TWO ESSAYS ON NON-GAAP REPORTING

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAI'I AT MANOA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

BUSINESS ADMINISTRATION

MAY 2023

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Keywords: Non-GAAP earnings, disclosure prominence, SEC investigations, turnover, turnover-performance sensitivity, political risk, COVID-19 pandemic

ACKNOWLEDGEMENTS

To my dissertation committee, (Jian Zhou - Chair, Hamid Pourjalali, Boochun Jung, Qianqiu Liu, and Kentaro Hayashi), thank you so much for all your help with completing my dissertation. I learned so much from all of you, and your guidance made this paper possible. Thank you especially to my committee chair, Jian Zhou, for your encouragement and advice. I would also like to thank Min Liu and Ron Heck for their feedback and recommendations.

To my accounting and finance PhD student friends, thank you for an amazing time during the program. I could not have picked better people to make my way through the program with.

Finally, to my family most of all, I can't thank you enough for the love and support you have given me along the way. I couldn't have done this without you.

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Abstract

This study examines whether an investigation by the United States Securities and Exchange Commission (SEC) affects a firm's non-GAAP reporting choices and a potential mechanism for the effect, Turnover-Performance Sensitivity (TPS). Using a list of all closed SEC investigations between January 1, 2000 and August 2, 2017 provided by Blackburne et al. (2021), I examine my research question. I find that, when under an SEC investigation, firms with opportunistic motives increase their non-GAAP reporting, while those with informative motives reduce their opportunistic non-GAAP reporting. Further, I find TPS increases for firms with opportunistic motives that are under investigation and that opportunistic non-GAAP reporting choices exacerbate this effect. Opportunistic firms also have less persistent non-GAAP earnings during an SEC investigation. Conversely, firms with informative motives do not see such a change to TPS. I also find that the effect of an investigation on opportunistic reporting is stronger for (i) informative firms in the post-financial crisis period, (ii) firms that have a high level of financial expertise on the board of directors and the nomination committee, (iii) firms with dual board chair-CEO positions, and (iv) firms with low Earnings Response Coefficients (ERC). This paper has implications for regulators and investors, as my research shows that SEC interventions have unintended consequences related to opportunistic non-GAAP reporting and managers' career prospects.

Keywords: SEC investigations, non-GAAP earnings, disclosure prominence, turnover, Turnover-Performance Sensitivity

CHAPTER 1.1. INTRODUCTION

This study examines whether investigations by the Securities and Exchange Commission (SEC) affect the reporting of non-GAAP (Generally Accepted Accounting Principles) financial measures. Specifically, I examine whether firms are more likely to report non-GAAP earnings per share opportunistically. In addition, using Turnover-Performance Sensitivity (TPS) as a mechanism for this effect, I examine how these changes to non-GAAP earnings affect the likelihood a manager will be fired for poor performance while under an investigation.

The SEC investigates allegations of non-compliance with its regulations to protect investors. Recommended by the SEC's Enforcement Division, investigations can be conducted through informal inquiry, interviews, and examining records and trading information (SEC, 2017). As the investigations are completed privately, and it is up to a firm's discretion to decide if they announce to the investigation to investors. Often, the case concludes if the SEC and the firm under investigation settle without trial. However, sometimes SEC investigations can lead to an enforcement action or litigation against the parties involved. For example, in 2017, following an investigation, the SEC issued an accounting and auditing enforcement release (AAER) against General Motors Company for maintaining poor internal controls related to loss contingencies (SEC, 2017).

While such investigations meet the SEC's mandate of protecting investors (Securities Exchange Act of 1934 as Amended, 2018), they have wide-ranging effects on firm operations and financial reporting. Firms under an SEC investigation are more likely to engage in real earnings management (Blackburne et al., 2020) or insider trading, and they often see a decline in performance following the investigation (Blackburne et al., 2021). Announcing investigations to investors affects the firm's capital market prospects, including analyst coverage, bid-ask spreads,

and litigation risk. These effects are worthy of study because they can affect the SEC's other goals of maintaining a fair, orderly, and efficient market (Securities Exchange Act of 1934, as Amended, 2018).

In this paper, I examine the effect of an SEC investigation on the opportunistic reporting of non-GAAP earnings. Non-GAAP earnings are a vital area of study as they have replaced GAAP earnings as the dominant determinant of stock prices (Bradshaw & Sloan, 2002) and their use has greatly increased over time (Bentley et al., 2018). The SEC's Regulation G (2003) and Regulation S-K (2003) regulate non-GAAP disclosures. As a result, the firm could face scrutiny of their non-GAAP earnings during an SEC investigation and change their disclosures in anticipation of the scrutiny. However, what changes the company will make are difficult to predict in advance. Three competing outcomes are possible: increased opportunism, decreased opportunism, or no change. The opportunism perspective (Barth et al., 2008; D. E. Black & Christensen, 2009; Bradshaw & Sloan, 2002) and the crowding-out effect of enforcement both (Hou et al., 2021; Schantl & Wagenhofer, 2020) predict that firms under an SEC investigation would increase the opportunistic reporting of non-GAAP earnings. Under the opportunism perspective, companies report non-GAAP earnings opportunistically to manage perceptions of the company's performance (D. E. Black et al., 2018). Under the crowding-out effect of enforcement, Schantl and Wagenhofer (2020) show that during periods of higher public enforcement, firms may think private litigation is less likely to occur because, if there is no enforcement action, no misreporting has occurred. Numerous investigations do not result in an enforcement action (SEC, 2017), so this is a distinct possibility. Conversely, the regulatory observer effect (Blackburne et al., 2020; Levitt & List, 2011) predicts a decreased likelihood of the opportunistic reporting of non-GAAP earnings and the prominence of such earnings. The regulatory observer effect suggests the firm will behave in ways to appease

the regulator while it is under investigation. Additionally, many SEC investigations that do not result in an enforcement action go undisclosed to investors (Blackburne et al., 2019). It is also possible that, because of a lack of disclosure, there is no effect on non-GAAP reporting. These competing possibilities for the effect of SEC investigations on opportunistic non-GAAP reporting is an empirical question providing tension to this analysis and is worthy of further research into the topic.

The conflicting arguments found in prior literature point to another possibility, a more nuanced result. That an SEC investigation can have multiple effects depending on the company's motives, such as to provide information or to increase public perception. In this paper, I follow Curtis et al. (2014) in defining the motives of the company. I define companies with transitory gains as having informative motives and those without transitory gains as having opportunistic motives. I predict the effect of an SEC investigation will be different for the two groups. Firms with opportunistic motives will increase opportunistic reporting while under an investigation to improve investor perceptions. By contrast, firms with informative motives will decrease their opportunistic reporting because of the regulatory observer effect.

As a mechanism for the effect of SEC investigations on opportunistic non-GAAP reporting, I propose the likelihood a manager is fired for poor performance, or Turnover-Performance Sensitivity (TPS). Turnover is a key corporate governance mechanism and a powerful motivator for managers to make changes. The opportunism perspective (Barth, Gow, et al., 2012; D. E. Black et al., 2018; D. E. Black & Christensen, 2009; Doyle et al., 2013) of non-GAAP reporting involves the use of non-GAAP measures to improve perceptions of the firm for the manager's benefit. Extensive research supports this idea. For example, Barth et al. (2012) find that firms exclude stock-based compensation expense to increase earnings. Other researchers find that firms use non-

GAAP to meet earnings targets (D. E. Black & Christensen, 2009) or that firms change their non-GAAP definitions to meet earnings targets (Doyle et al., 2013). Further, in their survey of the non-GAAP literature, Black et al. (2018) report numerous other examples of opportunistic non-GAAP reporting. Thus, reporting opportunistically to improve the firms' prospects is a significant motivator for non-GAAP reporting. Previous papers on SEC investigations find that turnover is an important consideration, as is non-GAAP reporting. Blackburne et al. (2020) find that the absolute level of CEO turnover increases during an SEC investigation and Solomon and Soltes (2021) find the absolute level of turnover increases if a company discloses an SEC financial fraud investigation. Marques (2006) finds that SEC interventions in the market affected the likelihood of using non-GAAP reporting and Kolev et al. (2008) find that SEC interventions affected non-GAAP exclusion quality. Therefore, SEC investigations, CEO turnover, and non-GAAP reporting are linked as well. Managers of companies with opportunistic motives may use non-GAAP reporting as a method to improve perceptions of their performance, thereby causing Turnover-Performance Sensitivity to increase further. On the other hand, managers of companies with informative motives should not see any change in Turnover-Performance Sensitivity. I examine this further in this paper.

Using a sample of all closed SEC investigations between January 1, 2000 and August 2, 2017 from Blackburne et al. (2021), I compare opportunistic non-GAAP reporting for firms under an SEC investigation. I measure opportunistic non-GAAP use in six ways; whether non-GAAP earnings (i) is higher than GAAP earnings (Bentley et al., 2018; T.-Y. Chen et al., 2018), (ii) avoids a GAAP loss (Bentley et al., 2018), (iii) avoids a decrease in GAAP income from prior year, (iv) avoids a decrease in GAAP income from prior quarter, (v) meets-or-beats analyst forecasts (Bentley et al., 2018), and (vi) is presented more prominently than GAAP earnings (J. V. Chen et

al., 2021). Using these six measures, I examine whether firms are more or less likely to report non-GAAP opportunistically while under an SEC investigation. In my analysis, I split the sample of firms into two groups, firms with opportunistic motives and those with informative motives, based on the findings of Curtis et al. (2014). I examine whether the effect of an SEC investigation differs based on the motives of the firm. Next, I examine whether Turnover-Performance Sensitivity for firms under investigation changes if the firm presents non-GAAP earnings opportunistically. And finally, I confirm that Turnover-Performance Sensitivity is the mechanism at work by comparing Turnover-Performance Sensitivity for CEOs that are under an SEC investigation compared to those that are not.

My findings generally support my predictions. In an effort to improve investor perceptions, the managers of opportunistic companies use opportunistic non-GAAP reporting more when under an SEC investigation. When the managers of these firms use opportunistic non-GAAP reporting to improve board and investor perceptions, it increases Turnover-Performance Sensitivity further. I confirm Turnover-Performance Sensitivity as the mechanism at work by showing that Turnover-Performance Sensitivity increases for opportunistic firms when under an SEC investigation. This provides strong motivation for managers to improve the appearance of good performance. However, as expected, I do not see these effects for companies with informative motives. When under an SEC investigation, companies with informative motives decrease their use of opportunistic non-GAAP reporting due to the regulatory observer effect. As a result, when managers of these firms use opportunistic non-GAAP reporting, the Turnover-Performance Sensitivity is unaffected.

In additional analysis, I show that the effect of an SEC investigation on opportunistic non-GAAP reporting is higher following the financial crisis of 2007-2008. This is indicative of the

higher level of SEC and public scrutiny, and therefore a higher level of the regulatory observer effect, following the financial crisis. I also find that the effect of SEC investigations on opportunistic non-GAAP reporting is higher for firms with a higher level of financial expertise on the board of directors and the nominating committee. The result is also stronger for firms with dual board chair-CEO positions and those with a lower Earnings Response Coefficient (ERC). Lastly, I find that opportunistic firms have less persistent non-GAAP earnings during an SEC investigation, showing that the key findings were due to the opportunistic use of non-GAAP earnings.

This paper has important implications for regulators and investors. It shows that direct SEC interventions may have unintended consequences related to opportunistic non-GAAP reporting. Specifically, that firms with opportunistic motives increase their opportunistic non-GAAP reporting during an SEC investigation. More research is needed to determine whether these disclosures mislead investors and analysts, consistent with the opportunism perspective, or if the disclosures provide additional information for evaluating management consistent with the stewardship perspective. If the disclosures provide additional information, this confirms that most SEC investigations are not disclosed to investors (Blackburne et al., 2021). This paper also shows that firms with informative motives report non-GAAP earnings less opportunistically following an SEC investigation, consistent with the regulatory observer effect. This is beneficial, as it suggests firms follow SEC regulations more closely during an investigation.

