***
NAS	-31.017	-1.330					
AUDITFEE	10.712	0.490			-8.663	-0.580	
ICW	59.252	1.180	0.323	1.710 **	59.457	1.120	
BIG4	-37.579	-1.080	0.005	0.010	-34.500	-0.950	
SPECIALIST	5.545	0.370			4.871	0.330	
INITIAL	-27.151	-1.400			-13.978	-0.690	
BOARDIND	-79.556	-0.930	-0.719	-0.860	-87.574	-1.050	
BOARDMEET	-1.818	-0.990	0.007	0.510	-0.274	-0.160	
BOARDSIZE	1.272	0.370	-0.030	-0.900	2.087	0.570	
ACSIZE	4.946	0.430	0.123	2.060 **	6.868	0.570	
ACEXPERT	-16.158	-0.770	-0.087	-0.410	-13.556	-0.650	
CEOTENURE	-4.835	-0.730	-0.011	-0.170	-3.044	-0.440	
CEOCHAIR	-31.773	-1.760 *	-0.104	-0.610	-14.700	-0.830	
RESTATE$_{t-1}$	1.315	0.070	0.038	0.280	2.902	0.160	
ASSETS	22.168	1.710 *	0.201	4.360 ***	7.738	0.990	
LEVERAGE	3.904	0.130	0.585	2.450 **	-13.626	-0.540	
MTB	0.080	0.430	-0.001	-0.970	0.091	0.510	
SALEGR	-0.222	-0.310	-0.069	-0.320	0.036	0.060	
LOSS	-21.927	-1.030	-0.103	-0.620	-6.567	-0.300	
ROA	15.767	0.290	-0.288	-0.530	-4.899	-0.100	
FINANCE	8.441	0.470			8.937	0.480	
LITIGATION	-20.637	-1.010	0.219	1.440	-15.812	-0.780	
SUIT	90.277	1.210	0.764	1.750 *	100.847	1.390 *	
AGE			0.001	0.010			
MERGACQ	3.968	0.250	0.039	0.310	-3.785	-0.230	
SEGBUS			0.057	0.660			
FOREIGN	30.979	1.450	-0.318	-2.460 **	13.707	0.670	
RESTRUCTURE	-5.599	-0.370			-13.084	-0.850	
Constant	15.227	0.060	-5.609	-5.220 ***	239.292	1.570	
Lambda					10.676	1.551	
Year Controls	Included				Included		
Industry Controls	Included				Included		
Observations	894				840		
R^2	4.43%						
Log Pseudo-Likelihood					-6002.96		

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 14

NAS variable in Stage 2 of H1 is the predicted NAS from Supplemental Hypotheses Stage 1 of H1 on Table 14

Table 16 (cont.)
Supplemental Analyses: OOPADISBEG

	Panel C				Panel D			
	H3: Regression of OOPADISBEG and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPADISBEG and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							-81.852	-2.740 ***
CLAWBACK*RESTATE$_{t-1}$			-29.912	-0.880				
CLAWBACK			-40.365	-1.660 **			-35.545	-1.490 *
RESTATE$_{t+1}$							27.960	1.030
AUDITFEE			-8.033	-0.550			-13.642	-0.920
ICW	0.323	1.710	59.319	1.120	0.369	1.900 **	70.054	1.230
BIG4	0.005	0.010	-35.688	-0.980	0.135	0.280	-11.009	-0.280
SPECIALIST			4.798	0.320			2.565	0.170
INITIAL			-14.353	-0.710			-7.615	-0.390
BOARDIND	-0.719	-0.860	-89.610	-1.070	-0.762	-0.880	-51.731	-0.590
BOARDMEET	0.007	0.510	-0.275	-0.160	0.005	0.400	-0.120	-0.060
BOARDSIZE	-0.030	-0.900	2.149	0.590	-0.025	-0.750	1.638	0.450
ACSIZE	0.123	2.060 **	6.803	0.560	0.137	2.300 **	7.778	0.620
ACEXPERT	-0.087	-0.410	-13.561	-0.650	-0.024	-0.110	-2.324	-0.120
CEOTENURE	-0.010	-0.170	-3.246	-0.470	-0.001	-0.020	-4.616	-0.670
CEOCHAIR	-0.104	-0.610	-15.299	-0.850	-0.081	-0.470	-14.401	-0.810
RESTATE$_{t-1}$	0.037	0.270	6.810	0.320	0.015	0.110		
ASSETS	0.201	4.360 ***	7.484	0.960	0.204	4.420 ***	10.666	1.390
LEVERAGE	0.585	2.450 **	-13.869	-0.550	0.549	2.120 **	-25.071	-1.010
MTB	-0.001	-0.970	0.090	0.510	-0.001	-0.940	0.091	0.600
SALEGR	-0.069	-0.320	-0.113	-0.200	-0.176	-0.740	0.307	0.020
LOSS	-0.103	-0.620	-6.431	-0.290	-0.154	-0.880	1.667	0.080
ROA	-0.288	-0.530	-4.985	-0.100	-0.195	-0.310	2.419	0.050
FINANCE			9.198	0.500			3.786	0.200
LITIGATION	0.219	1.440	-16.629	-0.810	0.277	1.770 *	-26.281	-1.390 *
SUIT	0.764	1.750 *	101.609	1.400 *	0.942	2.110 **	110.931	1.410 *
AGE	0.002	0.010			-0.042	-0.380		
MERGACQ	0.039	0.310	-3.897	-0.240	0.032	0.250	3.946	0.250
SEGBUS	0.057	0.660			0.033	0.370		
FOREIGN	-0.318	-2.460 **	13.058	0.640	-0.328	-2.460 **	6.882	0.340
RESTRUCTURE			-13.279	-0.860			-14.950	-0.990
Constant	-5.609	-5.220 ***	237.683	1.570	-5.756	-5.080 ***	197.897	1.300
Lambda			10.263	1.442			11.144	1.809 *
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			840				806	
Log Pseudo-Likelihood			-6002.79				-5743.37	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 16 (cont.)
Supplemental Analyses: OOPADISBEG

	Panel E			
	H5: Regression of OOPADISBEG and CLAWBACK*NAS			
	Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*NAS			-16.160	-1.640
CLAWBACK			-23.069	-0.460
NAS			-11.530	-0.500
AUDITFEE			1.559	0.070
ICW	0.325	1.730 **	59.297	1.120
BIG4	0.002	0.010	-41.814	-1.140
SPECIALIST			5.312	0.360
INITIAL			-19.033	-0.980
BOARDIND	-0.728	-0.870	-72.805	-0.830
BOARDMEET	0.007	0.530	-0.696	-0.320
BOARDSIZE	-0.030	-0.880	1.970	0.540
ACSIZE	0.122	2.040 **	6.681	0.540
ACEXPERT	-0.088	-0.410	-15.226	-0.720
CEOTENURE	-0.010	-0.170	-3.633	-0.530
CEOCHAIR	-0.105	-0.610	-21.354	-1.130
RESTATE$_{t-1}$	0.038	0.280	2.992	0.160
ASSETS	0.200	4.350 ***	14.320	1.140
LEVERAGE	0.583	2.440 **	-8.208	-0.260
MTB	-0.001	-0.970	0.094	0.530
SALEGR	-0.067	-0.310	0.365	0.420
LOSS	-0.103	-0.630	-14.177	-0.670
ROA	-0.293	-0.530	-2.061	-0.040
FINANCE			8.512	0.470
LITIGATION	0.218	1.440	-16.161	-0.810
SUIT	0.767	1.760 *	91.110	1.230
AGE	0.005	0.040		
MERGACQ	0.040	0.320	-0.608	-0.040
SEGBUS	0.056	0.640		
FOREIGN	-0.318	-2.460 **	20.599	0.980
RESTRUCTURE			-10.619	-0.690
Constant	-5.595	-5.220 ***	-54.435	-0.110
Lambda			2.289	0.104
Year Controls			Included	
Industry Controls			Included	
Observations			840	
Log Pseudo-Likelihood			-6002.00	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate multicollinearity.

Table 17

Supplemental Analyses: OOPA_NEG

	Panel A		Panel B			
	H1: Regression of OOPA_NEG and NAS		H2: Regression of OOPA_NEG and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					0.140	0.330
NAS	0.677	1.640				
AUDITFEE	-0.374	-1.250			0.018	0.470
ICW	0.139	0.510	0.289	1.430 *	0.039	0.560
BIG4	-0.102	-0.220	-0.056	-0.130	-0.071	-0.610
SPECIALIST	0.244	1.460			0.058	1.470
INITIAL	-0.032	-0.100			-0.088	-1.420
BOARDIND	-0.606	-0.540	-0.862	-1.000	-0.018	-0.070
BOARDMEET	0.047	1.940 *	0.013	0.840	0.003	0.540
BOARDSIZE	0.037	0.810	-0.019	-0.580	0.007	0.640
ACSIZE	-0.212	-2.650 ***	0.130	2.120 **	-0.054	-2.500 **
ACEXPERT	0.306	1.070	-0.038	-0.170	0.042	0.620
CEOTENURE	0.168	2.200 **	0.005	0.080	0.036	1.990 **
CEOCHAIR	-0.166	-0.520	-0.112	-0.620	-0.118	-2.140 **
RESTATE$_{t-1}$	-0.211	-1.200	0.005	0.040	-0.045	-1.070
ASSETS	-0.311	-1.420	0.184	3.780 ***	0.003	0.110
LEVERAGE	0.143	0.300	0.606	2.300 **	0.134	1.550 *
MTB	-0.011	-1.220	0.000	-0.490	-0.001	-4.070 ***
SALEGR	0.054	1.160	-0.374	-1.730 **	0.004	0.960
LOSS	0.696	2.230 **	-0.149	-0.830	0.103	1.850 *
ROA	-0.416	-0.470	-0.349	-0.520	0.074	0.370
FINANCE	-0.278	-1.750 *			-0.070	-1.890 *
LITIGATION	0.289	1.270	0.222	1.360	0.051	0.920
SUIT	-0.495	-0.780	1.045	2.290 **	-0.173	-0.920
AGE			-0.090	-0.720		
MERGACQ	-0.524	-2.430 ***	0.042	0.310	-0.071	-1.820 **
SEGBUS			0.060	0.650		
FOREIGN	-0.184	-0.660	-0.276	-2.020 **	0.033	0.690
RESTRUCTURE	-0.307	-1.580			-0.044	-1.020
Constant	4.379	1.130	-4.960	-4.490 ***	0.123	0.220
Lambda					-0.081	-0.363
Year Controls	Included				Included	
Industry Controls	Included				Included	
Observations	767				723	
Wald Chi-square	58.62 **				258.33 ***	
Log Pseudo-Likeli	-498.14				-741.68	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 14

NAS variable in Stage 2 of H1 is the predicted NAS from Supplemental Hypotheses Stage 1 of H1 on Table 14

Table 17 (cont.)
Supplemental Analyses: OOPA_NEG

	Panel C				Panel D			
	H3: Regression of OOPA_NEG and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPA_NEG and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							0.289	2.390 ***
CLAWBACK*RESTATE$_{t-1}$			-0.070	-0.610				
CLAWBACK							0.182	0.370
RESTATE$_{t+1}$			0.180	0.420			-0.056	-1.130
AUDITFEE			0.020	0.510			-0.005	-0.140
ICW	0.288	1.430 *	0.038	0.550	0.368	1.780 **	0.048	0.590
BIG4	-0.052	-0.120	-0.074	-0.630	0.194	0.350	-0.143	-1.220
SPECIALIST			0.058	1.470			0.046	1.150
INITIAL			-0.088	-1.430			-0.115	-1.820 *
BOARDIND	-0.861	-1.000	-0.018	-0.070	-0.799	-0.920	0.002	0.010
BOARDMEET	0.013	0.850	0.003	0.530	0.016	0.970	0.003	0.650
BOARDSIZE	-0.019	-0.580	0.007	0.650	-0.020	-0.610	0.009	0.800
ACSIZE	0.130	2.120 **	-0.054	-2.510 **	0.144	2.350 **	-0.062	-2.750 ***
ACEXPERT	-0.038	-0.170	0.042	0.620	0.006	0.030	0.028	0.400
CEOTENURE	0.006	0.090	0.036	1.960 **	0.022	0.330	0.037	2.000 **
CEOCHAIR	-0.112	-0.620	-0.118	-2.150 **	-0.083	-0.450	-0.107	-1.890 *
RESTATE$_{t-1}$	0.010	0.070	-0.035	-0.780	-0.031	-0.180		
ASSETS	0.184	3.770 ***	0.002	0.060	0.191	4.010 ***	0.011	0.350
LEVERAGE	0.605	2.300 **	0.132	1.530 *	0.542	1.860 *	0.143	1.570 *
MTB	0.000	-0.490	-0.001	-4.050 ***	0.000	-0.390	-0.001	-3.880 ***
SALEGR	-0.372	-1.720 **	0.004	0.910	-0.380	-1.730 **	0.052	0.680
LOSS	-0.149	-0.840	0.103	1.860 *	-0.160	-0.880	0.113	1.940 *
ROA	-0.348	-0.520	0.078	0.390	-0.267	-0.390	-0.007	-0.030
FINANCE			-0.070	-1.870 *			-0.067	-1.780 *
LITIGATION	0.223	1.360	0.049	0.880	0.304	1.840 *	0.035	0.580
SUIT	1.043	2.280 **	-0.176	-0.940	1.081	2.340 **	-0.194	-0.950
AGE	-0.092	-0.740			-0.131	-1.080		
MERGACQ	0.043	0.320	-0.071	-1.820 **	0.026	0.190	-0.071	-1.770 **
SEGBUS	0.060	0.650			0.028	0.300		
FOREIGN	-0.277	-2.020 **	0.032	0.680	-0.300	-2.170 **	0.056	1.090
RESTRUCTURE			-0.045	-1.040			-0.035	-0.790
Constant	-4.959	-4.490 ***	0.125	0.230	-5.377	-4.640 ***	0.359	0.600
Lambda			-0.090	-0.408			-0.146	-0.561
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			723				701	
Wald Chi-square			257.96 ***				104.37 ***	
Log Pseudo-Likelihood			-741.49				-710.78	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 17 (cont.)
Supplemental Analyses: OOPA_NEG

	Stage 1			Stage 2		
	Coeff.	z-stat		Coeff.	z-stat	
CLAWBACK*NAS				0.005	0.140	
CLAWBACK				0.137	0.230	
NAS				0.131	1.690	*
AUDITFEE				-0.066	-1.050	
ICW	0.288	1.420	*	0.026	0.330	
BIG4	-0.053	-0.110		-0.066	-0.560	
SPECIALIST				0.054	1.380	
INITIAL				-0.046	-0.670	
BOARDIND	-0.859	-1.000		-0.119	-0.440	
BOARDMEET	0.013	0.790		0.008	1.380	
BOARDSIZE	-0.019	-0.570		0.007	0.630	
ACSIZE	0.130	2.110	**	-0.055	-2.280	**
ACEXPERT	-0.038	-0.170		0.060	0.870	
CEOTENURE	0.006	0.090		0.039	2.130	**
CEOCHAIR	-0.113	-0.620		-0.046	-0.650	
RESTATE$_{t-1}$	0.005	0.040		-0.043	-1.020	
ASSETS	0.183	3.710	***	-0.060	-1.170	
LEVERAGE	0.606	2.300	**	0.029	0.230	
MTB	0.000	-0.490		-0.001	-3.520	***
SALEGR	-0.376	-1.700	**	0.006	1.000	
LOSS	-0.150	-0.820		0.167	2.390	**
ROA	-0.344	-0.510		-0.015	-0.080	
FINANCE				-0.065	-1.730	*
LITIGATION	0.222	1.350		0.057	1.020	
SUIT	1.045	2.290	**	-0.164	-0.720	
AGE	-0.094	-0.640				
MERGACQ	0.043	0.310		-0.112	-2.350	***
SEGBUS	0.059	0.630				
FOREIGN	-0.277	-2.010	**	-0.035	-0.590	
RESTRUCTURE				-0.060	-1.360	
Constant	-4.944	-4.440	***	2.800	1.600	
Lambda				-0.086	-0.274	
Year Controls				Included		
Industry Controls				Included		
Observations				723		
Wald Chi-square				275.49	***	
Log Pseudo-Likelihood				-740.25		

Panel E — H5: Regression of OOPA_NEG and CLAWBACK*NAS

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate multicollinearity.

Table 18
Supplemental Analyses: OOPA_POS

	Panel A		Panel B			
	H1: Regression of OOPA_POS and NAS		H2: Regression of OOPA_POS and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					-0.067	-0.470
NAS	-0.561	-1.280				
AUDITFEE	0.445	1.410			0.009	0.230
ICW	-0.336	-1.130	0.298	1.480 *	-0.068	-1.120
BIG4	0.915	1.610	-0.091	-0.240	0.259	2.860 ***
SPECIALIST	0.005	0.030			-0.001	-0.020
INITIAL	0.176	0.560			0.089	1.420
BOARDIND	-0.214	-0.180	-0.880	-1.020	-0.098	-0.400
BOARDMEET	-0.039	-1.550	0.013	0.880	-0.003	-0.580
BOARDSIZE	-0.033	-0.670	-0.017	-0.520	-0.006	-0.540
ACSIZE	0.207	2.580 **	0.128	2.120 **	0.048	2.580 **
ACEXPERT	-0.045	-0.160	-0.035	-0.160	0.020	0.310
CEOTENURE	-0.055	-0.710	0.006	0.090	-0.016	-0.920
CEOCHAIR	0.246	0.740	-0.121	-0.670	0.108	1.950 *
RESTATE$_{t-1}$	0.192	1.070	0.001	0.010	0.052	1.290
ASSETS	0.183	0.810	0.183	3.790 ***	-0.013	-0.560
LEVERAGE	-0.176	-0.340	0.614	2.360 **	-0.101	-1.340 *
MTB	0.008	1.840 *	0.000	-0.480	0.001	4.370 ***
SALEGR	-0.038	-1.830 **	-0.389	-1.840 **	-0.002	-1.150
LOSS	-0.625	-1.880 *	-0.153	-0.860	-0.095	-1.830 *
ROA	-0.406	-0.480	-0.371	-0.550	-0.253	-1.440
FINANCE	0.293	1.760 *			0.067	1.840 *
LITIGATION	0.100	0.440	0.231	1.400	0.036	0.720
SUIT	0.159	0.270	1.057	2.390 **	0.070	0.490
AGE			-0.073	-0.670		
MERGACQ	0.290	1.270	0.046	0.340	0.031	0.810
SEGBUS			0.051	0.540		
FOREIGN	0.102	0.350	-0.275	-2.020 **	-0.040	-0.930
RESTRUCTURE	0.271	1.370			0.034	0.800
Constant	-5.012	-1.230	-4.955	-4.470 ***	0.418	0.920
Lambda					0.071	1.063
Year Controls	Included				Included	
Industry Controls	Included				Included	
Observations	767				723	
Wald Chi-square	49.97				424.10 ***	
Log Pseudo-Likeli	-480.16				-720.36	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 14

NAS variable in Stage 2 of H1 is the predicted NAS from Supplemental Hypotheses Stage 1 of H1 on Table 14

Table 18 (cont.)
Supplemental Analyses: OOPA_POS

	Panel C				Panel D			
	H3: Regression of OOPA_POS and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPA_POS and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							-0.277	-2.380 ***
CLAWBACK*RESTATE$_{t-1}$			0.064	0.560				
CLAWBACK			-0.092	-0.630			0.019	0.090
RESTATE$_{t+1}$							0.085	1.800 **
AUDITFEE			0.007	0.190			0.029	0.770
ICW	0.298	1.480 *	-0.067	-1.120	0.378	1.820 **	-0.090	-1.420 *
BIG4	-0.092	-0.240	0.262	2.860 ***	0.088	0.180	0.296	3.700 ***
SPECIALIST			-0.001	-0.020			0.011	0.290
INITIAL			0.089	1.420			0.104	1.660 *
BOARDIND	-0.880	-1.020	-0.097	-0.390	-0.828	-0.940	-0.107	-0.420
BOARDMEET	0.013	0.880	-0.003	-0.580	0.014	0.900	-0.003	-0.670
BOARDSIZE	-0.017	-0.510	-0.006	-0.560	-0.017	-0.500	-0.007	-0.590
ACSIZE	0.128	2.120 **	0.048	2.580 **	0.142	2.310 **	0.052	2.720 ***
ACEXPERT	-0.035	-0.160	0.020	0.310	0.009	0.040	0.036	0.550
CEOTENURE	0.006	0.090	-0.016	-0.900	0.021	0.320	-0.016	-0.900
CEOCHAIR	-0.121	-0.680	0.109	1.960 **	-0.098	-0.540	0.107	1.890 **
RESTATE$_{t-1}$	0.004	0.030	0.044	1.010	-0.014	-0.080		
ASSETS	0.183	3.780 ***	-0.012	-0.530	0.190	3.950 ***	-0.028	-1.190
LEVERAGE	0.614	2.360 **	-0.100	-1.330 *	0.568	2.060 **	-0.118	-1.500 *
MTB	0.000	-0.480	0.001	4.330 ***	0.000	-0.500	0.001	4.130 ***
SALEGR	-0.389	-1.840 **	-0.002	-0.980	-0.386	-1.800 **	0.006	0.100
LOSS	-0.153	-0.860	-0.096	-1.840 *	-0.155	-0.850	-0.104	-1.970 **
ROA	-0.372	-0.560	-0.254	-1.460	-0.299	-0.420	-0.193	-1.050
FINANCE			0.067	1.820 *			0.066	1.800 *
LITIGATION	0.231	1.400	0.037	0.750	0.307	1.800 *	0.037	0.710
SUIT	1.056	2.400 **	0.071	0.500	1.088	2.450 **	0.062	0.400
AGE	-0.073	-0.670			-0.106	-0.910		
MERGACQ	0.047	0.350	0.031	0.820	0.020	0.140	0.020	0.530
SEGBUS	0.051	0.540			0.026	0.260		
FOREIGN	-0.275	-2.020 **	-0.039	-0.900	-0.299	-2.140 **	-0.058	-1.290
RESTRUCTURE			0.034	0.820			0.037	0.860
Constant	-4.954	-4.470 ***	0.426	0.940	-5.304	-4.520 ***	0.406	0.850
Lambda			0.074	1.119			0.060	0.585
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			723				701	
Wald Chi-square			425.16 ***				106.89 ***	
Log Pseudo-Likelihood			-720.20				-689.17	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 18 (cont.)
Supplemental Analyses: OOPA_POS