This paper is the first to examine the effect of SEC investigations on opportunistic non-GAAP EPS use, as well as the effect of SEC investigations on Turnover-Performance Sensitivity. It provides a distinct contribution to the accounting literature because it involves actual closed SEC investigations of specific companies. During an investigation, the firm is being actively scrutinized

by the SEC for misreporting, opportunistic reporting, and errors. Prior work examines the effects of new SEC regulations or SEC warnings regarding non-GAAP disclosures (Heflin & Hsu, 2008; Kolev et al., 2008; Marques, 2006), a much lower level of scrutiny not specific to the firm. This paper is also the first to examine the effect of SEC scrutiny on non-GAAP EPS prominence. Further, by using the SEC investigation dataset, this paper accompanies the work of Blackburne et al. (2021) and Blackburne et al. (2020) which examine the effect of SEC investigations on earnings management and insider trading, respectively. Finally, this paper also examines the effect of SEC scrutiny on Turnover-Performance Sensitivity. While another working paper examines the absolute effect of an investigation on turnover (Blackburne et al., 2020), this paper examines how the turnover effect varies with performance. In their paper, Blackburne et al. (2020) also examine how CEO Turnover is affected in absolute terms for firms with investigations that did not result in an AAER. This paper examines a different, but related concept, the sensitivity of turnover to firm performance for all firms that are under investigation. It also examines how the effect varies with opportunistic non-GAAP reporting, providing a distinct contribution from Blackburne et al. (2020).

This paper also follows O'Connell's (2007) call for more stewardship related research and contributes to the stewardship literature. Specifically, by examining the relationship between CEO Turnover and SEC Investigations, this paper researches the contemporary meaning of stewardship and who provides the evaluations of management used in corporate governance mechanisms. It looks at how stewardship affects firms' non-GAAP choices and how regulators affect stewardship.

The rest of the paper is organized as follows. Chapter 1.2 presents the institutional background on SEC investigations and develops hypotheses regarding the relationship between SEC investigations and non-GAAP reporting, Chapter 1.3 describes my sample and research methods, Chapter 1.4 presents the results of my main tests and additional analyzes, and Chapter 1.5 concludes.

CHAPTER 1.2. RELATED LITERATURE AND HYPOTHESIS DEVELOPMENT

1.2.1. Institutional Background

The United States Securities and Exchange Commission (SEC) is mandated to "to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation." (Securities Exchange Act of 1934 as Amended, 2018). One way the SEC accomplishes this goal is to investigate firms to ensure that they are reporting information in a fair manner and according to regulations. Investigations are conducted through one of eleven regional offices or the SEC headquarters in Washington, DC. When the investigation finds proof of financial reporting misconduct or violation of regulations, the SEC may bring enforcement actions against the firm and individuals responsible. Such enforcement actions can include civil penalties or a recommendation to the Department of Justice to bring a criminal action. These SEC investigations may have many consequences on firms' actions and financial reporting during as well as after the investigation concludes, even if the affected area is not what the SEC is focusing on during their investigation. For example, in a recent paper by Blackburne et al. (2021), the authors find that the selling of shares by corporate insiders greatly increases following the start of an SEC investigation, particularly in investigations that result in AAERs or restatements which are considered severe outcomes.

One area under the purview of the SEC is non-GAAP reporting. Regulation G (2003) defines non-GAAP financial measures as:

> A numerical measure of a registrant's historical or future financial performance, financial position or cash flows that excludes amounts… that are included in the most directly comparable measure calculated and presented in accordance with GAAP… or includes amounts… that are excluded from the most directly comparable measure. (§II(A)(2)(A))

The regulation has two requirements that companies must follow regarding non-GAAP disclosures. It requires firms to present a reconciliation between their non-GAAP measure and with the most comparable GAAP measure. In addition, the non-GAAP measure cannot be misleading or contain untrue information. Regulation S-K (2003) also discusses non-GAAP disclosures. Item 10(e) of Regulation S-K applies to firm press releases and documents filed with the SEC. It requires presentation of the most comparable GAAP measure with equal or greater prominence to the non-GAAP measure. In practice, this means that the non-GAAP measure cannot precede the comparable GAAP measure.[1] However, there are other ways that the SEC considers more prominent. The SEC provides additional examples of more prominent non-GAAP measures in their Compliance and Disclosure Interpretations (C&DIs). For example, the non-GAAP disclosures C&DI (SEC, 2018a, Question 102.10) states that in addition to reporting the non-GAAP measure first, the SEC considers the non-GAAP earnings as more prominent if the earnings release headline refers to the non-GAAP measure but not the GAAP measure, if there is a management discussion and analysis of the non-GAAP measure but not the GAAP measure, or

[1] See Appendix C of Chen et al. (2021) for detailed examples of firm disclosures that present non-GAAP earnings more prominently than GAAP earnings, in violation of Item 10(e) of Regulation S-K.

presenting the non-GAAP measure in a style (e.g. font size or boldness) that emphasizes it over the GAAP measure.

The importance of non-GAAP disclosures is increasing over time. Between 2003 and 2013, the reporting of non-GAAP measures increased from close to 30% of firms to almost 60% (Bentley et al., 2018). 76% of S&P 500 firms reported non-GAAP measures in 2016 and this has increased to 94% by 2020 (PwC, 2021a). This suggests that the use of non-GAAP measures is even higher for larger firms. McVay et al. (2021) suggest that non-GAAP earnings are so widely and routinely used that they have become the "generally accepted" earnings measure for many publicly traded firms.

The increasing importance of non-GAAP disclosures are reflected in the particular focus the SEC has placed on them. According to a report conducted by PwC, during the period from October 2020 to September 2021, the SEC issued the greatest number of comment letters for non-GAAP disclosures (PwC, 2021b). Of those comment letters, violation of Item 10(e) is the most frequently cited reason for non-GAAP comment letters from the SEC (PwC, 2021a). Jo and Yang (2020) found that firms that emphasize non-GAAP earnings but have poor GAAP performance are more likely to receive comment letters. More seriously, the SEC's Financial Reporting and Audit Task Force has examined the use of non-GAAP measures in more depth since its inception in 2013, with the goal of finding cases of non-GAAP misuse to forward to the SEC's division of enforcement (Rapoport, 2013). This increased focus has come to fruition as the SEC has started to issue enforcement actions over the improper use of non-GAAP disclosures (Riely et al., 2020). For example, the home-security company, ADT Inc., faced an enforcement action for not following the regulations of Item 10(e) (SEC, 2018c). In the enforcement action, the SEC stated that "ADT did not afford equal or greater prominence to comparable GAAP financial measures in

two of its earnings releases containing non-GAAP financial measures." Specifically, ADT presented a positive "Adjusted EBITDA" in the headline of their Earnings Release without mentioning the comparable GAAP measure, a negative EBITDA. This means that ADT used non-GAAP exclusions to convert a GAAP loss into a non-GAAP profit, making the choice to exclude the GAAP measure from the headline more opportunistic in nature.

1.2.2. SEC Investigations and Opportunistic Non-GAAP Reporting

In my first hypothesis, I explore the effect of SEC investigations on reporting non-GAAP disclosures opportunistically. When a company is under investigation, there are three possible outcomes; that the company (i) becomes more likely to report non-GAAP earnings opportunistically, (ii) that there is no change in non-GAAP reporting, or (iii) becomes less likely to report non-GAAP earnings opportunistically.

A company may be more likely to report non-GAAP earnings opportunistically to improve board and investor perceptions of the company's performance. This is known as the opportunism perspective of non-GAAP reporting (Barth, Landsman, et al., 2012; D. E. Black & Christensen, 2009; E. L. Black, Christensen, Kiosse, et al., 2017; Bradshaw & Sloan, 2002). Researchers find evidence of managers opportunistically reporting non-GAAP earnings. For example, consistent with opportunistic non-GAAP use, Bradshaw and Sloan (2002) document that the magnitude of the difference between GAAP and non-GAAP earnings has increased over time. Barth et al. (2012) find that firms excluded stock-based compensation expense, generally considered a recurring expense of the business that should be included in income, to increase earnings, smooth earnings, and meet earnings benchmarks. They also find no evidence that the exclusions result in better predictions of future firm performance. Both point towards the opportunistic use of non-GAAP earnings. Examining the types of expenses excluded in the reporting of non-GAAP earnings, Black

and Christensen (2009) find that recurring expenses, such as depreciation, research and development, and stock-based compensation expense are excluded to meet earnings targets. This is consistent with the opportunistic use of non-GAAP reporting. In another example of opportunistic reporting of non-GAAP earnings, Bowen et al. (2005) find that managers change the emphasis on non-GAAP or GAAP measures depending on which portrays the firm in the best possible way. Finally, Black et al. (2017) find that companies are more likely to report non-GAAP earnings and exclude recurring expenses if they are unable to meet analyst forecasts using real or accruals earnings management.

The board and investors' perceptions of the company's performance are important because managers of underperforming firms are more likely to be dismissed. Dismissing under-performing CEOs is a key corporate governance mechanism (DeFond & Hung, 2004) or is even a necessary condition for a corporate governance system (Macey, 1997). Researchers propose that, while executive compensation is a related topic, executive turnover is worthy of study in its own right because it avoids the difficulties associated with cash and equity pay (Wu & Zhang, 2019). Prior research into SEC investigations examines the accounting or capital market consequences of SEC interventions. For example, researchers examine the effect of SEC interventions on firm performance and insider trading (Blackburne et al., 2021), earnings management (Blackburne et al., 2020; Cunningham et al., 2020), firm disclosures (Bozanic et al., 2017), or certainty surrounding fair value estimates (Bens et al., 2016). Using SEC financial fraud investigation data obtained through a Freedom of Information Act (FOIA) request, Solomon and Soltes (2021) find that CEOs that disclose an SEC investigation are more likely to experience turnover. Blackburne et al. (2020) find that the absolute likelihood of CEO turnover increases during an investigation for non-AAER firms, that is for investigations that do not later result in an AAER. As turnover is

possible during an investigation, it should be a strong motivator for the CEO to change the firm's reporting and reduce opportunism in non-GAAP reporting.

Another reason a company may be more likely to report non-GAAP earnings opportunistically when under an SEC investigation is because of the crowding-out effect of enforcement (Schantl & Wagenhofer, 2020). In their recent theory paper, Schantl and Wagenhofer (2020) examine the effects of changing private enforcement (litigation) and public enforcement (government investigations). The authors show that strengthening private enforcement through increased litigation always reduces the amount of misreporting because investors conduct such litigation, and it is therefore not subject to agency problems. However, public enforcement, which is conducted through investigations by an independent government agency, is subject to agency problems because the investigators engage in strategic and self-interested behavior. In particular, Schantl and Wagenhofer (2020) state that the investigator's effort is costly and unobservable. Therefore, investigators attempt to reduce their effort where possible to reduce their costs. Investigators are mainly incentivized through costs, such as reputational damage in the case of negligence. When private enforcement is low, there is a low likelihood that low effort on the part of the investigator will be revealed and will cause reputational damage to the investigator. When private enforcement is high, the opposite situation occurs. It becomes more likely that low effort on the part of the investigator will be revealed and they will face reputational costs.

When private enforcement is high and an exogenous increase in public investigations occurs, it has the effect of "crowding-out" private enforcement. Where enforcement actions do not occur following investigations, investors believe that misreporting is less likely and therefore do not conduct as much private enforcement. The reduction in private enforcement is strong enough that the overall level of deterrence decreases. The company's manager can determine that there is

a decreased likelihood of enforcement and, consequently, this increases their level of opportunistic reporting. Investors are not aware of these agency problems, so the overall level of private enforcement remains lower.

Hou et al. (2021) support the crowding-out theory developed by Schantl and Wagenhofer (2020). In their paper, Hou et al. (2021) examine the effect of the 2018-2019 government shutdown caused by failed negotiations over the debt ceiling. The government shutdown reduced the SEC's budget, causing the SEC to pause some of their operations, including the review of periodic reports and filings, starting and continuing investigations, and continuing litigation work (SEC, 2018b, Page 17). Hou et al. (2021) have several findings that provide support for the crowding out effect of enforcement. They find that during the shutdown, the likelihood of reporting favorable non-GAAP earnings decreases overall, which they measure as whether non-GAAP earnings are greater than GAAP earnings. The authors also find that this only occurs in firms that face above the median levels of private litigation risk. They supplement this by looking at the amount of the difference between GAAP and non-GAAP earnings, finding that the difference decreased during the shutdown and the result is stronger for firms with higher levels of litigation risk. Hou et al. (2021) interpret these findings as opportunistic reporting decreasing during that time.