	Panel E			
	H5: Regression of OOPA_POS and CLAWBACK*NAS			
	Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*NAS			0.004	0.130
CLAWBACK			-0.075	-0.530
NAS			-0.100	-1.330
AUDITFEE			0.071	1.170
ICW	0.299	1.480 *	-0.057	-0.930
BIG4	-0.092	-0.240	0.258	2.790 ***
SPECIALIST			0.002	0.050
INITIAL			0.057	0.840
BOARDIND	-0.879	-1.020	-0.024	-0.090
BOARDMEET	0.013	0.890	-0.007	-1.210
BOARDSIZE	-0.017	-0.510	-0.006	-0.540
ACSIZE	0.128	2.120 **	0.049	2.620 ***
ACEXPERT	-0.036	-0.160	0.006	0.090
CEOTENURE	0.006	0.090	-0.018	-1.020
CEOCHAIR	-0.122	-0.680	0.054	0.790
RESTATE$_{t-1}$	0.000	0.000	0.051	1.240
ASSETS	0.183	3.780 ***	0.035	0.830
LEVERAGE	0.615	2.360 **	-0.020	-0.200
MTB	0.000	-0.480	0.001	3.950 ***
SALEGR	-0.391	-1.850 **	-0.005	-1.680 **
LOSS	-0.155	-0.870	-0.143	-2.210 **
ROA	-0.368	-0.550	-0.183	-1.090
FINANCE			0.063	1.710 *
LITIGATION	0.232	1.400	0.031	0.620
SUIT	1.058	2.400 **	0.069	0.490
AGE	-0.075	-0.680		
MERGACQ	0.048	0.360	0.062	1.370 *
SEGBUS	0.049	0.520		
FOREIGN	-0.276	-2.030 **	0.011	0.190
RESTRUCTURE			0.046	1.060
Constant	-4.950	-4.460 ***	-1.587	-1.020
Lambda			0.078	1.223
Year Controls		Included		
Industry Controls		Included		
Observations		723		
Wald Chi-square		416.14 ***		
Log Pseudo-Likelihood		-719.54		

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate multicollinearity.

Table 19

Supplemental Analyses: OOPAMAT5perc

	Panel A		Panel B			
	H1: Regression of OOPAMAT5perc and NAS		H2: Regression of OOPAMAT5perc and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					-0.118	-1.270
NAS	-0.304	-0.840				
AUDITFEE	0.377	1.340			0.026	0.790
ICW	-0.092	-0.260	0.320	1.610 *	-0.023	-0.370
BIG4	-0.176	-0.310	-0.094	-0.250	0.013	0.130
SPECIALIST	-0.006	-0.030			-0.005	-0.140
INITIAL	-0.092	-0.290			0.038	0.630
BOARDIND	0.481	0.380	-1.031	-1.190	0.017	0.080
BOARDMEET	-0.020	-0.760	0.012	0.820	0.000	0.010
BOARDSIZE	0.019	0.360	-0.019	-0.560	0.003	0.340
ACSIZE	-0.032	-0.330	0.131	2.200 **	-0.003	-0.200
ACEXPERT	0.412	1.270	-0.048	-0.210	0.077	1.290 *
CEOTENURE	-0.132	-1.380 *	0.003	0.050	-0.020	-1.220
CEOCHAIR	-0.117	-0.370	-0.127	-0.710	0.000	0.010
RESTATE$_{t-1}$	-0.216	-1.040	-0.004	-0.030	-0.028	-0.810
ASSETS	-0.062	-0.300	0.187	3.890 ***	-0.027	-1.360
LEVERAGE	0.948	2.040 **	0.668	2.490 **	0.158	2.190 **
MTB	0.001	0.400	0.000	-0.300	0.000	0.320
SALEGR	0.072	0.320	-0.418	-1.890 **	-0.001	-0.370
LOSS	1.408	4.220 ***	-0.170	-1.000	0.285	5.450 ***
ROA	3.173	3.190 ***	-0.344	-0.500	0.495	3.320 ***
FINANCE	-0.255	-1.390			-0.044	-1.380
LITIGATION	-0.302	-1.160	0.243	1.480	-0.045	-1.030
SUIT	0.090	0.120	1.105	2.620 ***	0.047	0.290
AGE			-0.071	-0.650		
MERGACQ	-0.057	-0.250	0.031	0.230	-0.021	-0.610
SEGBUS			0.073	0.810		
FOREIGN	0.353	1.220	-0.260	-1.910 *	0.025	0.640
RESTRUCTURE	-0.051	-0.240			-0.022	-0.590
Constant	-1.585	-0.420	-4.948	-4.510 ***	0.478	1.160
Lambda					0.105	2.918 ***
Year Controls	Included				Included	
Industry Controls	Included				Included	
Observations	767				723	
Wald Chi-square	88.22 ***				163.29 ***	
Log Pseudo-Likeli	394.32				-640.96	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 14

NAS variable in Stage 2 of H1 is the predicted NAS from Supplemental Hypotheses Stage 1 of H1 on Table 14

Table 19 (cont.)
Supplemental Analyses: OOPAMAT5perc

	Panel C				Panel D			
	H3: Regression of OOPAMAT5perc and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPAMAT5perc and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							-0.045	-0.420
CLAWBACK*RESTATE$_{t-1}$			-0.122	-1.230				
CLAWBACK			-0.077	-0.760			-0.121	-1.130
RESTATE$_{t+1}$							0.043	1.040
AUDITFEE			0.030	0.900			0.025	0.740
ICW	0.321	1.620 *	-0.023	-0.380	0.390	1.920 **	-0.029	-0.460
BIG4	-0.092	-0.240	0.008	0.080	0.069	0.140	0.030	0.260
SPECIALIST			-0.005	-0.140			-0.006	-0.180
INITIAL			0.038	0.630			0.047	0.760
BOARDIND	-1.030	-1.190	0.013	0.060	-0.960	-1.070	0.046	0.200
BOARDMEET	0.012	0.820	0.000	0.020	0.013	0.880	0.001	0.210
BOARDSIZE	-0.019	-0.560	0.003	0.370	-0.018	-0.530	0.002	0.230
ACSIZE	0.131	2.200 **	-0.003	-0.200	0.143	2.390 **	0.001	0.070
ACEXPERT	-0.048	-0.210	0.077	1.290 *	-0.006	-0.020	0.092	1.530 *
CEOTENURE	0.003	0.050	-0.021	-1.270	0.019	0.290	-0.015	-0.870
CEOCHAIR	-0.126	-0.700	-0.001	-0.030	-0.105	-0.580	0.000	0.000
RESTATE$_{t-1}$	-0.015	-0.100	-0.012	-0.320	0.010	0.070		
ASSETS	0.187	3.890 ***	-0.028	-1.430	0.191	3.980 ***	-0.026	-1.310 *
LEVERAGE	0.668	2.480 **	0.157	2.160 **	0.634	2.240 **	0.149	2.030 **
MTB	0.000	-0.300	0.000	0.340	0.000	-0.320	0.000	0.270
SALEGR	-0.418	-1.890 **	-0.001	-0.700	-0.422	-1.870 **	0.003	0.070
LOSS	-0.171	-1.000	0.285	5.460 ***	-0.180	-1.020	0.295	5.550 ***
ROA	-0.343	-0.500	0.497	3.310 ***	-0.256	-0.350	0.438	2.960 ***
FINANCE			-0.043	-1.350			-0.044	-1.350
LITIGATION	0.244	1.480	-0.048	-1.080	0.319	1.900 *	-0.034	-0.750
SUIT	1.107	2.610 ***	0.049	0.310	1.127	2.650 ***	0.037	0.230
AGE	-0.071	-0.640			-0.102	-0.890		
MERGACQ	0.031	0.230	-0.022	-0.620	0.010	0.070	-0.028	-0.780
SEGBUS	0.072	0.810			0.046	0.510		
FOREIGN	-0.260	-1.900 *	0.022	0.580	-0.290	-2.080 **	0.016	0.410
RESTRUCTURE			-0.023	-0.630			-0.024	-0.650
Constant	-4.949	-4.510 ***	0.459	1.100	-5.261	-4.530 ***	0.404	0.960
Lambda			0.104	2.844 ***			0.105	2.593 ***
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			723				701	
Wald Chi-square			165.03 ***				107.06 ***	
Log Pseudo-Likelihood			-640.21				-617.45	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 19 (cont.)
Supplemental Analyses: OOPAMAT5perc

	Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*NAS			0.012	0.450
CLAWBACK			-0.137	-1.390 *
NAS			-0.057	-0.970
AUDITFEE			0.060	1.220
ICW	0.323	1.630 *	-0.016	-0.260
BIG4	-0.096	-0.250	0.016	0.160
SPECIALIST			-0.004	-0.110
INITIAL			0.021	0.330
BOARDIND	-1.040	-1.200	0.058	0.250
BOARDMEET	0.012	0.830	-0.002	-0.460
BOARDSIZE	-0.019	-0.550	0.003	0.350
ACSIZE	0.131	2.210 **	-0.003	-0.160
ACEXPERT	-0.050	-0.220	0.069	1.150
CEOTENURE	0.003	0.050	-0.021	-1.260
CEOCHAIR	-0.129	-0.720	-0.031	-0.540
RESTATE$_{t-1}$	-0.005	-0.030	-0.029	-0.830
ASSETS	0.188	3.870 ***	0.000	-0.010
LEVERAGE	0.674	2.500 **	0.207	2.390 ***
MTB	0.000	-0.280	0.000	0.200
SALEGR	-0.422	-1.910 **	-0.002	-0.990
LOSS	-0.175	-1.020	0.258	4.310 ***
ROA	-0.338	-0.490	0.536	3.730 ***
FINANCE			-0.047	-1.460
LITIGATION	0.246	1.490	-0.048	-1.090
SUIT	1.111	2.630 ***	0.053	0.330
AGE	-0.072	-0.650		
MERGACQ	0.031	0.240	-0.003	-0.080
SEGBUS	0.073	0.820		
FOREIGN	-0.259	-1.890 *	0.054	1.090
RESTRUCTURE			-0.015	-0.400
Constant	-4.964	-4.500 ***	-0.626	-0.500
Lambda			0.113	3.289 ***
Year Controls			Included	
Industry Controls			Included	
Observations			723	
Wald Chi-square			168.13 ***	
Log Pseudo-Likelihood			-640.55	

Panel E
*H5: Regression of OOPAMAT5perc and CLAWBACK*NAS*

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate
  multicollinearity.