One alternative explanation for the findings of Hou et al. (2021) is that managers are worried that the government shutdown will result in a decrease of GAAP earnings. However, the authors reduce the likelihood of this alternative explanation of their results by using other measures of reduced public enforcement. They examine the effects of SEC busyness on discretionary accruals. This alternative test has the benefit of illustrating that the busyness of an SEC office should not affect the firm's GAAP earnings. The authors find that the value of absolute

discretionary accruals is significantly lower if the firm files its form 10-K in the busiest month for each SEC office. These results are also representative of decreased opportunistic reporting.

The crowding out effect of enforcement (Hou et al., 2021; Schantl & Wagenhofer, 2020) can apply to SEC investigations of firms' financial reporting as well. During the investigation, if the company's manager knows that the investigation will not result in an enforcement action, they may estimate that investor litigation will be lower in the future. If the manager does not have to worry about investigations or litigation, the manager is free to take more liberties with their financial reporting than they otherwise would. This thought process would lead them to increase their level of opportunistic reporting.

The crowding out effect would be even more likely to occur if the potential benefits of reporting opportunistically outweigh the costs. For example, despite the requirements of Item 10(e) that firms present a comparable GAAP measure with equal or greater prominence, Chen et al. (2021) find that 36% of firms still report non-GAAP earnings more prominently despite this prohibition. Thus, there is a large cross-section of firms that simply disregard an SEC regulation in the belief that the benefits of reporting opportunistically outweigh the potential costs of SEC intervention.

It is worth noting that the costs of ignoring the requirements of Item 10(e) are not inconsequential. If an enforcement action is pursued by the SEC, civil penalties can be assessed against the firm. In addition, there are also court costs and reputational damages once the information becomes public. Returning to the example discussed in the Institutional Background Section, home-security company ADT Inc. was required to pay a penalty of $100,000 for not following the regulations of Item 10(e) (SEC, 2018c). The news was widely reported and its stock was down 3.5% the trading day after the court ruling was announced (Sprouse, 2018). However,

the company must have believed the benefit of turning a GAAP loss into a non-GAAP profit and reporting it more prominently was worth cost of the potential penalties and court costs as well as the potential negative press when the company is caught.

This would suggest that a company may continue to report non-GAAP measures opportunistically despite an SEC investigation. Prior literature on non-compliance with regulations agrees with this outcome. In their model of accounting standards and regulatory enforcement, Laux and Stocken (2018) show that when regulatory penalties are insensitive to the size of the violation and the regulation is stringent, the firm will choose not to comply with the standard. In the case of non-GAAP earnings reporting, the potential penalty of an SEC comment letter is relatively low and insensitive to the magnitude of the violation, as it will simply request the firm change the practice. Examining firms' non-compliance with SEC regulations on mandatory compensation disclosures, Robinson et al. (2011) find that even when the SEC identified the firm as not complying with the regulation, the CEO's excess compensation did not decrease. This suggests that there are no personal financial penalties for the manager in the case of a minor regulation non-compliance. Thus, the manager may increase opportunistic non-GAAP reporting during an SEC investigation as well. Overall, there is a significant portion of the literature from the opportunism perspective of non-GAAP reporting and the crowding out effect of enforcement that supports increased opportunism during an SEC investigation.

It is also possible that an SEC investigation has no impact on opportunistic non-GAAP reporting. Blackburne et al. (2021) find in their examination of SEC investigations that only 19% of firms under investigation disclose the investigation to investors at the outset. This lack of disclosure occurs even though SEC investigations are associated with significant decreases in stock market performance over the following year (a decrease in the median market-adjusted one-

year return of 5.73%). Because these investigations are undisclosed, they do not directly affect the market value of the firm. However, such investigations are accompanied by decreases in market value and are important items for investors to know. Similarly, Solomon and Soltes (2021) find that only 54.4% of firms disclose a financial fraud investigation. As a result, investors are unaware of the investigation unless an enforcement action takes place in the future. If investors are unaware of the investigation and it does not result in an enforcement action against the firm, there should be no change in the firm's reporting, so Turnover Performance Sensitivity should not change. Therefore, there is some support in the literature for no change to opportunistic non-GAAP reporting as well.

On the other hand, the likelihood of reporting non-GAAP earnings opportunistically may decrease during an SEC investigation, as the company provides the board and investors more information about the company's future performance. This perspective is known as the informativeness view of non-GAAP reporting (Bhattacharya et al., 2003; D. E. Black et al., 2018; Bradshaw & Sloan, 2002). Several papers find that managers provide non-GAAP earnings measures for informational purposes. For example, Bhattacharya et al. (2003) find that investors view non-GAAP earnings as more informative than GAAP earnings, and Bradshaw and Sloan (2002) find that the value relevance of non-GAAP earnings has increased over time. Other papers show that non-GAAP earnings are more likely to be provided for informational purposes in specific circumstances. Curtis et al. (2014), for instance, demonstrate that providing information to investors is the most pervasive motivation for providing non-GAAP earnings during periods with transitory gains.

During an SEC investigation, the manager may use non-GAAP earnings to provide investors with additional information about the firm, as the informativeness view would suggest.

This would help the stock price continue to reflect the fundamental value of the company, accounting for the negative performance that follows an SEC investigation as found by Blackburne et al. (2020). Solomon and Soltes (2021) find that firms that disclose SEC investigations of financial fraud are more likely to have lower stock returns over the following year and be subject to shareholder class action lawsuits. Therefore, a firm that uses informative non-GAAP disclosures may not experience a large stock price decline following the investigation's disclosure, reducing the legal liability of the CEO.

Similarly, it is possible that the firm provides less opportunistic non-GAAP earnings due to the Hawthorne effect. The Hawthorne effect is "the stimulation to output or accomplishment that results from the mere fact of being under observation" (Levitt & List, 2011). Levitt and List (2011) propose three channels for the Hawthorne effect with an experiment; (i) that scrutiny and emphasis on the process affect behavior, (ii) that the treatment itself reminds participants they are under observation, and (iii) through experimenter demand effects. Experimenter demand effects involve the experimental subject attempting to act in ways that will please the experimenter. The effect occurs in several contexts (Bandiera et al., 2005; Benz & Meier, 2008; Gneezy et al., 2004; List, 2006).

It is this experimenter demand effect that may affect companies under an SEC investigation. When under an SEC investigation, a manager knows they are being observed and can act in ways to please the investigator. The SEC disapproves of opportunistic non-GAAP reporting if the regulator considers such measures misleading and will ask the firm to change or remove any misleading measures. Presenting non-GAAP earnings that exclude recurring items, often done by disguising them as special items (Cain et al., 2019), is considered misleading (SEC, 2018a, Question 100.01). If the manager used non-GAAP earnings opportunistically in the past,

they would stop reporting opportunistic non-GAAP earnings during an investigation to avoid detection by the investigation. The result would be more conservative non-GAAP reporting during an investigation.

The earnings management literature hypothesizes or finds the Hawthorne or regulatory observer effect in several other contexts. For example, Jones (1991) shows that industries under investigation by the International Trade Commission managed earnings in a way to influence the regulator, making discretionary accruals income-decreasing during import relief investigation periods. Another paper finds that firms used income-decreasing discretionary accruals during antitrust investigations (Makar & Alam, 1998). In a more recent paper, Cunningham et al. (2020) demonstrates that firms that received SEC comment letters switch to real earnings management from accruals-based earnings management following the receipt of a Comment Letter. The results of the earnings management literature are in line with prior research on SEC intervention and non-GAAP disclosure (Heflin & Hsu, 2008; Kolev et al., 2008; Marques, 2006). These papers show that the regulatory observer effect can occur in settings with increased regulation and suggest that the regulatory observer effect may occur with the increased scrutiny accompanying an SEC investigation as well.

Prior research examines SEC interventions on the market and non-GAAP reporting choices after the intervention. For example, examining the effect of the SEC's 2001 warning regarding the use of non-GAAP financial measures, Kolev et al. (2008) find that companies with lower quality exclusions became less likely to report non-GAAP measures. Marques (2006), using a hand-collected sample of S&P 500 data between 2001 and 2003, examines the effect of the 2001 SEC warning and Regulation G, finding that the likelihood of disclosure decreases during that period. Bowen et al. (2005) find similar results using press releases on Business Newswire or PR

Newswire, finding that the likelihood of disclosure decreased following the 2001 SEC warning. Heflin and Hsu (2008) examine the effect of these two SEC interventions on exclusion magnitude, finding that there was a decrease during that time period. This paper has several important differences compared to the ones discussed above. I use a novel sample of actual SEC investigations and examine their impact on firm non-GAAP disclosures. This represents a level of SEC scrutiny not examined before in the non-GAAP disclosures literature. I also examine non-GAAP disclosures during the SEC investigation where the Hawthorne effect should occur most strongly. Prior research has focused on the open-ended period after the SEC's intervention, where the intensity of focus would naturally vary over time. Finally, I use a measure of non-GAAP disclosures not previously examined in the context of SEC interventions, non-GAAP EPS prominence, which will be discussed in more depth in the following section.

Three related papers use SEC investigations to show the regulatory observer effect on other areas of the firm's operations. Blackburne et al. (2021) show that corporate insiders use their knowledge of the SEC investigation to their benefit, trading the firm's stock when an SEC investigation begins, and earning significant abnormal profits. Blackburne et al. (2020) find the regulatory observer effect in GAAP reporting. Following Zang (2012), Blackburne et al. (2020) find that firms under investigation increase their use of real activities-based earnings management by reversing accruals and decreasing cash flows or discretionary expenses. These findings are in line with Cunningham et al. (2020). Blackburne et al. (2020) also find reductions in earnings manipulation measured by M-Score (Beneish, 1999), F-Score (Dechow et al., 2011), FSD Score (Amiram et al., 2015), and C-Score (Khan & Watts, 2009), suggesting reduced use of financial reporting discretion. The findings of Blackburne et al. (2021) and Blackburne et al. (2020) show

that the regulatory observer effect is a strong possibility as well. Overall, therefore, there is considerable support for decreased opportunism during an SEC investigation.

The conflicting arguments found in prior literature point to another possibility, a more nuanced result. That is, that an SEC investigation can have multiple effects depending on the company's motives (i.e., to provide information or to increase public perception). Prior research supports that firms have different motives depending on the situation. Curtis et al. (2014) show that firms with transitory gains have informativeness as their primary motivation for reporting non-GAAP earnings. Barth et al. (2012) found meanwhile, that firms responded opportunistically when required to recognize stock-based compensation expense. Black et al. (2018) conducted a review of the non-GAAP literature, finding that non-GAAP reporting is generally informative in nature, but prior research has found examples of opportunism. In this paper, I choose to follow Curtis et al. (2014) in defining the motives of the company. I define firms with transitory gains as having informative motives and companies without transitory gains as having opportunistic motives.

I discuss Curtis et al. (2014) extensively in this paper, so a short discussion of their results is warranted here. In their paper, Curtis et al. (2014) obtain a sample of 1,920 firm-quarters between 2004 to 2009 that report transitory gains in Compustat for their quarterly or annual filings. The authors then read the relevant sections of the companies' earnings announcements. If the company provides a non-GAAP earnings per share that excludes the transitory gain they are classified as informative disclosers, otherwise they are classified as opaque disclosers. Following Doyle et al. (2003), they show that, for opaque disclosers, the gains are negatively related to future operating earnings as expected because they are not a part of the firm's core operations and will not persist into the future. Next, the authors show that, for opaque disclosers, the transitory gains are positively associated with price reactions, indicative of opportunism. However, this reaction

corrects when the 10-Q/10-K is filed as the filing date return is negatively associated with transitory gains for opaque disclosers. Informative disclosers, on the other hand, see no effects related to transitory gains, indicating that the reason they exclude transitory gains is to inform as expected. Overall, Curtis et al. (2014) show that the primary motive for reporting non-GAAP earnings for firms with transitory gains is informative.