Table 20
Supplemental Analyses: OOPAMAT10perc

	Panel A		Panel B			
	H1: Regression of OOPAMAT10perc and NAS		H2: Regression of OOPAMAT10perc and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					-0.004	-0.050
NAS	0.469	1.110				
AUDITFEE	-0.410	-1.260			-0.020	-0.790
ICW	0.270	0.610	0.301	1.470 *	0.042	0.840
BIG4	-0.316	-0.480	-0.087	-0.220	-0.031	-0.390
SPECIALIST	-0.133	-0.520			-0.012	-0.460
INITIAL	0.404	1.010			0.048	1.000
BOARDIND	-2.102	-1.240	-0.898	-1.020	-0.184	-0.990
BOARDMEET	0.028	0.920	0.011	0.790	0.002	0.800
BOARDSIZE	0.065	0.960	-0.018	-0.540	0.009	1.200
ACSIZE	0.040	0.300	0.129	2.140 **	0.001	0.100
ACEXPERT	0.396	0.930	-0.036	-0.160	0.030	0.700
CEOTENURE	-0.113	-0.830	0.003	0.040	-0.008	-0.610
CEOCHAIR	0.046	0.110	-0.121	-0.680	-0.033	-1.060
RESTATE$_{t-1}$	-0.255	-0.850	0.003	0.020	-0.028	-1.080
ASSETS	-0.314	-1.170	0.184	3.800 ***	-0.007	-0.460
LEVERAGE	0.210	0.360	0.615	2.300 **	0.100	1.680 **
MTB	-0.004	-1.200	0.000	-0.510	0.000	-1.880 *
SALEGR	0.012	0.400	-0.383	-1.820 **	-0.001	-0.680
LOSS	2.148	4.780 ***	-0.142	-0.810	0.201	4.370 ***
ROA	3.880	3.160 ***	-0.357	-0.530	0.391	3.320 ***
FINANCE	-0.410	-1.680 *			-0.045	-1.860 *
LITIGATION	-1.103	-2.760 ***	0.222	1.330	-0.105	-3.260 ***
SUIT	0.265	0.380	1.053	2.390 **	0.020	0.170
AGE			-0.074	-0.670		
MERGACQ	-0.464	-1.560 *	0.036	0.270	-0.034	-1.270
SEGBUS			0.062	0.680		
FOREIGN	-0.030	-0.080	-0.271	-1.990 **	0.025	0.890
RESTRUCTURE	-0.100	-0.330			-0.007	-0.230
Constant	7.483	1.640	-4.952	-4.470 ***	0.818	2.480 **
Lambda					0.018	0.474
Year Controls	Included				Included	
Industry Controls	Included				Included	
Observations	767				723	
Wald Chi-square	90.67 ***				84.39 ***	
Log Pseudo-Likeli	-243.17				-437.95	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 14

NAS variable in Stage 2 of H1 is the predicted NAS from Supplemental Hypotheses Stage 1 of H1 on Table 14

Table 20 (cont.)
Supplemental Analyses: OOPAMAT10perc

	Panel C				Panel D			
	H3: Regression of OOPAMAT10perc and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of OOPAMAT10perc and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							0.095	1.050
CLAWBACK*RESTATE$_{t-1}$			-0.044	-0.590				
CLAWBACK			0.013	0.140			-0.048	-0.330
RESTATE$_{t+1}$							0.014	0.450
AUDITFEE			-0.019	-0.750			-0.021	-0.810
ICW	0.301	1.470 *	0.042	0.830	0.378	1.820 **	0.030	0.570
BIG4	-0.088	-0.230	-0.033	-0.420	0.103	0.210	-0.010	-0.130
SPECIALIST			-0.012	-0.460			-0.014	-0.580
INITIAL			0.048	1.000			0.058	1.210
BOARDIND	-0.895	-1.010	-0.186	-1.000	-0.842	-0.920	-0.168	-0.890
BOARDMEET	0.011	0.790	0.002	0.800	0.013	0.840	0.003	1.020
BOARDSIZE	-0.018	-0.540	0.009	1.220	-0.018	-0.520	0.007	0.950
ACSIZE	0.129	2.140 **	0.001	0.100	0.143	2.350 **	0.006	0.440
ACEXPERT	-0.036	-0.160	0.029	0.690	0.010	0.040	0.042	0.990
CEOTENURE	0.003	0.040	-0.008	-0.630	0.020	0.300	-0.004	-0.330
CEOCHAIR	-0.121	-0.680	-0.034	-1.080	-0.099	-0.540	-0.026	-0.820
RESTATE$_{t-1}$	0.002	0.020	-0.022	-0.800	0.009	0.060		
ASSETS	0.184	3.800 ***	-0.007	-0.490	0.189	3.850 ***	-0.004	-0.270
LEVERAGE	0.614	2.300 **	0.099	1.670 **	0.575	1.960 *	0.089	1.480 *
MTB	-0.001	-0.510	0.000	-1.830 *	-0.001	-0.540	0.000	-1.680 *
SALEGR	-0.383	-1.820 **	-0.001	-0.810	-0.389	-1.750 **	-0.026	-0.600
LOSS	-0.142	-0.810	0.202	4.380 ***	-0.147	-0.810	0.197	4.210 ***
ROA	-0.358	-0.530	0.392	3.310 ***	-0.267	-0.360	0.352	2.950 ***
FINANCE			-0.045	-1.840 *			-0.047	-1.890 *
LITIGATION	0.221	1.330	-0.106	-3.270 ***	0.298	1.760 *	-0.098	-2.900 ***
SUIT	1.053	2.380 **	0.020	0.170	1.076	2.420 **	0.032	0.270
AGE	-0.074	-0.670			-0.111	-0.960		
MERGACQ	0.036	0.270	-0.034	-1.270	0.012	0.090	-0.036	-1.330 *
SEGBUS	0.062	0.680			0.036	0.390		
FOREIGN	-0.271	-1.990 **	0.024	0.860	-0.301	-2.160 **	0.022	0.740
RESTRUCTURE			-0.007	-0.250			-0.005	-0.180
Constant	-4.952	-4.470 ***	0.813	2.460 **	-5.288	-4.390 ***	0.719	2.050 **
Lambda			0.016	0.416			0.013	0.182
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			723				701	
Wald Chi-square			84.35 ***				82.19 ***	
Log Pseudo-Likelihood			-437.78				-414.83	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 20 (cont.)
Supplemental Analyses: OOPAMAT10perc

	Stage 1			Stage 2		
	Coeff.	z-stat		Coeff.	z-stat	
CLAWBACK*NAS				0.013	0.550	
CLAWBACK				-0.030	-0.400	
NAS				0.043	0.920	
AUDITFEE				-0.049	-1.330	
ICW	0.304	1.500	*	0.039	0.770	
BIG4	-0.082	-0.210		-0.025	-0.320	
SPECIALIST				-0.013	-0.520	
INITIAL				0.062	1.240	
BOARDIND	-0.909	-1.040		-0.221	-1.170	
BOARDMEET	0.011	0.790		0.004	1.190	
BOARDSIZE	-0.018	-0.540		0.009	1.220	
ACSIZE	0.129	2.150	**	0.001	0.110	
ACEXPERT	-0.037	-0.160		0.036	0.840	
CEOTENURE	0.003	0.040		-0.007	-0.520	
CEOCHAIR	-0.122	-0.680		-0.010	-0.240	
RESTATE$_{t-1}$	0.003	0.020		-0.028	-1.060	
ASSETS	0.184	3.820	***	-0.028	-1.040	
LEVERAGE	0.618	2.330	**	0.070	0.990	
MTB	0.000	-0.510		0.000	-1.620	
SALEGR	-0.382	-1.810	**	-0.001	-0.310	
LOSS	-0.143	-0.810		0.223	4.190	***
ROA	-0.355	-0.530		0.362	2.980	***
FINANCE				-0.043	-1.780	*
LITIGATION	0.225	1.350		-0.102	-3.150	***
SUIT	1.054	2.390	**	0.033	0.280	
AGE	-0.073	-0.670				
MERGACQ	0.037	0.270		-0.047	-1.570	*
SEGBUS	0.062	0.680				
FOREIGN	-0.270	-1.980	**	0.002	0.060	
RESTRUCTURE				-0.012	-0.420	
Constant	-4.963	-4.490	***	1.728	1.770	*
Lambda				0.025	0.979	
Year Controls				Included		
Industry Controls				Included		
Observations				723		
Wald Chi-square				86.40	***	
Log Pseudo-Likelihood				-437.31		

Panel E — H5: Regression of OOPAMAT10perc and CLAWBACK*NAS

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate multicollinearity.

Table 21
Supplemental Analyses: NumOOPA_log

	Panel A		Panel B			
	H1: Regression of NumOOPA_log and NAS		H2: Regression of NumOOPA_log and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	t-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					0.829	13.050 ***
NAS	-0.073	-0.790				
AUDITFEE	0.082	1.220			0.051	1.600
ICW	-0.084	-1.440 *	0.233	1.440 *	-0.142	-2.080 **
BIG4	0.127	1.300	0.093	0.360	0.202	1.870 *
SPECIALIST	0.025	0.690			0.034	1.040
INITIAL	0.099	1.460			0.101	1.690 *
BOARDIND	0.496	1.960 **	-0.190	-0.310	0.473	1.730 **
BOARDMEET	-0.007	-1.170	0.008	0.610	-0.007	-1.380
BOARDSIZE	-0.018	-1.820 *	-0.004	-0.130	-0.011	-0.920
ACSIZE	-0.031	-2.050 **	0.165	3.630 ***	-0.054	-2.850 ***
ACEXPERT	-0.024	-0.390	-0.184	-1.090	0.016	0.230
CEOTENURE	-0.097	-6.000 ***	0.124	2.560 ***	-0.089	-4.880 ***
CEOCHAIR	-0.077	-1.180	0.030	0.220	-0.054	-1.020
RESTATE$_{t-1}$	-0.085	-2.350 **	0.159	1.490 *	-0.088	-2.140 **
ASSETS	0.017	0.340	0.144	3.870 ***	-0.063	-2.840 ***
LEVERAGE	-0.015	-0.130	0.384	2.000 **	-0.155	-1.850 **
MTB	0.000	-1.530	0.000	-0.660	0.000	-0.810
SALEGR	0.004	1.420 *	-0.021	-2.780 ***	0.012	5.390 ***
LOSS	-0.039	-0.530	0.016	0.120	0.030	0.550
ROA	-0.080	-0.410	-0.567	-1.480 *	-0.024	-0.130
FINANCE	-0.026	-0.790			-0.014	-0.470
LITIGATION	-0.015	-0.310	0.016	0.130	-0.030	-0.600
SUIT	0.304	2.330 **	0.293	0.710	0.151	0.830
AGE			-0.364	-3.690 ***		
MERGACQ	0.065	1.390 *	-0.004	-0.040	0.036	0.890
SEGBUS			0.067	1.180		
FOREIGN	0.137	2.190 **	-0.252	-2.470 **	0.151	3.420 ***
RESTRUCTURE	-0.083	-1.960 *			-0.087	-2.240 **
Constant	-0.245	-0.290	-3.987	-4.820 ***	1.115	2.740 ***
Lambda					-0.481	-23.628 ***
Year Controls	Included				Included	
Industry Controls	Included				Included	
Observations	894				840	
R^2	16.96%					
Log Pseudo-Likelihood					-790.78	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 14

NAS variable in Stage 2 of H1 is the predicted NAS from Supplemental Hypotheses Stage 1 of H1 on Table 14

Table 21 (cont.)

Supplemental Analyses: NumOOPA_log

	Panel C				Panel D			
	H3: Regression of NumOOPA_log and CLAWBACK*RESTATE$_{t-1}$				H4: Regression of NumOOPA_log and CLAWBACK*RESTATE$_{t+1}$			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							0.114	0.910
CLAWBACK*RESTATE$_{t-1}$			0.072	0.750				
CLAWBACK			0.804	10.510 ***			0.821	10.330 ***
RESTATE$_{t+1}$							-0.028	-0.820
AUDITFEE			0.049	1.550			0.048	1.460
ICW	0.240	1.480 *	-0.141	-2.070 **	0.314	1.990 **	-0.155	-2.250 **
BIG4	0.104	0.400	0.205	1.900 *	0.219	0.710	0.121	0.990
SPECIALIST			0.035	1.060			0.038	1.190
INITIAL			0.102	1.700 *			0.069	1.160
BOARDIND	-0.183	-0.300	0.479	1.760 **	-0.019	-0.030	0.513	1.850 **
BOARDMEET	0.007	0.590	-0.007	-1.380	0.014	1.070	-0.009	-1.740 *
BOARDSIZE	-0.004	-0.140	-0.012	-0.930	0.005	0.190	-0.019	-1.520
ACSIZE	0.164	3.600 ***	-0.053	-2.840 ***	0.173	3.700 ***	-0.052	-2.760 ***
ACEXPERT	-0.188	-1.120	0.016	0.240	-0.184	-1.070	0.004	0.060
CEOTENURE	0.125	2.600 ***	-0.088	-4.850 ***	0.134	2.880 ***	-0.084	-4.460 ***
CEOCHAIR	0.027	0.200	-0.052	-0.990	0.034	0.240	-0.035	-0.660
RESTATE$_{t-1}$	0.137	1.300 *	-0.097	-2.340 **	-0.025	-0.280		
ASSETS	0.143	3.880 ***	-0.062	-2.830 ***	0.140	3.780 ***	-0.061	-2.700 ***
LEVERAGE	0.390	2.030 **	-0.155	-1.850 **	0.376	1.830 *	-0.153	-1.690 **
MTB	0.000	-0.660	0.000	-0.800	0.000	-0.210	0.000	-0.940
SALEGR	-0.021	-2.830 ***	0.012	5.430 ***	-0.142	-0.810	0.108	1.750 **
LOSS	0.013	0.090	0.030	0.540	-0.044	-0.310	0.061	1.060
ROA	-0.559	-1.460 *	-0.024	-0.130	-0.442	-1.100	-0.013	-0.060
FINANCE			-0.015	-0.520			-0.029	-1.010
LITIGATION	0.018	0.150	-0.028	-0.560	0.075	0.620	-0.042	-0.830
SUIT	0.294	0.710	0.149	0.820	0.506	1.260	0.022	0.130
AGE	-0.365	-3.690 ***			-0.439	-4.390 ***		
MERGACQ	-0.004	-0.040	0.036	0.910	0.024	0.240	0.034	0.830
SEGBUS	0.065	1.140			0.048	0.880		
FOREIGN	-0.252	-2.470 **	0.153	3.470 ***	-0.269	-2.650 ***	0.145	3.280 ***
RESTRUCTURE			-0.086	-2.230 **			-0.061	-1.650 *
Constant	-3.968	-4.830 ***	1.123	2.770 ***	-4.060	-4.600 ***	1.186	2.850 ***
Lambda			-0.480	-23.574 ***			-0.486	-21.079 ***
Year Controls			Included				Included	
Industry Controls			Included				Included	
Observations			840				806	
Log Pseudo-Likelihood			-790.42				-738.91	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 21 (cont.)
Supplemental Analyses: NumOOPA_log

	Panel E			
	H5: Regression of NumOOPA_log and CLAWBACK*NAS			
	Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*NAS			-0.050	-1.860 *
CLAWBACK			0.864	12.330 ***
NAS			-0.005	-0.060
AUDITFEE			0.066	0.920
ICW	0.236	1.450 *	-0.143	-2.060 **
BIG4	0.118	0.450	0.179	1.630
SPECIALIST			0.033	1.010
INITIAL			0.097	1.290
BOARDIND	-0.192	-0.310	0.482	1.670 **
BOARDMEET	0.008	0.610	-0.007	-1.090
BOARDSIZE	-0.005	-0.180	-0.012	-0.980
ACSIZE	0.168	3.720 ***	-0.053	-2.830 ***
ACEXPERT	-0.178	-1.080	0.014	0.200
CEOTENURE	0.128	2.620 ***	-0.090	-4.920 ***
CEOCHAIR	0.010	0.080	-0.059	-0.820
RESTATE$_{t-1}$	0.174	1.650 **	-0.088	-2.130 **
ASSETS	0.149	4.050 ***	-0.055	-1.130
LEVERAGE	0.398	2.060 **	-0.161	-1.360 *
MTB	0.000	-0.590	0.000	-0.660
SALEGR	-0.020	-3.230 ***	0.013	4.540 ***
LOSS	-0.002	-0.020	0.022	0.280
ROA	-0.598	-1.580 *	-0.035	-0.180
FINANCE			-0.015	-0.510
LITIGATION	0.015	0.120	-0.030	-0.590
SUIT	0.271	0.650	0.132	0.710
AGE	-0.341	-3.730 ***		
MERGACQ	-0.002	-0.020	0.035	0.690
SEGBUS	0.075	1.350 *		
FOREIGN	-0.233	-2.320 **	0.151	2.230 **
RESTRUCTURE			-0.082	-1.910 *
Constant	-4.240	-5.090 ***	0.764	0.380
Lambda			-0.484	-23.926 ***
Year Controls			Included	
Industry Controls			Included	
Observations			840	
Log Pseudo-Likelihood			-787.85	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate multicollinearity.

Table 22
Supplemental Analyses: REVISION

	Panel A		Panel B			
	H1: Regression of REVISION and NAS		H2: Regression of REVISION and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					0.029	2.050 **
NAS	-0.962	-1.720 *				
AUDITFEE	0.817	2.040 **			0.006	1.440
ICW	-0.427	-2.420 ***	0.127	1.740 **	-0.030	-1.780 **
BIG4	1.520	2.400 **	-0.033	-0.680	0.023	3.920 ***
SPECIALIST	0.070	1.200			0.003	0.570
INITIAL	-0.466	-2.130 **			-0.009	-1.390
BOARDIND	-0.476	-1.160	0.129	0.700	-0.076	-2.980 ***
BOARDMEET	-0.005	-0.710	0.001	0.830	0.000	-0.930
BOARDSIZE	0.037	1.490	0.020	2.530 **	0.001	0.660
ACSIZE	0.017	0.510	0.013	0.900	-0.002	-1.000
ACEXPERT	-0.025	-0.170	0.011	0.220	0.012	1.660 **
CEOTENURE	0.031	1.190	-0.018	-1.210	0.003	1.520 *
CEOCHAIR	-0.080	-0.760	-0.083	-2.140 **	0.002	0.390
RESTATE$_{t-1}$	2.922	51.460 ***	0.104	2.690 ***	0.416	42.480 ***
ASSETS	0.399	1.640	0.100	8.800 ***	-0.001	-0.210
LEVERAGE	-0.053	-0.340	0.171	3.040 ***	-0.006	-0.740
MTB	0.000	-1.710 *	0.000	-0.330	0.000	-0.220
SALEGR	0.008	0.940	-0.001	-0.750	0.000	-0.110
LOSS	-0.071	-0.600	0.153	4.010 ***	0.004	0.690
ROA	0.305	1.680 *	0.061	0.800	0.008	0.730
FINANCE	0.067	0.800			-0.003	-0.740
LITIGATION	-0.265	-2.390 ***	-0.075	-1.880 *	-0.007	-1.310 *
SUIT	-0.311	-1.350 *	0.254	2.160 **	-0.031	-1.400 *
AGE			-0.044	-1.760 *		
MERGACQ	0.494	3.130 ***	0.101	3.310 ***	0.017	3.660 ***
SEGBUS			0.071	3.500 ***		
FOREIGN	0.378	1.670 *	-0.019	-0.600	0.003	0.560
RESTRUCTURE	0.332	2.260 **			0.006	1.160
Constant	-12.799	-2.610 ***	-4.553	-12.080 ***	0.005	0.090
Lambda					-0.00568	-1.073
Year Controls	Included		Included		Included	
Industry Controls	Included		Included		Included	
Observations	20,332				18,302	
Wald Chi-square	3120.96 ***				2241.98 ***	
Pseudo-R^2	25.76%					
Log Pseudo-Likeli	-5099.79				-6919.07	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 6