Using transitory gains as the motive-defining variable has several benefits. It is supported by citations and use in prior literature (Bentley et al., 2018; D. E. Black et al., 2018; E. L. Black, Christensen, Kiosse, et al., 2017; Blankespoor et al., 2020). It also solves two empirical issues. It separates the companies into income-increasing (opportunistic) and income-decreasing (informative) groups (Leung & Veenman, 2018) allowing for the groups to be separately identified and it shows variation over time (D. E. Black et al., 2018) increasing the likelihood of successful regression estimation.

As the literature supports a nuanced view of non-GAAP reporting, I use this in my hypothesis as well. When companies have opportunistic motives, they should be more likely to report opportunistically in response to an SEC investigation. This is done to improve investors' and board members' perceptions of the firm to reduce the likelihood of dismissal and is also a result of the crowding-out effect of enforcement (Hou et al., 2021; Schantl & Wagenhofer, 2020). By contrast, when companies have informative motives, they should be less likely to report opportunistically in response to an SEC investigation. This is done to inform investors (Bradshaw & Sloan, 2002) or because of the Hawthorne effect (Levitt & List, 2011). I therefore formally state my first hypothesis in two parts, as follows.

H1a: When companies have opportunistic motives, opportunistic reporting of non-GAAP earnings *increases* when under an SEC investigation.

H1b: When companies have informative motives, opportunistic reporting of non-GAAP earnings *decreases* when under an SEC investigation.

Before moving on to the next section, one additional note on reverse causality is warranted. It is possible that the SEC investigation started in response to prior opportunistic non-GAAP reporting. This is most likely to be the case for firms with opportunistic motives, as discussed in Hypothesis 1a. However, this reverse causality should not present an issue in this paper as this would bias against finding results. If the SEC is focused on finding opportunistic non-GAAP reporting, such reporting would decrease during an investigation, in contrast with Hypothesis 1a.

1.2.3. Turnover-Performance Sensitivity and Opportunistic Non-GAAP Use

In my second hypothesis, I relate the opportunistic use of non-GAAP earnings to CEO turnover to confirm that this is the motivation behind the changes found in Hypothesis 1a. In their recent working paper, Blackburne et al. (2020) find that the absolute likelihood of CEO turnover increases during an investigation for cases that do not later result in an AAER. Therefore, there is some support for the connection between SEC investigations and turnover.

However, besides varying in absolute terms, turnover also varies in relation to company performance. Jenter and Lewellen (2021), for example, show that the sensitivity of turnover to firm performance is greater when performance is poorer. Turnover-Performance Sensitivity can also increase as a CEO's contract nears its expiration (Cziraki & Groen-Xu, 2019) or decrease as CEOs tenure increases, consistent with entrenchment (Allgood & Farrell, 2000). This concept of Turnover-Performance Sensitivity is distinct from the absolute level of turnover and is worthy of

research, as documented by the published research that examines the concept specifically. In this paper, I examine whether Turnover-Performance Sensitivity varies when a firm is under investigation by the SEC and uses opportunistic non-GAAP reporting.

Following Hypothesis 1, assuming that there are two distinct effects on non-GAAP reporting depending on the motives of the firm, there should also be two distinct effects on Turnover-Performance Sensitivity. Firms with opportunistic motives are expected to be more likely to report non-GAAP earnings opportunistically to influence investor perceptions (Barth, Gow, et al., 2012; D. E. Black & Christensen, 2009; E. L. Black, Christensen, Joo, et al., 2017; Bowen et al., 2005; Bradshaw & Sloan, 2002). The opportunistic use of non-GAAP earnings may affect Turnover-Performance Sensitivity during an SEC investigation as well. If the board of directors is influenced by non-GAAP reporting, it may have a more favorable picture of the firm's accounting performance. This would make it less likely the CEO would be fired for apparent good performance reporting by non-GAAP earnings. In turn, Turnover-Performance Sensitivity would increase for firms that report non-GAAP measures opportunistically.

Firms with informative motives, on the other hand, are not expected to be motivated by the likelihood of being dismissed for poor performance. They are expected to report less opportunistically than before the investigation because of the informativeness perspective (Bradshaw & Sloan, 2002) or because of the regulatory observer effect (Blackburne et al., 2020; Levitt & List, 2011). Thus, there should not be a change to Turnover Performance-Sensitivity for informative firms that use opportunistic non-GAAP reporting.

This suggests that Turnover-Performance Sensitivity will increase, only for firms that have opportunistic motives and report non-GAAP earnings opportunistically during an SEC investigation. As a result, I formally state my second hypothesis as follows.

H2a: When companies have opportunistic motives and are under an SEC Investigation, Turnover-Performance Sensitivity *increases* when they report opportunistically.

H2b: When companies have informative motives and are under an SEC Investigation, Turnover-Performance Sensitivity *does not change* when they report opportunistically.

1.2.4. SEC Investigations and Turnover-Performance Sensitivity

In my third hypothesis, I continue to examine Turnover-Performance Sensitivity as a mechanism for the effect found in Hypothesis 1a by examining the relationship between SEC Investigations and Turnover-Performance Sensitivity directly. Once again, following Hypothesis 1, assuming that there are two distinct effects on non-GAAP reporting depending on the motives of the firm, there should also be two distinct effects on Turnover-Performance Sensitivity.

Firms with opportunistic motives are expected to use non-GAAP earnings to affect the likelihood of being fired for poor performance. Therefore, we would expect an increase in Turnover-Performance Sensitivity for opportunistic firms during an SEC Investigation. However, the literature also supports this view. From a stewardship or contracting-related perspective (O'Connell, 2007; Watts, 2003; Watts & Zimmerman, 1986; Wu & Zhang, 2009), we can argue that an SEC investigation increases Turnover-Performance Sensitivity. Wu and Zhang (2009) propose that the change to IFRS or US GAAP increases the level of conservatism in accounting, allowing for better evaluation of management. Better evaluation results in a higher level of Turnover-Performance Sensitivity. Using a sample of European companies that adopt IFRS or US GAAP between 1988 and 2004, the authors find Turnover-Performance Sensitivity increases for such firms and they attribute their findings to the greater level of conservatism inherent in IFRS or US GAAP. Wu and Zhang (2019) confirm these results in a subsequent paper using mandatory

adopters of IFRS. They examine the change for firms that waited until IFRS became mandatory in 2005 for European publicly traded companies, finding that Turnover-Performance Sensitivity increases. In addition, they find that the effect is stronger for firms that were forced to make large accounting changes or derecognize large loss provisions. This supports the theory that it was due to the increased level of conservatism inherent in IFRS.

Likewise, SEC investigations may cause increased Turnover-Performance Sensitivity if they allow the board to better evaluate the manager's performance. This would be the case if the investigation brings to light negative news or financial reporting misconduct that falls short of requiring an enforcement action but is still serious. If the investigation is likely to result in an enforcement action, the results would be particularly serious. The effect of an SEC investigation is thus like an increased level of conservatism, as it brings negative news to light sooner than would happen otherwise.

Similarly, Turnover-Performance Sensitivity could also increase during an investigation if we view the investigation as an increased level or increased perception of law enforcement. Using a sample of firms in 33 countries, DeFond and Hung (2004) find that firms in countries with stronger law enforcement institutions have higher levels of Turnover-Performance Sensitivity. Wu and Zhang (2019), in their analysis of mandatory IFRS adoption and CEO turnover, find that the increase in Turnover-Performance Sensitivity following nationwide IFRS adoption is greater in countries with higher levels of enforcement. If an SEC investigation represents an increased level of enforcement, then we would expect to see increased Turnover-Performance Sensitivity during the investigation. Overall, the literature suggests Turnover-Performance Sensitivity will increase for opportunistic firms during an SEC Investigation.

Conversely, firms with informative motives are not expected to be use opportunistic non-GAAP reporting to change the likelihood of being dismissed for poor performance. They are expected to report less opportunistically because of the informativeness perspective (Bradshaw & Sloan, 2002) or because of the regulatory observer effect (Blackburne et al., 2020; Levitt & List, 2011). A manager with informative motives is likely to have given an accurate picture of the firm's value and operations over time. An SEC investigation is unlikely to result in an enforcement action or bring any additional negative facts to light, resulting in no change to Turnover-Performance Sensitivity. It is also possible that a positive result from the investigation acts as a positive evaluation of the manager, giving them a buffer against being fired for poor performance, decreasing Turnover-Performance Sensitivity. Thus, there should not be a change to Turnover Performance-Sensitivity during an SEC investigation for informative firms.

This suggests that Turnover-Performance Sensitivity will increase during an SEC investigation, only for firms that have opportunistic motives. As a result, I formally state my third hypothesis as follows.

H3a: When companies have opportunistic motives, Turnover-Performance Sensitivity *increases* when under an SEC investigation.

H3b: When companies have informative motives, Turnover-Performance Sensitivity *does not change* when under an SEC investigation.

CHAPTER 1.3. SAMPLE SELECTION AND RESEARCH DESIGN

1.3.1. Data and Sample Selection

For my empirical analysis, I obtain all 4,754 closed SEC investigations between January 1, 2000 and August 2, 2017 from Blackburne et al. (2021). Among them, I exclude 1,149 investigations which are for firms without GVKEYs. I also obtain 187,195 non-GAAP Earnings Per Share (EPS) firm-quarter observations between 2003 and 2019 from Bentley et al. (2018). Similarly, I obtain, from Chen et al. (2021), data on whether firms present non-GAAP EPS more prominently than GAAP earnings for 48,648 firm-quarters between 2003 and 2016. I use a dataset of 1,286 forced CEO turnover events provided by Dr. Alexander Wagner and Dr. Florian Peters. Dr. Wagner and Dr. Peters consider CEO departures as forced turnover events if the press reports state "that the CEO was fired, forced out, or retires or resigns due to policy differences or pressure" or if the CEO is below the age of 60 and the reason for their departure is not "death, poor health, or acceptance of another position" or the CEO is retiring but the company announces the retirement less than six months before the departure (Peters & Wagner, 2014). Peters and Wagner (2014) and Jenter and Kanaan (2015) describe the full criteria for classifying a CEO turnover event as forced in their papers. I also obtain the Field-Ritter dataset of company founding dates (Field & Karpoff, 2002; Loughran & Ritter, 2004) to complement the IPO dates found in Compustat. Finally, I obtain control variables from Compustat, CRSP, and IBES. More detailed descriptions of the sample used to test Hypothesis 1 and the sample used to test Hypotheses 2 and 3 will be presented along with the results for each.

1.3.2. Research Design

For my first hypothesis, I combine the SEC investigations dataset (Blackburne et al., 2021) with the data reporting non-GAAP EPS (Bentley et al., 2018) and the non-GAAP earnings prominence data (J. V. Chen et al., 2021). I merge this data with the control variables from Compustat, CRSP, and IBES, and I remove observations missing control variables and set the opportunistic non-GAAP measures to zero for firms that do not report non-GAAP earnings.

I measure opportunistic non-GAAP reporting in six different ways. Whether non-GAAP earnings are favorable (*FAV_NG*) is measured as one if the firm reports non-GAAP earnings greater than GAAP earnings and zero otherwise. This measure has been used to measure opportunistic reporting previously (Bentley et al., 2018; T.-Y. Chen et al., 2018). Whether non-GAAP earnings avoids a loss (*AVOID_LOSS*) is measured as one if the firm reports positive non-GAAP earnings and negative GAAP earnings, and zero otherwise. This situation would only occur if losses or expenses were excluded from GAAP earnings to make non-GAAP earnings positive, thus representing an opportunistic use of non-GAAP measures. This measure has also been used in prior research (Bentley et al., 2018). I measure whether a firm avoids a decrease from the prior year or the prior quarter's earnings (*AVOID_PY_DECREASE* and *AVOID_PQ_DECREASE*) as one if the firm reports non-GAAP earnings that are higher than GAAP earnings in the prior year (or quarter), but current GAAP earnings is lower than GAAP earnings in the prior year (or quarter), and zero otherwise. I also measure whether the firm meets or beats analyst forecasts (*BEAT*) as one if the firm reports non-GAAP earnings that is higher than the mean analyst forecast, and zero otherwise. Finally, whether the firm reports non-GAAP earnings more prominently (*NG_FIRST*) than GAAP earnings is measured as one if the firm reports non-GAAP earnings before GAAP EPS in the quarter's earnings announcement, and zero otherwise following Chen et al. (2021).