NAS variable in Stage 2 of H1 is the predicted NAS from Main Hypotheses Stage 1 of H1 (see Table 6)

Table 22 (cont.)
Supplemental Analyses: REVISION

	Panel C						Panel D					
	H3: Regression of REVISION and CLAWBACK*RESTATE$_{t-1}$						H4: Regression of REVISION and CLAWBACK*RESTATE$_{t+1}$					
	Stage 1			Stage 2			Stage 1			Stage 2		
	Coeff.	z-stat		Coeff.	z-stat		Coeff.	z-stat		Coeff.	z-stat	
CLAWBACK*RESTATE$_{t+1}$										0.114	2.550	***
CLAWBACK*RESTATE$_{t-1}$				0.064	2.040	**						
CLAWBACK				0.013	1.060					0.401	38.860	***
RESTATE$_{t+1}$										0.387	25.490	***
AUDITFEE				0.006	1.390					0.010	2.440	**
ICW	0.128	1.740	**	-0.030	-1.780	**	-0.257	-2.890	***	0.053	3.070	***
BIG4	-0.033	-0.680		0.023	3.950	***	-0.096	-2.100	**	0.036	5.530	***
SPECIALIST				0.003	0.570					-0.002	-0.430	
INITIAL				-0.009	-1.380					-0.003	-0.390	
BOARDIND	0.129	0.700		-0.076	-2.970	***	0.154	0.900		-0.030	-1.080	
BOARDMEET	0.001	0.830		0.000	-0.950		0.001	0.910		0.000	-0.900	
BOARDSIZE	0.020	2.530	**	0.001	0.620		0.019	2.590	**	-0.002	-1.480	
ACSIZE	0.013	0.910		-0.002	-0.910		0.013	0.900		-0.002	-0.930	
ACEXPERT	0.011	0.220		0.012	1.610	*	0.006	0.130		0.009	1.120	
CEOTENURE	-0.017	-1.200		0.003	1.520	*	-0.025	-1.810	**	0.003	1.510	*
CEOCHAIR	-0.083	-2.130	**	0.002	0.420		-0.100	-2.760	***	0.011	1.690	*
RESTATE$_{t-1}$	0.103	2.670	***	0.410	39.830	***	0.482	10.840	***			
ASSETS	0.100	8.800	***	0.000	-0.180		0.088	8.120	***	-0.010	-4.020	***
LEVERAGE	0.172	3.050	***	-0.005	-0.680		0.058	1.010		-0.011	-1.190	
MTB	0.000	-0.330		0.000	-0.220		0.000	-0.800		0.000	-0.850	
SALEGR	-0.001	-0.760		0.000	-0.040		0.000	-0.520		0.000	-0.270	
LOSS	0.153	4.010	***	0.004	0.720		0.106	2.830	***	-0.001	-0.220	
ROA	0.061	0.800		0.008	0.750		-0.020	-0.260		0.010	0.880	
FINANCE				-0.003	-0.720					-0.008	-2.030	**
LITIGATION	-0.075	-1.880	*	-0.007	-1.310	*	-0.046	-1.260		-0.004	-0.620	
SUIT	0.255	2.170	**	-0.031	-1.420	*	0.099	0.850		-0.002	-0.070	
AGE	-0.044	-1.760	*				-0.014	-0.650				
MERGACQ	0.101	3.310	***	0.017	3.680	***	0.062	2.140	**	0.009	1.820	**
SEGBUS	0.071	3.490	***				0.060	3.400	***			
FOREIGN	-0.019	-0.600		0.003	0.580		-0.030	-0.980		0.005	0.960	
RESTRUCTURE				0.006	1.190					0.010	2.110	**
Constant	-4.552	-12.080	***	0.007	0.120		-4.141	-11.810	***	0.126	1.870	*
Lambda				-0.003	-0.710					-0.213	-22.443	***
Year Controls	Included			Included			Included			Included		
Industry Controls	Included			Included			Included			Included		
Observations				18,302						17,564		
Wald Chi-square				2244.53	***					7231.52	***	
Log Pseudo-Likelihood				-6913.29						-6420.24		

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 22 (cont.)
Supplemental Analyses: REVISION

	Panel E			
	H5: Regression of REVISION and CLAWBACK*NAS			
	Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*NAS			-0.011	-2.490 **
CLAWBACK			0.426	50.670 ***
NAS			-0.030	-0.710
AUDITFEE			0.025	0.820
ICW	0.091	1.120	-0.044	-2.150 **
BIG4	-0.056	-1.350	0.060	1.250
SPECIALIST			0.003	0.570
INITIAL			-0.024	-1.440
BOARDIND	0.193	1.180	-0.068	-2.020 **
BOARDMEET	0.001	0.960	0.000	-0.540
BOARDSIZE	0.017	2.410 **	0.001	0.430
ACSIZE	0.001	0.090	-0.002	-0.760
ACEXPERT	0.009	0.190	0.005	0.450
CEOTENURE	-0.023	-1.720 **	0.004	1.940 **
CEOCHAIR	-0.095	-2.710 ***	0.003	0.330
RESTATE$_{t-1}$	-0.305	-5.580 ***	0.410	40.740 ***
ASSETS	0.086	8.310 ***	0.008	0.430
LEVERAGE	0.083	1.630	-0.008	-0.650
MTB	0.000	-0.290	0.000	-0.660
SALEGR	-0.001	-0.600	0.000	0.720
LOSS	0.124	3.560 ***	-0.009	-0.890
ROA	0.006	0.090	0.010	0.810
FINANCE			0.001	0.100
LITIGATION	-0.044	-1.290	-0.009	-1.010
SUIT	0.171	1.510	-0.046	-1.870 **
AGE	-0.026	-1.310		
MERGACQ	0.092	3.340 ***	0.019	1.580 *
SEGBUS	0.059	3.520 ***		
FOREIGN	-0.025	-0.870	0.017	0.950
RESTRUCTURE			0.013	1.190
Constant	-4.038	-11.890 ***	-0.454	-0.530
Lambda			-0.211	-31.913 ***
Year Controls	Included		Included	
Industry Controls	Included		Included	
Observations			18,302	
Wald Chi-square			5081.97 ***	
Log Pseudo-Likelihood			-6794.01	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate multicollinearity.

Table 23
Supplemental Analyses: REVOOPA

	Panel A			Panel B		
	H1: Regression of REVOOPA and NAS		H2: Regression of REVOOPA and CLAWBACK			
	Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK					0.501	53.420 ***
NAS	-1.490	-3.070 ***				
AUDITFEE	1.316	3.770 ***			0.017	3.730 ***
ICW	-0.287	-1.770 **	0.090	1.150	0.002	0.090
BIG4	2.296	4.160 ***	-0.083	-2.040 **	0.049	6.840 ***
SPECIALIST	0.132	2.620 ***			0.012	2.180 **
INITIAL	-0.490	-2.560 **			-0.003	-0.340
BOARDIND	0.186	0.510	0.164	1.010	-0.060	-1.940 **
BOARDMEET	0.002	0.330	0.001	0.970	0.000	-0.990
BOARDSIZE	0.050	2.310 **	0.014	2.080 **	-0.001	-0.950
ACSIZE	0.041	1.430	0.007	0.490	-0.003	-0.940
ACEXPERT	-0.163	-1.280 *	-0.008	-0.180	0.015	1.600 *
CEOTENURE	0.019	0.840	-0.017	-1.320 *	0.005	1.770 **
CEOCHAIR	-0.245	-2.630 ***	-0.088	-2.490 **	-0.001	-0.190
RESTATE$_{t-1}$	2.441	48.170 ***	-0.223	-4.570 ***	0.405	39.310 ***
ASSETS	0.555	2.630 ***	0.087	8.320 ***	-0.013	-4.510 ***
LEVERAGE	0.237	1.830 **	0.096	1.820 *	-0.002	-0.160
MTB	0.000	-2.940 ***	0.000	-0.260	0.000	0.510
SALEGR	0.007	2.290 **	-0.001	-1.080	0.000	-0.490
LOSS	-0.139	-1.330	0.106	3.030 ***	0.001	0.160
ROA	0.457	2.900 ***	-0.017	-0.270	0.022	1.790 *
FINANCE	0.141	1.950 *			-0.004	-0.950
LITIGATION	-0.291	-3.020 ***	-0.029	-0.830	-0.002	-0.330
SUIT	-0.347	-1.610 *	0.218	1.920 *	-0.051	-1.870 **
AGE			-0.024	-1.160		
MERGACQ	0.594	4.350 ***	0.080	2.900 ***	0.012	2.150 **
SEGBUS			0.060	3.550 ***		
FOREIGN	0.580	2.960 ***	-0.044	-1.520	0.006	0.950
RESTRUCTURE	0.512	4.030 ***			0.013	2.440 **
Constant	-17.552	-4.110 ***	-4.112	-11.980 ***	0.150	1.970 **
Lambda					-0.247	-36.878 ***
Year Controls	Included		Included		Included	
Industry Controls	Included		Included		Included	
Observations	20,332				18,302	
Wald Chi-square	2941.29 ***				5721.82 ***	
Pseudo-R^2	20.12%					
Log Pseudo-Likeli	-6581.91				-9426.04	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 6

NAS variable in Stage 2 of H1 is the predicted NAS from Main Hypotheses Stage 1 of H1 (see Table 6)