To test Hypothesis 1, I partition the sample by the motives of the firm. Curtis et al. (2014) find that the main motivation for firms with transitory gains is informative. Thus, I operationalize the motives of the firm by partitioning the sample into those with and without transitory gains during the quarter. Firms without transitory gains (*TRANSITORY_GAINS = 0*) are said to have opportunistic motives while firms with transitory gains (*TRANSITORY_GAINS = 1*) are said to have informative motives.

I focus on transitory gains specifically because it is an often cited in the non-GAAP research literature as a way of distinguishing managerial motives. For example, Bentley et al. (2018) cite the work of Curtis et al. (2014) and include transitory items in their analysis of manager and analyst non-GAAP reporting. Black et al. (2018) discuss in their review of the non-GAAP literature the fact that managers exclude transitory gains, resulting in lower income but also a more informative earnings, citing Curtis et al. (2014). Several other non-GAAP research papers cite Curtis et al. (2014) in their review of the literature (Allee & Deangelis, 2015; E. L. Black, Christensen, Joo, et al., 2017) or use their research methods in their analysis (Leung & Veenman, 2018). In their review of the disclosure processing cost literature, Blankespoor et al. (2020) cite Curtis et al. (2014) as well. As we can see, the use of transitory gains is well supported by prior literature.

Focusing on transitory gains also solves two empirical issues. When trying to separate informative and opportunistic firm, both types are predicted to report non-GAAP earnings greater than GAAP earnings. Opportunistic firms are likely to inflate earnings to improve investor perceptions while informative firms are likely to remove uninformative, income-decreasing transitory items. Focusing on transitory gains solves this problem as opportunistic and informative firms can be separated (Leung & Veenman, 2018). If firms are split in this manner, opportunistic

firms will report higher non-GAAP earnings and informative firms will report lower non-GAAP earnings, allowing for analysis to continue. The second empirical issue comes from variation in the variable of interest. Firms can be inconsistent in their exclusion of transitory items (D. E. Black et al., 2018). This means that firms can change their motives over time, providing more variation to use in the analysis. Both reasons make transitory gains a good choice to use in my analysis.

After partitioning sample by firm motives, I regress the opportunistic non-GAAP reporting variables on *INVESTIGATION*, an indicator equal to 1 if the firm is under investigation during that fiscal quarter and zero otherwise, and the *TRANSITORY_GAIN* variable. I present the logistic regression in Equation (1) below.

$$\begin{aligned}\text{logit}(OUTCOME_{it}) = {} & \beta_0 + \beta_1 INVESTIGATION_{it} + \beta_2 TRANSITORY\_GAIN_{it} \\ & + \beta_3 INVESTIGATION_{it} * TRANSITORY\_GAIN_{it} + \beta_4 LOSSES_{it} + \beta_5 SIZE_{it} \\ & + \beta_6 BM_{it} + \beta_7 VOLATILITY_{it} + \beta_8 FUTURE\_GROWTH_{it} + \varepsilon_{it} \qquad (1)\end{aligned}$$

Where $OUTCOME_{it}$ is one of the six outcome variables: FAV_NG_{it}, $AVOID\_LOSS_{it}$, $AVOID\_PY\_DECREASE_{it}$, $AVOID\_PQ\_DECREASE_{it}$, $BEAT$, NG_FIRST_{it}

I include several control variables based on Chen et al. (2021) that are related to the likelihood of reporting non-GAAP EPS based on Lougee and Marquardt (2004) and Bowen et al. (2005). *LOSSES* is an indicator variable equal to 1 if the firm has four consecutive quarters of GAAP losses and 0 otherwise. *SIZE* is firm size, equal to the natural logarithm of total assets. *BM* is the book-to-market ratio, measured as shareholders' equity divided by the market value of equity. *VOLATILITY* is the volatility of GAAP earnings, equal to the standard deviation of Return

on Assets (ROA) over at least five of the last eight preceding quarters. Finally, *FUTURE_GROWTH* is equal to the sales in quarter *t* less sales in quarter *t+4* scaled by total assets. Complete variable definitions are presented in Appendix A. I include fiscal quarter and industry fixed effects to account for industry and time invariant factors, respectively, and standard errors are clustered by firm and calendar year-quarter (Petersen, 2009).

Hypothesis 1a posits that when companies have opportunistic motives (i.e. *TRANSITORY_GAINS = 0*), the likelihood of reporting non-GAAP earnings opportunistically increases. Therefore, for firms without transitory gains, β_1 should be positive and significant. Hypothesis 1b states that when companies have informative motives (i.e. *TRANSITORY_GAINS = 1*), the likelihood of reporting non-GAAP earnings opportunistically decreases. Therefore, for firms without transitory gains, β_3 should be negative and significant and it should be larger in magnitude than β_1.

For my second and third hypotheses, examining the relationship between SEC investigations and Turnover-Performance Sensitivity, I combine the SEC investigations data, forced CEO turnover data, and non-GAAP data and merge it with the control variables from Compustat, CRSP, and IBES, and IPO data. Similar to the previous sample, I remove observations missing control variables and set the opportunistic non-GAAP measures to zero for firms that do not report non-GAAP earnings. I also create an additional measure of opportunistic non-GAAP reporting, *OPP,* and use it as a seventh overall measure. *OPP* is equal to one if the firm presents non-GAAP earnings opportunistically, and zero otherwise. I also measure opportunistic non-GAAP reporting using the six variables mentioned previously.

In my second hypothesis, I examine the relationship between Turnover-Performance Sensitivity and presenting non-GAAP EPS opportunistically. Once again, I partition the sample

into firms with opportunistic motives and informative motives (*TRANSITORY_GAIN = 1 or 0,* respectively). I regress *Forced3yr*, an indicator variable equal to 1 if a forced CEO turnover event occurs during the three subsequent years and 0 otherwise, on the *INVESTIGATION* indicator variable, the opportunistic non-GAAP measures, and two firm performance measures. The two firm performance measures are two-year cumulative return on assets (*ROA*) and two-year cumulative sales growth (*SALES_GROWTH*) I interact *INVESTIGATION*, the non-GAAP measures, and the firm-performance measures to create a triple interaction. The logistic regression is presented in Equation (2) below:

$$\begin{aligned}\text{logit}(Forced3yr_{it}) = \; & \beta_0 + \beta_1 INVESTIGATION_{it} + \beta_2 ROA_{it} + \beta_3 SALES\_GROWTH_{it} \\ & + \beta_4 NG_{it} + \beta_5 INVESTIGATION_{it} * ROA_{it} \\ & + \beta_6 INVESTIGATION_{it} * SALES\_GROWTH_{it} \\ & + \beta_7 INVESTIGATION_{it} * NG_{it} \\ & + \beta_8 INVESTIGATION_{it} * ROA_{it} * NG_{it} \\ & + \beta_9 INVESTIGATION_{it} * SALES\_GROWTH_{it} * NG_{it} \\ & + CONTROLS_{it} + \varepsilon_{it}\end{aligned} \tag{2}$$

Where NG_{it} is one of the seven opportunistic non-GAAP measures (*FAV_NG, AVOID_LOSS, AVOID_PY_DECREASE, AVOID_PQ_DECREASE, BEAT, NG_FIRST, OPP*).

I include several control variables based on Gao et al. (2017) to account for some of the most important firm characteristics that can affect the likelihood of a forced CEO turnover event. These are stock returns (*RET*), cash flow volatility (*CFO_VOL*), leverage (*LEVERAGE*), accruals

(*ACCRUAL*), the natural logarithm of sales (*LN_SALES*), the natural logarithm of firm age (*LN_AGE*), the natural logarithm of the number of employees (LN_EMP), the natural logarithm of the number of firms in the industry, and the natural logarithm of the number of firms in the state following Gao et al. (2017). These control variables represent firm performance (*ROA, SALESGROWTH, RET*), firm fundamentals (*CFO_VOL, LEVERAGE, ACCRUAL*), and the size and position of the firm in the market (*LN_SALES, LN_AGE, LN_EMP*). I also include fiscal year-quarter and industry fixed effects to account for unobservable time and firm related factors, respectively. Standard errors are clustered by firm and year (Petersen, 2009). All variables are defined in more detail in Appendix A.

Hypothesis 2a posits that when companies have opportunistic motives (i.e. *TRANSITORY_GAINS = 0*), Turnover-Performance Sensitivity decreases when they report opportunistically. Therefore, for firms without transitory gains, β_8 or β_9 should be negative and significant as this will decrease the relationship between performance and being fired when the firm reports opportunistically. Hypothesis 2b states that when companies have informative motives (i.e. *TRANSITORY_GAINS = 1*), Turnover-Performance Sensitivity does not change when they report opportunistically. Therefore, for firms with transitory gains, β_8 or β_9 should be insignificant.

In my third hypothesis, I confirm that Turnover-Performance Sensitivity is the mechanism driving the relationship between SEC Investigations and Opportunistic non-GAAP reporting by examining the direct relationship between investigations and Turnover-Performance Sensitivity. Like the previous equation, I regress *Forced3yr*, an indicator variable equal to 1 if a forced CEO turnover event occurs during the three subsequent years and 0 otherwise, on *INVESTIGATION*, an indicator equal to 1 if the firm is under investigation during that fiscal quarter and zero otherwise. I present the logistic regression in Equation (3) below:

$$\text{logit}(Forced3yr_{it}) = \beta_0 + \beta_1 INVESTIGATION_{it} + \beta_2 ROA_{it} + \beta_3 SALES\_GROWTH_{it} + \beta_4\ INVESTIGATION_{it} * ROA_{it} + \beta_5\ INVESTIGATION_{it} * SALES\_GROWTH_{it} + CONTROLS_{it} + \varepsilon_{it} \quad (3)$$

Control variables are the same as in Equation (3). Similarly, I include year and industry fixed effects and standard errors are clustered by firm and year (Petersen, 2009). Turnover-Performance Sensitivity is the coefficient on the interaction of the SEC investigation with the accounting measures of firm performance (*ROA, SALESGROWTH*). I operationalize performance using both ROA and sales growth in this regression, so β_4 and β_5 both represent Turnover-Performance Sensitivity. If one of the two coefficients is significant, I can conclude that an SEC investigation influences Turnover-Performance Sensitivity.

Hypothesis 3a states that when companies have opportunistic motives, Turnover-Performance Sensitivity increases when under an SEC investigation. Therefore, for firms without transitory gains (*TRANSITORY_GAINS = 0*), β_4 or β_5 should be negative and significant as this will increase the relationship between performance and being fired. Conversely, Hypothesis 3b states that when companies have informative motives, Turnover-Performance Sensitivity remains the same when under an SEC investigation. Therefore, for firms with transitory gains (*TRANSITORY_GAINS = 1*), β_4 or β_5 should be insignificant as this will have no effect on the relationship between performance and being fired.

CHAPTER 1.4. RESULTS

1.4.1. Hypothesis 1 Descriptive Statistics

The full sample selection process for the sample used to test Hypothesis 1 is presented below in Table 1.1. The initial sample of firms with non-GAAP earnings data is 198,695 firm-quarter observations. This comes from the data provided by by Bentley et al. (2018) and covers the years 2003 to 2019. I remove 48,596 observations not in the period covered by SEC investigations, 97,783 observations that were not investigated by the SEC, 6,302 observations where the firms were not investigated during the sample period, 2,537 observations missing control variables, and 1,322 observations in industries with no changes in their non-GAAP reporting (removed to avoid collinearity in the regressions). This leaves me with a final sample of 42,155 firm-quarter observations from January 2003 to June 2016 and consists of 1,522 unique firms.

[INSERT TABLE 1.1 HERE]

Descriptive statistics for the full sample are shown in Table 1.2 below. The first six variables show evidence of opportunistic non-GAAP reporting. Approximately 33% of firms report non-GAAP earnings that are higher than GAAP earnings (*FAV_NG*). Firms use non-GAAP earnings to avoid a loss compared to the prior year (*AVOID_PY_DECREASE*) and the prior quarter (*AVOID_PQ_DECREASE)* 29.4% and 29.0% of the time, respectively. Firms report non-GAAP earnings more prominently than GAAP earnings 9.4% of the time (*NG_FIRST*), meet or beat analyst forecasts 14.7% of the time (*BEAT*), and use non-GAAP reporting to avoid a GAAP loss 5.0% of the time (*AVOID_LOSS*). Investigations occur in 30% of the sample or 12,639 observations. Transitory gains occur in 9.6% of the observations. These observations represent

firm-quarters where the firm has informative motives, meaning that such cases occur in 9.6% of the time in this sample. We should see less opportunistic non-GAAP reporting for such firms.

Examining the control variables in more depth we can see a wide variety of firms are represented. Firm assets (*ATQ*) range from $18.293 million up to $268.499 billion, suggesting the sample contains both small and large firms. Repeated losses (*LOSSES*) has a mean of 0.13, meaning that the on average firms in the sample face repeated losses 13% of the time. This suggests that both successful and firms in danger of failing are represented in the sample. Future growth (*FUTURE_GROWTH*) has a mean of -0.021. This means that the average firm in the sample faces a decline in the following year. This is unusual as firms are expected to have a positive future growth level in order to stay in business. However, this sample is composed of firms that are under investigation by the SEC and does not represent the typical cross-section of firms. Prior research has found that firms under an SEC investigation face an economically significant decline in performance (Blackburne et al., 2021). This explains why the average level of future growth is negative in this case. It is worth noting that the maximum level of future growth is 17.2%, thus successful firms are also represented in the sample.

(INSERT TABLE 1.2 HERE)

Next, I examine the Pearson Correlations for the sample in Table 1.3, presented below. Examining the opportunistic non-GAAP measures first, we can see that two of the six (*FAV_NG* at 0.01 and *AVOID_LOSS* at 0.01) are positively correlated and one variable (*NG_FIRST* at -0.02) is negatively correlated with the SEC investigation indicator variable (*INVESTIGATION*) at the 5% level, providing some initial evidence that opportunistic non-GAAP earnings is related to an

SEC investigation, although multivariate analysis is required in order to determine the direction and confirm my hypotheses. The mixed univariate results could be explained by the mixed motives of the firms under investigation. This will be accounted for in the multivariate analysis.

The SEC Investigation indicator variable (*INVESTIGATION*) is also positively correlated at the 5% level with several other variables including *TRANSITORY_GAIN* (0.02)*, LOSSES* (0.02)*, SIZE* (0.06)*, VOLATILITY* (0.09)*, AND FUTURE_GROWTH* (0.03). This suggests that the SEC is more likely to investigate firms with transitory gains, repeated losses, large firms, firms with volatile earnings, and firms with higher future sales growth.

Five of the opportunistic non-GAAP measures are correlated with *TRANSITORY_GAIN*, suggesting that firm motives have a place in this analysis and affect non-GAAP reporting as expected from Curtis et al. (2014). *TRANSITORY_GAINS* are negatively correlated with *FAV_NG* (-0.07), *AVOID_LOSS* (-0.04), and *BEAT* (-0.04), suggesting that firms are less likely to report non-GAAP earnings opportunistically when they have informative motives. However, firms are more likely to avoid a decrease in earnings (*AVOID_PY_DECREASE* at 0.04 and *AVOID_PQ_DECREASE* at 0.03) using non-GAAP earnings. This suggests that some opportunism is still present even for firms with informative motives.

Examining the control variables in more detail, I find that *LOSSES* and *BM* are negatively related with reporting non-GAAP earnings opportunistically (although *AVOID_LOSS* is an exception for *LOSSES* and *FAV_NG* and *AVOID_LOSS* are exceptions for *BM*). This suggests that firms with repeated losses and high BM are less likely to report non-GAAP measures opportunistically. *SIZE*, *VOLATILITY*, and *FUTURE_GROWTH* are positively associated with reporting non-GAAP measures opportunistically. This means that larger firms, firms with more volatile earnings, and firms with higher future sales growth are all more likely to report non-GAAP

earnings opportunistically. For firms with higher volatility, it is most likely that this is done to reduce the apparent level of volatility for investors.

[INSERT TABLE 1.3 HERE]

1.4.2. Hypothesis 1 Tests

I estimate the regression in Equation (1) for each of the six main dependent variables in Table 1.4, presented below. Each of the dependent variables is a different measure of opportunistic non-GAAP earnings use; reporting favorable non-GAAP earnings (*FAV_NG*), using non-GAAP earnings to avoid a loss (*AVOID_LOSS*), using non-GAAP earnings to avoid a decrease in earnings from the prior fiscal year (*AVOID_PY _DECREASE*), using non-GAAP earnings to avoid a decrease in earnings from the prior fiscal quarter (*AVOID_PQ_DECREASE*), meeting or beating the analyst consensus forecast using non-GAAP earnings (*BEAT*), and reporting non-GAAP earnings more prominently than GAAP earnings (*NG_FIRST*). Complete variable definitions are presented in Appendix A. All columns include industry and fiscal year-quarter fixed effects as well as standard error clustering at the firm and year-quarter level.

[INSERT TABLE 1.4 HERE]

First I examine the coefficient on *INVESTIGATION*, which represents the effect of an SEC investigation on opportunistic non-GAAP reporting for firms with opportunistic motives (i.e., those without a transitory gain during the period). This will help test Hypothesis 1a, that such firms are more likely to opportunistically non-GAAP earnings. The results for the *INVESTIGATION* coefficient are mixed. The coefficient is positively significant at the 1% level for *FAV_NG* (0.079)

and *AVOID_LOSS* (0.162) in Columns (1) and (2). In real terms the odds of reporting favorable non-GAAP earnings and avoiding a loss using non-GAAP earnings increase by 8.2% and 17.6%, respectively, for opportunistic firms when under an SEC investigation. This provides support for Hypothesis 1a as firms under an SEC investigation with opportunistic motives are more likely to report favorable non-GAAP earnings and avoid a GAAP loss. However, *NG_FIRST* (-0.070) in Column (6) is significantly negative, suggesting such firms are also less likely to report non-GAAP earnings prominently. It is possible that this result is because the other opportunistic non-GAAP reporting measures are not strictly against SEC regulations. Reporting non-GAAP earnings prominently, however, violates Item 10(e) of Regulation S-K and would therefore attract more scrutiny from the SEC during an investigation. Therefore, the incentive to stop this practice is much stronger compared to the other five measures. In addition, the coefficients in Columns (3) – (5) are insignificant at the 10% level. Thus, the results from these measures do not support Hypothesis 1a.

Looking at the interaction coefficient next (*INVESTIGATION*TRANSITORY_GAIN*), the results are much stronger. The coefficient is negative and significant for all six columns, with four columns (Columns 1, 3, 4, and 6) at the 1% level and 2 columns (Columns 2 and 5) being at the 10% level. Further, the coefficient magnitudes are larger than the coefficients on *INVESTIGATION* for all six outcome variables. This represents the change in the likelihood of reporting non-GAAP variables opportunistically for firms with informative motives. Firms under investigation by the SEC with informative motives are significantly less likely to report non-GAAP earnings opportunistically, in support of Hypothesis 1b. Examining the coefficient with the greatest absolute magnitude, *AVOID_LOSS* (-0.415) shows that in real terms, firms with informative motives and under an investigation are 34.0% less likely to use non-GAAP earnings to avoid a loss. Using the

coefficient with the smallest absolute magnitude, *AVOID_PY_DECREASE* (-0.227) shows a decrease of 20.3%, still an economically significant result. Thus, the results from these measures strongly support Hypothesis 1b.

The results for *TRANSITORY_GAIN* are significant across five of the six columns, though the direction of the coefficient changes for several of the dependent variables. For example, the coefficient for *TRANSITORY_GAIN* is negatively significant at the 1% for *FAV_NG, AVOID_LOSS,* and *BEAT*. This suggests that firms with informative motives are less likely to have favorable non-GAAP earnings or use non-GAAP earnings to avoid a loss or meet analyst forecasts. Firms with transitory gains are more likely to exclude the gain for to inform investors (Curtis et al., 2014), thus lowering the company's non-GAAP income below it's GAAP income and creating this result. On the other hand, *TRANSITORY_GAIN* is positively significant at the 1% level for *AVOID_PY_DECREASE* and *AVOID_PQ_DECREASE.* This is interesting because it means that while the transitory gain is exluded for informative purposes, the firm still surpasses prior earnings levels.

Examining the control variables, *SIZE* is positive and significant at the 1% level in all six columns suggesting that larger firms are more likely to report non-GAAP earnings opportunistically. *BM* is also significant in four of the six columns. The coefficient is positively significant for *FAV_NG, AVOID_LOSS,* and *NG_FIRST* meaning that firms with a high book-to-market ratio are more likely to report non-GAAP favorable non-GAAP earnings, report non-GAAP earnings that avoid a GAAP loss, and report non-GAAP earnings more prominently than GAAP earnings. Surprisingly, the coefficient for *BEAT* is extremely negative and significant. This is difficult to explain however one interpretation could be that analysts use non-GAAP earnings to make their forcasts for firms with a high book-to-market ratio, thus making it extremely difficult

for these firms to meet their forecasts using non-GAAP exclusions alone. This could warrant further research to find out whether this is the case.

Inspecting the R-Squared values, we can see that they range from 7.489% for *AVOID_LOSS* to 20.668% for *BEAT.* While not extremely high it does suggest that the variables included in the regressions as well as the fixed effects provide some information in determining the liklihood of opportunistic non-GAAP use. That five of the six columns have R-Squared values of over 10% is comforting as it means the lower R-Squared for *AVOID_LOSS* is likely caused by the relatively small number of firms that use this method of opportunistic non-GAAP reporting (5.0% as shown in Table 1.2).

Finally, it is worth examining the results of the Hypothesis 1 tests visually to get a better picture of what the coefficients actually mean in real terms. Figure 1.1, presented below, shows the likelihood of using non-GAAP earnings to avoid a GAAP (*AVOID_LOSS*) with and without an SEC investigation, for firms with opportunistic (*TRANSITORY_GAIN* = 0) and informative motives (*TRANSITORY_GAIN* = 1). I use *AVOID_LOSS* as the measure of opportunistic non-GAAP reporting because the magnitude of the coefficients was highest. Thus, we should expect to see the largest visual effect with this variable. The purpose of this figure is to provide additional support for Hypothesis 1a and Hypothesis 1b.

[INSERT FIGURE 1.1 HERE]

The results are quite striking. Absent an SEC investigation, the likelihood of using non-GAAP earnings to avoid a loss is approximately 50% for firms with opportunistic motives and 25% percent for firms with informative motives. The fact that there is such a large difference

between the two groups to start with, also suggests that the inclusion of transitory gains to represent firm motives was a good choice. When an SEC investigation occurs, rather than move in the same direction the two groups diverge further. For firms with opportunistic motives, the liklihood of avoiding a loss increases to over 58%, a change of 8%. This supports Hypothesis 1a. On the other hand, firms with informative motives, the likelihood of avoiding a loss decreases to under 20%, a change of 5%. This supports Hypothesis 1b.

Also noticable is the effect of motives on the likelihood of avoiding a loss. During an SEC investigation, there is an almost 40% difference between firms with opportunistic motives and firms with informative motives. This supports the idea that opportunistic non-GAAP reporting is strongly related to the motives and circumstances of the firm, explaining the mixed results found in prior literature (D. E. Black et al., 2018).

Returning to the tests in this section overall, they generally support Hypotheses 1a and 1b, that when under an investigation, firms with opportunistic motives are more likely to report non-GAAP earnings opportunistically and firms with informative motives are less likely to report non-GAAP earnings opportunistically. There are some exceptions however, for avoiding decreases, meeting analyst forecasts, and non-GAAP earnings prominence, the results do not support the Hypothesis 1a for opportunistic firms. However, using all measures firms with informative motives are significantly less likely to report non-GAAP earnings opportunistically when under an SEC investigation, strongly supporting Hypothesis 1b.

1.4.3. Hypothesis 2 and 3 Descriptive Statistics

The sample selection process for the sample used to test Hypotheses 2 and 3 is presented in Table 1.5 below. The initial sample of firms with non-GAAP earnings data (provided by Bentley et al. (2018)) is 198,695 firm-quarter observations. Their most recent update of the data contains firms between 2003 and 2019. I remove 48,596 observations that are not in the sample period (i.e. those before January 2003 or after June 2016 because they cannot be matched to SEC investigations), 97,783 observations with non-GAAP data that were not investigated at all during the sample period, 24,062 observations missing control variables, and 3,796 observations that were either under investigation for the full sample period or the investigation occurred outside the sample period. This leaves me with a final sample of 24,458 firm-quarter observations from January 2003 to June 2016 and consists of 832 unique firms.