Table 23 (cont.)
Supplemental Analyses: REVOOPA

	Panel C				Panel D			
	H3: Regression of REVOOPA and CLAWBACK*RESTATE_{t-1}				H4: Regression of REVOOPA and CLAWBACK*RESTATE_{t+1}			
	Stage 1		Stage 2		Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*RESTATE$_{t+1}$							0.109	2.740 ***
CLAWBACK*RESTATE$_{t-1}$			0.216	4.590 ***				
CLAWBACK			0.500	64.240 ***			0.486	51.830 ***
RESTATE$_{t+1}$							0.380	28.150 ***
AUDITFEE			0.015	3.410 ***			0.024	5.170 ***
ICW	0.106	1.370 *	0.001	0.060	-0.205	-2.450 ***	0.087	4.610 ***
BIG4	-0.090	-2.330 **	0.050	6.960 ***	-0.109	-2.480 **	0.060	8.190 ***
SPECIALIST			0.011	2.150 **			0.008	1.390
INITIAL			-0.003	-0.360			0.007	0.870
BOARDIND	0.176	1.120	-0.059	-1.880 **	0.107	0.640	-0.015	-0.470
BOARDMEET	0.001	0.980	0.000	-1.000	0.001	0.910	0.000	-0.950
BOARDSIZE	0.012	1.820 *	-0.002	-1.120	0.016	2.310 **	-0.003	-2.080 **
ACSIZE	0.008	0.560	-0.002	-0.750	0.017	1.220	-0.001	-0.420
ACEXPERT	-0.015	-0.340	0.014	1.440 *	-0.009	-0.180	0.014	1.470 *
CEOTENURE	-0.016	-1.280	0.005	1.810 **	-0.021	-1.530 *	0.004	1.400 *
CEOCHAIR	-0.083	-2.440 **	0.000	-0.020	-0.088	-2.460 **	0.002	0.280
RESTATE$_{t-1}$	-0.365	-7.110 ***	0.384	34.020 ***	0.457	10.910 ***		
ASSETS	0.081	7.950 ***	-0.013	-4.540 ***	0.092	8.550 ***	-0.018	-6.050 ***
LEVERAGE	0.091	1.790 *	-0.001	-0.090	0.072	1.260	0.001	0.080
MTB	0.000	-0.260	0.000	0.560	0.000	-0.780	0.000	-0.440
SALEGR	-0.001	-1.040	0.000	-0.220	0.000	-0.550	0.000	-0.010
LOSS	0.098	2.890 ***	0.001	0.100	0.086	2.320 **	0.003	0.340
ROA	-0.025	-0.390	0.022	1.840 *	-0.040	-0.550	0.026	1.980 **
FINANCE			-0.004	-0.920			-0.011	-2.230 **
LITIGATION	-0.021	-0.610	-0.002	-0.260	-0.025	-0.680	-0.003	-0.440
SUIT	0.214	1.900 *	-0.055	-1.930 **	0.175	1.480	-0.008	-0.300
AGE	-0.025	-1.290			-0.013	-0.580		
MERGACQ	0.075	2.790 ***	0.012	2.080 **	0.050	1.770 *	0.010	1.680 **
SEGBUS	0.055	3.480 ***			0.056	3.200 ***		
FOREIGN	-0.046	-1.620	0.007	1.070	-0.044	-1.440	0.006	0.900
RESTRUCTURE			0.013	2.480 **			0.019	3.450 ***
Constant	-3.865	-11.600 ***	0.180	2.350 **	-4.286	-12.170 ***	0.119	1.480
Lambda			-0.269	-33.308 ***			-0.252	-30.892 ***
Year Controls	Included		Included		Included		Included	
Industry Controls	Included		Included		Included		Included	
Observations			18,302				17,564	
Wald Chi-square			6862.94 ***				7803.11 ***	
Log Pseudo-Likelihood			-9372.19				-8919.67	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Table 23 (cont.)
Supplemental Analyses: REVOOPA

	Panel E			
	H5: Regression of REVOOPA and CLAWBACK*NAS			
	Stage 1		Stage 2	
	Coeff.	z-stat	Coeff.	z-stat
CLAWBACK*NAS			-0.006	-1.170
CLAWBACK			0.504	53.760 ***
NAS			-0.094	-1.900 *
AUDITFEE			0.085	2.380 **
ICW	0.091	1.160	-0.021	-0.930
BIG4	-0.078	-1.910 *	0.154	2.760 ***
SPECIALIST			0.012	2.210 **
INITIAL			-0.037	-1.900 *
BOARDIND	0.168	1.030	-0.017	-0.450
BOARDMEET	0.001	0.970	0.000	-0.010
BOARDSIZE	0.014	2.080 **	0.002	0.900
ACSIZE	0.007	0.500	0.001	0.160
ACEXPERT	-0.009	-0.190	-0.004	-0.280
CEOTENURE	-0.018	-1.340 *	0.004	1.710 **
CEOCHAIR	-0.089	-2.520 **	-0.015	-1.480
RESTATE$_{t-1}$	-0.220	-4.480 ***	0.405	39.290 ***
ASSETS	0.089	8.620 ***	0.028	1.300
LEVERAGE	0.098	1.840 *	0.016	1.180
MTB	0.000	-0.270	0.000	-1.820 *
SALEGR	-0.001	-1.100	0.000	1.650 *
LOSS	0.106	3.040 ***	-0.015	-1.310
ROA	-0.018	-0.270	0.031	2.360 **
FINANCE			0.006	0.850
LITIGATION	-0.030	-0.840	-0.016	-1.620 *
SUIT	0.218	1.920 *	-0.051	-1.850 **
AGE	-0.023	-1.100		
MERGACQ	0.081	2.940 ***	0.037	2.600 ***
SEGBUS	0.060	3.550 ***		
FOREIGN	-0.043	-1.470	0.042	2.090 **
RESTRUCTURE			0.036	2.770 ***
Constant	-4.176	-12.150 ***	-1.728	-1.760 *
Lambda			-0.247	-36.621 ***
Year Controls	Included		Included	
Industry Controls	Included		Included	
Observations			18,302	
Wald Chi-square			5902.16 ***	
Log Pseudo-Likelihood			-9422.85	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate
  multicollinearity.

Table 24
Supplemental Analyses: RESTATE_OOPA

	Panel A			Panel B				
	H1: Regression of RESTATE_OOPA			H2: Regression of RESTATE_OOPA and CLAWBACK				
	Stage 2			Stage 1			Stage 2	
	Coeff.	z-stat		Coeff.	z-stat		Coeff.	z-stat
CLAWBACK							0.085	10.100 ***
NAS	-4.152	-2.050 **						
AUDITFEE	3.633	2.410 **					0.002	1.680 *
ICW	-0.141	-0.220		0.072	0.890		-0.005	-1.000
BIG4	6.148	2.700 ***		-0.060	-1.390		0.003	2.050 **
SPECIALIST	0.365	1.700 *					0.002	1.780 *
INITIAL	-0.570	-0.740					0.003	1.700 *
BOARDIND	3.915	2.060 **		0.049	0.290		0.007	1.000
BOARDMEET	0.016	2.340 **		0.001	0.930		0.000	-0.050
BOARDSIZE	0.137	1.540		0.010	1.490		0.000	-0.770
ACSIZE	0.012	0.090		0.024	1.820 *		-0.001	-1.450
ACEXPERT	-1.070	-2.000 **		0.000	-0.010		-0.001	-0.660
CEOTENURE	0.221	2.100 **		-0.028	-2.050 **		0.001	2.650 ***
CEOCHAIR	-1.192	-2.580 ***		-0.067	-1.960 **		-0.001	-1.030
RESTATE$_{t-1}$				-0.041	-0.660		0.031	9.160 ***
ASSETS	1.402	1.630		0.094	7.430 ***		-0.002	-3.630 ***
LEVERAGE	1.293	2.450 ***		0.075	1.250		0.000	-0.160
MTB	-0.001	-1.930 *		0.000	-0.860		0.000	2.470 **
SALEGR	0.015	1.470 *		-0.002	-1.520 *		0.000	-0.890
LOSS	-0.772	-1.650 *		0.112	3.130 ***		-0.002	-1.210
ROA	0.990	2.080 **		-0.081	-1.110		0.002	0.920
FINANCE	0.636	1.910 *					0.001	0.830
LITIGATION	-0.537	-1.320 *		-0.069	-1.830 *		0.001	0.560
SUIT	-0.265	-0.250		0.177	1.680 *		-0.008	-1.380 *
AGE				-0.019	-0.870			
MERGACQ	1.015	1.660 **		0.082	2.890 ***		-0.002	-2.080 **
SEGBUS				0.055	2.880 ***			
FOREIGN	1.725	2.170 **		-0.044	-1.470		0.001	0.900
RESTRUCTURE	1.233	2.420 **					0.001	0.840
Constant	-45.742	-2.510 **		-4.031	-8.840 ***		0.032	1.490
Lambda							-0.047	-6.429 ***
Year Controls	Included			Included			Included	
Industry Controls	Included			Included			Included	
Observations	20,270						18,302	
Wald Chi-square	191.70 ***						149.93 ***	
Pseudo-R^2	9.12%							
Log Pseudo-Likeli	-553.99						18601.81	

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

Stage 1 of H1 can be found on Table 6

NAS variable in Stage 2 of H1 is the predicted NAS from Main Hypotheses Stage 1 of H1 (see Table 6)

Table 24 (cont.)
Supplemental Analyses: RESTATE_OOPA

	Stage 1		Stage 2		
	Coeff.	z-stat	Coeff.	z-stat	
CLAWBACK*NAS			-0.001	-0.570	
CLAWBACK			0.086	9.860	***
NAS			-0.016	-1.360	
AUDITFEE			0.013	1.500	
ICW	0.072	0.880	-0.009	-1.470	*
BIG4	-0.057	-1.310	0.021	1.570	
SPECIALIST			0.002	1.790	*
INITIAL			-0.003	-0.560	
BOARDIND	0.052	0.300	0.014	1.630	*
BOARDMEET	0.001	0.930	0.000	0.910	
BOARDSIZE	0.010	1.490	0.000	0.700	
ACSIZE	0.024	1.820 *	0.000	-0.430	
ACEXPERT	-0.001	-0.020	-0.004	-1.470	*
CEOTENURE	-0.029	-2.060 **	0.001	2.620	***
CEOCHAIR	-0.067	-1.980 **	-0.004	-1.640	
RESTATE$_{t-1}$	-0.040	-0.650	0.031	9.160	***
ASSETS	0.095	8.050 ***	0.005	0.920	
LEVERAGE	0.075	1.260	0.003	0.730	
MTB	0.000	-0.830	0.000	-1.180	
SALEGR	-0.002	-1.520 *	0.000	-0.110	
LOSS	0.112	3.140 ***	-0.005	-1.740	*
ROA	-0.082	-1.120	0.004	1.380	
FINANCE			0.003	1.460	
LITIGATION	-0.069	-1.830 *	-0.001	-0.630	
SUIT	0.177	1.680 *	-0.008	-1.370	*
AGE	-0.018	-0.830			
MERGACQ	0.083	2.910 ***	0.002	0.520	
SEGBUS	0.055	2.880 ***			
FOREIGN	-0.043	-1.450	0.007	1.570	
RESTRUCTURE			0.005	1.620	
Constant	-4.070	-9.260 ***	-0.288	-1.220	
Lambda			-0.047	-6.448	***
Year Controls	Included		Included		
Industry Controls	Included		Included		
Observations			18,302		
Wald Chi-square			151.62 ***		
Log Pseudo-Likelihood			18603.67		

*, **, *** Denote significance at the p<0.10, p<0.05, and p<0.01 levels, respectively.