[INSERT TABLE 1.5 HERE]

I present the descriptive statistics for the Hypothesis 2 and 3 sample in Table 1.6 below. We can see that the first 10 variables are indicator variables, having minimum values of 0 and maximum values of 1. 5.5% of the sample has a forced turnover event within a 3 year period and 30.1% of the sample has an SEC investigation during the observed quarter. Opportunistic non-GAAP reporting is quite common in the sample, with over 35% of the observations reporting non-GAAP earnings that are higher than GAAP earnings (*FAV_NG = 1*). Firms use non-GAAP earnings to avoid prior year (prior quarter) decreases in 28.5% (30.6%) of the sample. Using non-GAAP to avoid losses (*AVOID_LOSS = 1*) is the rarest of the 7 measures at 5.7% of the observations. The combined measure of opportunistic non-GAAP reporting, however, has a mean

of 0.416, suggesting that firms use at least one of the opportunistic non-GAAP reporting methods 41.6% of the time. The mean for *TRANSITORY_GAIN* is 0.094, suggesting that firms have informative motives 9.4% of the time.

Looking at the control variables next, Return on Assets (*ROA*) has a mean of -0.005. While this is unusual for a typical cross section of firms, it is worth noting that this sample is composed of firms that are either under investigation by the SEC or have recently been investigated by the SEC and does not represent the typical cross-section of firms. Prior research has found that firms under an SEC investigation face an economically significant decline in performance (Blackburne et al., 2021). So a negative ROA is not unexpected in this case. The growth in total sales (*SALES_GROWTH*) and stock returns (*RET*) are both positive at 0.101 and 0.147, respectively, however which in this case as we usually expect to see. *CFO_VOL,* the standard deviation of operating cash flows, has a mean for the sample is 0.055. The mean level of *LEVERAGE* is 0.510 which appears to be high but this is also not unexpected as firms that are under SEC investigation may have higher than normal debt levels.

[INSERT TABLE 1.6 HERE]

The Pearson Correlation table for the Hypothesis 2 and 3 sample is presented in Table 1.7 below. All correlations discussed are at the 5% level. We can see that the forced turnover variable (*Forced3yr*) is positively (0.04) and significantly related to being under investigation by the SEC (*INVESTIGATION*), agreeing with the findings in prior literature (Blackburne et al., 2020). It is also related to *ROA* (0.02) and *SALES_GROWTH* (-0.02), albeit in opposing directions. This suggests that the investigation may have an effect on Turnover-Performance Sensitivity as stated

in Hypotheses 2 and 3 but the direction of the effect is unclear. However, the correlations do not reflect the motives of the firm which could be causing the opposing directions we see here. Turnover is also positively associated with all six of the six opportunistic non-GAAP measures, (*FAV_NG* at 0.05, *AVOID_LOSS* at 0.02, *AVOID_PY_DECREASE* at 0.05, *AVOID_PQ_DECREASE* at 0.05, *BEAT* at 0.04, and *NG_FIRST* at 0.03) suggesting that there is some merit to Hypothesis 2 connecting the two concepts. SEC investigations (*INVESTIGATION*) is significantly related to all six non-GAAP measures (*FAV_NG* at 0.02, *AVOID_LOSS* at 0.02, *AVOID_PY_DECREASE* at 0.01, *AVOID_PQ_DECREASE* at 0.01, *BEAT* at -0.01, and *NG_FIRST* at -0.01), however four of them have positive correlations and two have negative correlations. This provides some additional support for Hypothesis 1. Investigations are also negatively related to return on assets. Once again this could be due to competing motives which will be examined further in later tables. Examining the control variables we can see that turnover is negatively (-0.04) associated with stock returns (*RET*) and negatively associated (-0.02) with the volatility of cash flows (*CFO_VOL*) but positively (0.07) related to sales (*LN_SALES*) as well as *LN_AGE*, *LN_EMP* (0.04), *LN_FIRMS_IN_INDUSTRY* (-0.02), and *LN_FIRMS_IN_STATE* (0.02). Similarly, SEC investigations are also negatively (-0.05) associated with stock returns (*RET*) and negatively (-0.38) associated with the volatility of cash flows (*CFO_VOL*).

[INSERT TABLE 1.7 HERE]

In Figure 1.2, included below, I examine the sample graphically with a bar chart showing the number of SEC investigations (*INVESTIGATION*) and forced turnover events (*Forced3yr*) over the sample period. There are several trends worth noting. The first is that the number of

investigations peaks around the 2007-2008 financial crisis and steadily declines through the rest of the sample period. This suggests that there may be a strengthening effect around that time period which I will examine in additional analysis. Second, turnover events follow a similar, but less well defined, pattern. This is likely due to the use of a 3-year measure for forced turnovers. However it indicates that there is some relationship between CEO turnover and SEC investigations.

[INSERT FIGURE 1.2 HERE]

1.4.4. Hypothesis 2 Tests

The results for estimating Equation (2) are presented in Table 1.8, below. The results are split into two panels. Panel A presents the results for opportunistic firms (*TRANSITORY_GAIN = 0*) while Panel B presents the results for informative firms (*TRANSIOTY_GAIN = 1*). The dependent variable is the same for all columns and is the indicator variable for a turnover event in the three years following the current period (*Forced3yr*). Each of the seven columns uses a different measure of opportunistic non-GAAP reporting to interact with *INVESTIGATION, ROA,* and *SALES_GROWTH*.

First we can examine the results in Panel A to determine whether they support Hypothesis 2a. Hypothesis 2a posits that when companies have opportunistic motives, Turnover-Performance Sensitivity increases when they report opportunistically. This will be determined by looking at the triple interaction terms *INVESTIGATION*NG*ROA* and *INVESTIGATION*NG*SALES_GROWTH* where *NG* is one of the seven non-GAAP variables. H2a will be supported if the triple interaction terms are significantly negative. We can see that that is the case for six out of the seven opportunistic non-GAAP measures. *INVESTIGATION*NG*ROA* is significantly negative for *FAV_NG, AVOID_LOSS,*

AVOID_PY_DECREASE, AVOID_PQ_DECREASE, BEAT, and *OPP*. This suggests that when opportunistic firms are under an SEC investigation and use opportunistic non-GAAP measures, the relationship between turnover and performance and turnover increases even further. This provides support for H2a. It is worth noting that *NG_FIRST* actually has a positive and significant coefficient for *INVESTIGATION*NG*SALES_GROWTH*, which contradicts H2a. This is likely because *NG_FIRST* is a measure of non-GAAP earnings prominence. Presenting non-GAAP earnings more prominently than GAAP earnings violates Item 10(e) of Regulation S-K and would therefore attract more scrutiny from the SEC during an investigation, resulting in an increased overall likelihood of being fired and a decreased relationship of turnover with performance. This is confirmed by looking at the coefficient on *INVESTIGATION* which is the highest for *NG_FIRST* and is also the most statistically significant. Overall, however, the results of Panel A support H2a.

Next, I examine the results in Panel B to determine whether they support Hypothesis 2b. Hypothesis 2b posits that when companies have informative motives, Turnover-Performance Sensitivity does not change when they report opportunistically. H2b will be supported if the triple interaction terms are insignificant. The results in Panel B mostly support this hypothesis. The interaction terms for six out of the seven columns are insignificant, supporting H2b. That is, for informative firms, using opportunistic non-GAAP measures does not affect Turnover-Performance Sensitivity. *AVOID_PY_LOSS* does have negative and significant interactions for *INVESTIGATION*NG*ROA.* However, the results generally support H2b.

There are several variables that have consistent coefficients across the two panels of Table 1.8. For example, stock returns (*RET*) is negative and significant across both panels, although the coefficeint is slightly larger in Panel B. This makes sense as the investigation and accounting performance have less of an effect for informative firms. Similarly, the number of employees

(*LN_EMP*) is negatively related in both panels, although the relationship is weaker for informative firms which have smaller and less statistically significant coefficients. The size of the firm (*LN_SALES*) is a significant predictor of turnover across both panels. The coefficeint also remains steady across oppportunistic and informative firms. On the other hand, the age of the firm (*LN_AGE*) and the number of firms in the industry (*LN_FIRMS_IN_INDUSTRY*) are both significant predictors, but only for opportunistic firms in Panel A.

[INSERT TABLE 1.8 HERE]

Overall, the results of the tests for Hypothesis 2 support my predictions as well. Specifically, when companies have opportunistic motives, Turnover-Performance Sensitivity increases when under an SEC investigation and use opportunistic non-GAAP measure. In addition, when companies have informative motives, Turnover-Performance Sensitivity does not change when firms use opportunistic non-GAAP measures.

1.4.5. Hypothesis 3 Tests

Table 1.9 below presents the test of Hypothesis 3. As discussed in the research methods section, I partition the sample into firms with opportunistic motives (*TRANSITORY_GAIN = 1*) in Column (1) and informative motives (*TRANSITORY_GAIN = 0*) in Column (2) and estimate Equation (1).

In Column (1) we can see that the coefficient for *INVESTIGATION* (0.244) is positive and signficant at the 5% level, suggesting that investigations do result in an increased level of turnover, as found by Blackburne et al. (2020). Specifically, this amounts to 27.6% increase in the odds of being fired over the following three years. *ROA* (-1.522) and *SALES_GROWTH* (-0.211) are both

negative and significant at the 5% and 10% levels, respectively. This is expected as managers with better firm performance should be less likely to be fired.

Hypothesis 3a states that when companies have opportunistic motives, Turnover-Performance Sensitivity increases when under an SEC investigation. To support this, we should see a negative and significant interaction term in Column (1) for either *INVESTIGATION*ROA* or *INVESTIGATION*SALES_GROWTH*. This is what we find, supporting H3a. Specifically, we see that the interaction term *INVESTIGATION*SALES_GROWTH* is -0.420 and is significant at the 5% level. In real terms, a firm that is under investigation sees the odds of being fired increase by 34.5% if sales growth is at the sample minimum of -0.706. Therefore, the relationship between turnover and sales growth (Turnover-Performance Sensitivity) is increased as suggested by H3a.

Several of the other coefficients are also significant in Column (1). Turnover is negatively (-0.409) associated with stock returns (*RET*) at the 1% level. Like ROA and sales growth, this is expected as managers with a better stock return should be less likely to be fired. Interestingly, Sales (*LN_SALES*) is positively (0.567) significant at the 1% level. This means that managers of larger firms are likely to be fired, consistent with stronger corporate governance mechanisms. The age of the firm (*LN_AGE*) is also significantly positive (0.316), meaning that older firms are more likely to fire the CEO. This is also consistent with stronger corporate governance mechanisms which would be present in more established firms. The number of employees (*LN_EMP*) is also negative (-0.410) and significant, suggesting that the employees provide a buffer against being fired similar to the findings of Chang et al (2018). Finally, the number of firms in the industry (*LN_FIRMS_IN_INDUSTRY*) is also significantly positive, suggesting the level of competition a firm faces is positively associated with manager turnover.

In Column (2), which includes firms with informative motives (*TRANSITORY_GAIN = 0*), we can see that the coefficient for *INVESTIGATION* is insignficant, suggesting that investigations do not affect turnover for these firms. This provides a contribution to the literature as it shows that not all firms see turnover from an SEC investigation. *ROA* (-3.739) remains negative and significant at the 10% while *SALES_GROWTH* (-0.661) is negative but just above the level of 10% significance. The coefficient magnitudes are larger than in Column (1) suggesting that the effect of performance alone on turnover is stronger for these firms. This is an expected consequence for firms that better inform investors about firm performance. Firm performance better reflects the economic reality of the firm and should therefore affect turnover more strongly.

Hypothesis H3b states that when companies have informative motives, Turnover-Performance Sensitivity does not change when a firm is under an SEC investigation. To support this hypothesis, we should see either no significant interaction terms in Column (2) for either *INVESTIGATION*ROA* or *INVESTIGATION*SALES_GROWTH* or negative and significant interaction terms. This is what we find, supporting H3b. Specifically, both interaction terms are insignificant at the 10% level in Column (2). Therefore, Turnover-Performance Sensitivity is unaffected for firms with informative motives when under an SEC investigation.