The p-values are one-tailed for variables with a directional expected sign and two-tailed otherwise.

NAS is mean-centered and used in the calculation of the interaction term CLAWBACK*NAS to mitigate
  multicollinearity.

CHAPTER 5

CONCLUSION

Over the last decade, there has been a decline in the trend of restatements and a concurrent rise in the trend of OOPAs out of virtual obscurity. OOPAs are immaterial corrections to the financial statements, which are less prominent than revision restatements, and are therefore considered a form of stealth restatement. They garner less negative stakeholder reactions than more prominent types of restatements (Files et al, 2009; Irani & Xu, 2011). This increase in the existence of OOPAs may be an indication of improved financial reporting quality. Conversely, this trend could be an indication of managerial opportunism.

To further examine these conflicting possibilities, this study investigates the relationship between NAS and OOPAs. Such an examination also addresses the influence of NAS on auditor independence. The study also investigates the possibility of managerial opportunism in the context of clawback provisions. In addition, the interaction of NAS with clawback provisions on OOPAs is examined.

The extant literature presents two conflicting views concerning NAS in this context. The economic bond created between clients and auditors providing NAS may influence auditors and impair auditor independence (Schneider et al., 2006; Sharma, 2014; Tepalagul & Lin, 2015). In light of OOPAs, this could lead to the recognition of an OOPA instead of a restatement. An alternate view of NAS focuses on potential knowledge spillover that could increase reporting quality (Schneider et al., 2006; Sharma,

111

2014; Tepalagul & Lin, 2015). Using this interpretation, the relationship between NAS and OOPAs could indicate higher quality financial reporting.

When examining the impact of NAS on the existence of OOPAs, the results indicate support for improved financial reporting quality through knowledge spillover. The relationship between NAS and OOPAs is negative and statistically significant. Firms that purchase greater amounts of NAS are less likely to report an OOPA. This would indicate that NAS does not impair auditor independence. Supplemental analyses test this relationship using a variety of OOPA properties such as the materiality of OOPA (OOPAMAT), the length of the adjustment period (OOPALENGTH), the length of time to disclose the OOPA (OOPADISBEG), income-decreasing OOPAs (OOPA_NEG), income-increasing OOPAs (OOPA_POS), OOPAs that constitute at least 5% of net income (OOPAMAT5perc), OOPAs that constitute at least 10% of net income (OOPAMAT10perc), and the number of OOPAs (NumOOPA_log). NAS is not statistically significantly associated with any of these characteristics. These results suggest that NAS does not impair auditor independence.

Supplemental analyses further investigate NAS by examining the individual components of NAS: TAXNAS, AUDITNAS, and OTHERNAS. Both TAXNAS and OTHERNAS are negatively and statistically significantly associated with OOPAEXIST. When measured as the ratio of NAS to total fees, NAS (NAS_TOTALFEES) and each of its components (TAXNAS_TOTALFEES, AUDITNAS_TOTALFEES, OTHERNAS_TOTALFEES) are negatively and statistically significantly associated with OOPAEXIST. These findings substantiate and reinforce the findings of NAS and

OOPAEXIST further implying that NAS and its various components do not impair auditor independence but, instead, contribute to increased financial reporting quality.

Additional supplemental analyses use alternate dependent variables to test these relationships and arrive at the same conclusions concerning NAS. Firms that purchase greater amounts of NAS also have fewer occurrences of revision restatements (REVISION). This same relationship is indicated for stealth restatements in general when combining revision restatements and OOPAs (REVOOPA). Firms that purchase greater amounts of NAS have fewer occurrences of both revision restatements and OOPAs. In addition, firms that purchase greater amounts of NAS are less likely to report an OOPA subsequent to reporting a restatement while reporting no restatement in the current year (RESTATE_OOPA).

The second area of interest researched is clawback provisions and their impact on OOPAs. The current literature seems to indicate that clawbacks are a sign of increased financial reporting quality and decreased managerial opportunistic behavior (Chan et al., 2012; DeHann et al., 2013; Iskandar-Datta & Jiam, 2013). Firms with clawbacks report fewer restatements and garner positive market reactions. OOPAs are an immaterial restatement that do not trigger a clawback. Therefore, this decrease in restatements could be the result of management incentives to classify corrections as immaterial, and record an OOPA. Consequently, a clawback provision would not be triggered and the firm would avoid a negative market reaction. In direct contrast to the majority of the current literature's interpretation of clawback effectiveness, this would indicate decreased financial reporting quality and increased managerial opportunistic behavior.

My research supports this suspicion. CLAWBACK has a positive and statistically significant association with OOPAEXIST. Firms that have clawbacks are more likely to have an OOPA reported. Also, CLAWBACK has a positive and statistically significant association with NumOOPA_log. Firms with clawbacks have a greater number of OOPAs reported each year than firms without clawbacks. With the general trend of decreased restatements and the clawback literature reporting decreased restatements for clawback firms, these findings indicate that management may be acting opportunistically and recording corrections as OOPAs instead of restatements.

To expound upon these findings, I examine firms with previous restatements as well as firms with subsequent restatements. Both CLAWBACK*RESTATE$_{t-1}$ and CLAWBACK*RESTATE$_{t+1}$ have a positive and statistically significant association with OOPAEXIST. In addition, CLAWBACK has a positive and statistically significant association with RESTATE_OOPA. These findings substantiate the main findings and they suggest that management of firms with a prior restatement are more likely to record an OOPA than a restatement in the current year, and firms that recorded an OOPA in the current year subsequently report a restatement. Furthermore, the current literature shows that clawback adopting firms receive positive market reaction upon adoption and this reaction is increased for those firms with previous restatements (Chan et al., 2012; DeHaan et al., 2013; Iskandar-Datta & Jia, 2013). These findings seem to concur with my research and imply that management is incentivized to report less subsequent restatements and more OOPAs. My findings also imply that firms recording OOPAs may be opportunistically reporting them as such when, in fact, they should be reporting them as restatements. More research is required to understand why management records an

OOPA instead of a restatement when the recorded OOPA eventually is required to be recognized as a restatement. It seems in the longer term management is unable to get away with avoiding reporting a restatement.

I also examine the relationship between clawbacks and the materiality of OOPAs (OOPAMAT, OOPAMAT5perc, OOPAMAT10perc) as well as the negative or positive nature of the OOPA on net income (OOPA_NEG, OOPA_POS). There are no significant associations between CLAWBACK and characteristics of OOPAs. Therefore, regardless of the materiality or the nature of OOPAs (whether income-decreasing or income-increasing), firms are more likely to record OOPAs. This relationship is also indicated for clawback firms with previous restatements and clawback firms with subsequent restatements with one exception. CLAWBACK*RESTATE$_{t+1}$ has significant findings with OOPA_NEG and OOPA_POS. Clawback firms with subsequent restatements are more likely to have income-decreasing OOPAs and less likely to have income-increasing OOPAs. These clawback firms previously reported higher amounts of income, have recorded an OOPA to correct and decrease their income, and subsequently make a restatement. This could further imply managerial opportunism and the practice of recording OOPAs in lieu of a restatement.

Supplemental analyses also examine some time measures of OOPAs. Clawback firms have a shorter adjustment period and disclose OOPAs faster than firms without clawbacks. These comparatively faster corrections and disclosures could be management's attempt to avoid further inquiry of such adjustments, prevent the initiation of a clawback, and/or mitigate or deter negative market reaction. Similar results are found when examining these same relationships for clawback firms with a subsequent

restatement. Therefore, these seemingly hasty corrections may also indicate

management's intention to avoid reporting a restatement by instead reporting an OOPA

only to end up reporting the restatement in the future. Future research could also examine

the relationship between OOPA materiality and the length of the adjustment period as

well as the market reaction of OOPAs.

I also investigate whether the clawback results are similar for other immaterial

corrections. CLAWBACK has a positive and statistically significant association with

both REVISION and REVOOPA. Therefore, clawback firms are more likely to have a

revision restatement reported as well as stealth restatements in general (revision

restatements and/or OOPAs). This indicates that not only do clawback firms report more

OOPAs, but they report more stealth restatements overall. These findings provide further

support for the main analysis and the interpretation that clawbacks provide incentives to

not only decrease restatements (Denis 2012; Pyzoha, 2015) but also increase stealth

restatements. These findings are further substantiated when examining this relationship

using CLAWBACK*RESTATE$_{t-1}$ and CLAWBACK*RESTATE$_{t+1}$. Both variables have

a positive and statistically significant association with REVISION as well as with

REVOOPA.

One further area of interest researched is the association between clawback

provisions and OOPAs conditional on the level of NAS. Three dependent variables report

significant findings with this interaction: OOPALENGTH, NumOOPA_log, and

REVISION. CLAWBACK*NAS is negatively and statistically significantly associated

with all three of these dependent variables. Clawback firms that purchase greater amounts

of NAS further reduce the length of the adjustment period, reduce the number of OOPAs,

and reduce the likelihood of reporting revision restatements. These results add to the support that NAS does not seem to impair auditor independence but, instead, increases financial reporting quality.

This research has some potential limitations that should be considered. First, the sample consists of U.S. publicly traded companies and data is gathered largely from public data sources. Therefore, the results may not be generalizable to smaller firms, private firms, and those outside the U.S. Future research could investigate these firm types. Second, due to the use of secondary data, there is a risk that some information may be missing or incomplete. Third, the variables used may not properly capture each respective measure. Therefore, I have used additional measures of both NAS and OOPAs in supplemental analyses. Fourth, clawback adoption is voluntary and, as such, presents a potential selection bias. I have attempted to mitigate this limitation through the research design by utilizing a simultaneous two-stage regression. Finally, there may be potentially omitted variable that have not been included in this study.

This study makes several contributions and has several practical implications. The results add to the NAS literature providing evidence that greater purchases of NAS do not impair auditor independence. Rather, the results show that NAS benefits from knowledge spillover resulting in increased financial reporting quality. Therefore, the restrictions placed on NAS by SOX may be unwarranted. This study shows evidence of the benefits of NAS. As such, the results provide additional support and defense for decreasing existing NAS restrictions imposed by SOX.

The study also contributes to the clawback and disclosure literature. The results indicate that the assumed effectiveness of clawbacks discussed in the current literature

may be masking hidden problems. This study provides evidence that clawbacks

incentivize management to opportunistically record OOPAs. The decrease in restatements

may not be a sign of clawback effectiveness but rather the choice of management to

utilize OOPAs as a stealth restatement to their advantage. Based on these results,

regulators may wish to revise the current disclosure regulations for OOPAs giving them

greater prominence. Revisions may also be warranted to Dodd-Frank concerning

clawbacks in order to prevent or negate the unintended consequences of such provisions.

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