The control variables tell a similar story to Column (1). Turnover is negatively associated with stock returns (*RET*) at the 5% level and sales (*LN_SALES*) is positively significant at the 1% level. The number of employees (*LN_EMP*) remains negatively significant, however the magnitude and significance are lower than in Column (1). Cash flow volatility (*CFO_VOL*), leverage (*LEVERAGE*), and accruals (*ACCRUAL*) are all insignificant suggesting they are not significant predictors of turnover in this situation. Unlike Column (1), the age of the firm (*LN_AGE*) and the number of firms in the industry (*LN_FIRMS_IN_INDUSTRY*) are also

insignificant. Overall, these results imply that for firms with informative motives, the effect of accounting information on turnover increases, reducing the effect of other variables.

[INSERT TABLE 1.9 HERE]

It is also important to examine the results graphically if we can to help visualize the results more clearly. In Figure 1.3 below, I present the results for opportunistic firms from Table 1.9, Column (1). This graph shows the effect of an SEC investigation much more clearly. The estimated probability of being fired for each level of sales growth is presented, both with and without an SEC investigation. The range of sales growth, from -1 to 3, approximates the range of the sample as can be seen in Table 1.6. We can see from the graph that for both lines there is a negative relationship between sales growth and being fired. This is expected as a manager should be less likely to be fired for good firm performance. However, when an SEC investigation is taking place, the relationship between performance and turnover (Turnover-Performance Sensitivity) is much stronger as the line has a much steeper negative slope. In real terms, at a sales growth of -1 the CEO is almost twice as likely to be fired if the firm is also under investigation. On the other hand, at a sales growth of 3 the manager under an investigation is approximately half as likely to be fired. This suggests that the board of directors and shareholders are more willing to accept an SEC investigation if performance is consistently high, but less willing to accept an investigation if performance is also poor. Overall, this graph supports H3a, that Turnover-Performance Sensitivity increases for opportunistic firms who are under an SEC investigation.

[INSERT FIGURE 1.3 HERE]

Overall, the results of the tests for Hypothesis 3 support my predictions. Specifically, when companies have opportunistic motives, Turnover-Performance Sensitivity increases when under an SEC investigation and when companies have informative motives, Turnover-Performance Sensitivity does not change.

1.4.6. Additional Analysis

In the sections that follow I perform additional tests related to Hypothesis 1, the relationship between SEC Investigations and non-GAAP reporting, to examine if the effect is strengthened in specific situations or time periods.

1.4.6.1. Financial Crisis

Re-examining Figure 1.2 which presented the levels of SEC Investigations (*INVESTIGATION)* and forced turnover (*Forced3yr*) we can see that the highest level of SEC Investigations occurred during the Financial Crisis in 2007. Similarly, the highest levels of forced turnover were in 2007 and 2009. The changes in the economic environment that led to these events were exogenous to the relationships studied in this paper, yet they should strengthen the relationships found as SEC investigations and forced turnovers both increased during that time. As a result, this time period is an opportunity to study whether there were any changes following the financial crisis. In this section, I compare the estimated coefficients for observations before and after the financial crisis for the test of Hypothesis 1.

I partition the observations into two groups, one from 2007 and earlier years and the other from 2008 and later years, and reestimate Equation (1) using the six measures of opportunistic non-GAAP reporting. I have chosen to partition the sample between these two periods to include the formation of the financial crisis in the pre-financial crisis sample and the concequences of the

financial crisis and subsequent recession into the post-financial crisis sample. The results are shown in Table 1.10 below. Panel A estimates the regressions for the pre-financial crisis period and Panel B estimates the regressions for the post-financial crisis period.

In the post-financial crisis period (Panel A), the interaction between *INVESTIGATION* and *TRANSITORY_GAIN* is significant and negative for five of the six non-GAAP measures (*BEAT* being the exception), with coefficients ranging from -0.277 (*AVOID_PY_DECREASE* and *AVOID_PQ_DECREASE*) to -0.662 (*AVOID_LOSS*). This is consistent with the main results in Table 1.4 and supports Hypothesis 1b, that firms with informative motives decrease opportunistic non-GAAP reporting while under SEC investigation while firms with opportunistic motives do not. However, the coefficient magnitudes in the post-financial crisis sample are considerably greater than the main sample which had a maximum of -0.415 for *AVOID_LOSS*. This points to a much greater effect post-financial crisis.

In the pre-financial crisis period (Panel B) meanwhile, the interaction between *INVESTIGATION* and *TRANSITORY_GAIN* is insignificant for five of the six non-GAAP measures. The exception is *NG_FIRST* which tends to act differently than the other five measures because it is specifically prohibited by Item 10(e) of Regulation S-K. As it has been prohibited since 2003 it is understandable that the effect was there prior to the financial crisis and decreased as firms focused on reducing other opportunistic non-GAAP measures.

[INSERT TABLE 1.10 HERE]

Overall, the results of reestimating Equation (3) before and after the financial crisis point to an increased effect in later years. This suggests an increased regulatory observer effect in recent years as public scrutiny of firms increased following the financial crisis.

1.4.6.2. Board and CEO Characteristics

The results for Hypothesis 1 show that firms with informative motives are less likely to report non-GAAP earnings opportunistically when under an SEC investigation. If this effect is due to the firm's manager responding to SEC scrutiny to protect their job security, we should see the effect strengthen in situations where the board better understands the financial posiition of the company. This would be the case if the level of financial reporting expertise on the board is higher.

In this section I examine the level of financial expertise on the board of directors. I obtain data on the financial expertise of board members from Thomson/Refinitiv ESG. For the main sample for Hypothesis 1 I find the percentage of the board that is considered a financial expert and divide the sample into low and high expertise based on the sample median. The results are presented in Table 1.11 below. We should see stronger results for firms with high levels of financial expertise on the board.

The results conform to expectations. The interaction term between *INVESTIGATION* and *TRANSITORY_GAIN* is siginifantly negative at the 10% level in three of the six columns (*FAV_NG* at -0.379, *AVOID_PQ_DECREASE* at -0.344, and *NG_FIRST* at -0.527) in Panel A (Low Expertise). In Panel B (High Expertise), the interaction term is negatively significant at the 1% level in two of the six columns (*AVOID_PY_DECREASE* at -0.519 and *BEAT* -0.729) and at the 5% level in one column (*NG_FIRST* at -0.570). This translates to a decrease in the odds of meeting or beating analyst forecasts by 51.8% when the firm has informative motives and is under investigation by the SEC. Thus when the board has greater levels of financial expertise the

significance and magnitude of the effect is greater as expected. This conforms to the idea that the results for informative firms are caused by the regulatory observer effect and this effect is greater when the board has a better understanding of financial information.

It is also worth noting that the coefficients for *INVESTIGATION* are also more signifcantly positive in Panel B with the high expertise sample, ranging from 0.131 for *NG_FIRST* to 0.265 for *AVOID_LOSS*. This is interesting as it means opportunistic firms are more likely to report opportunistically even if the board has a higher level of financial expertise.

[INSERT TABLE 1.11 HERE]

Next, I focus on one subset of the board that has the most impact on hiring and firing of CEOs, the nomination committee, through the selection of the CEO. Similar to the overall board analysis, if this effect is due to the firm's manager responding to SEC scrutiny to protect their job security, we should see the effect strengthen in situations where the committees better understands non-GAAP reporting. This would be the case if the level of financial reporting expertise on the committees is higher.

I obtain data on the financial expertise of nomination committees members from Thomson/Refinitiv ESG as well. For the main sample for Hypothesis 1 I find the percentage of the nomination committee that are considered financial experts and divide the samples into low and high expertise based on the sample median. I then re-estimate Equation (1) for each of these new samples. The results for the nomination committee are presented in Table 1.12. We should see stronger results for firms with high levels of financial expertise on the committees.

The results for the nomination committee are in line with expectations. Table 1.12 below presents the results for this analysis, with Panel A containing the low expertise sample and Panel B containing the high expertise sample. Examining the coefficients for the interaction between *INVESTIGATION* and *TRANSITORY_GAIN* for the low expertise sample in Panel A, the interaction term is significantly negative at the 10% level in only one of the columns, *NG_FIRST* at -0.568. Contrast this with the high expertise sample in Panel B, the interaction term is significantly negative in four of the six columns (*AVOID_LOSS* at -1.330, *AVOID_PY_DECREASE* at -0.409, *BEAT* at -0.582, and *NG_FIRST* at -0.499). Therefore when the nomination committee has greater levels of financial expertise the significance of the effect is greater as expected. This agrees with results for the full board, that the results for informative firms are caused by the regulatory observer effect and this effect is greater when the board has a better understanding of financial information.

[INSERT TABLE 1.12 HERE]

Finally, I examine a characteristic of the chair of the board of directors, whether the position is held by the firm's CEO. CEOs who also hold the position of chairperson of the board are in a much stronger position to enact any accounting and operational changes without fear of being dismissed, even in the case of an SEC investigation. If fear of dismissal is the reason for the results in Hypothesis 1 we should see a greater effect for CEOs that hold the board chair position as well. To test this I reestimate Equation (1), partitioning the sample by whether the firm has a dual board chair-CEO position or not. I obtain data on the board chairperson and CEO from Thomson/Refinitiv ESG as well. For each quarterly observation I determine if the board chair is

also the CEO and include it in the dual chair-CEO sample if they are, and the separate chair-CEO sample otherwise. Observations that do not have information on board members are included in the separate chair-CEO sample.

The results of this analysis are presented in Table 1.13 below and follow the expected pattern. Panel A presents the results for firms with separate board chair and CEO positions and Panel B presents the results for firms with dual chair-CEO positions. Examining the coefficients for *INVESTIGATION* and the interaction between *INVESTIGATION* and *TRANSITORY_GAIN.* Overall, the coefficient magnitudes are greater in Panel B for firms with dual chair-CEO positions as expected. The coefficient for *INVESTIGATION* is significantly positive in five out of six of the columns (*FAV_NG* at 0.183, *AVOID_LOSS* at 0.231, *AVOID_PQ_DECREASE* at 0.096, *BEAT* at 0.137, and *NG_FIRST* at 0.337). This is compared to Panel A which has one significantly positive coefficient (*AVOID_LOSS* at 0.161) and one significantly negative coefficient (*NG_FIRST* at -0.223) for *INVESTIGATION*. This suggests that firms with opportunistic motives are more likely to report non-GAAP earnings opportunistically if the board has a dual chair-CEO position because they less concerned about dismissal.

For the interaction between *INVESTIGATION* and *TRANSITORY_GAIN,* while it is significantly negative in four of the six columns in Panel A and B, the magnitudes are generally greater in Panel B, sometimes more than double the size in Panel B. For example, FAV_NG is -0.239 in Panel A and -0.961 in Panel B. Similarly, AVOID_LOSS is -0.606 in Panel A and -1.477 in Panel B. This means that firms with informative motives are less likely to report non-GAAP earnings opportunistically if they have a dual chair-CEO position.

[INSERT TABLE 1.13 HERE]

Overall, the results of examining the board characteristics suggests an increased regulatory observer effect for firms with greater levels of financial expertise on the board of directors and dual board chair and CEO positions, indicative of stronger corporate governance mechanisms having a beneficial impact on non-GAAP reporting.

1.4.6.3. Analyst Forecast Dispersion

In this section, I examine the effect of analyst forecast dispersion on the relationship between SEC Investigations and non-GAAP reporting. I obtain data on analyst forecast dispersion from IBES and divide the sample for Hypothesis 1 into high and low levels of dispersion based on the sample median per year. I then re-estimate Equation (1) for the high and low dispersion samples.

Analyst dispersion represents the level of disagreement among analysts as to the future prospects of the firm. As disagreement among analysts increases, there is an decreased opportunity for the firm's manager to affect public perceptions through opportunistic non-GAAP reporting. Therefore, we should see the effect for informative firms is stronger in the high dispersion sample, consistent with Hypothesis 1b. However, the opposite is true if the level of dispersion is low. The firm's manager may be able to significantly affect public perceptions when analyst agreement is high. Thus, we should see a stronger effect for opportunistic firms in the low dispersion sample, consistent with with Hypothesis 1a.

The results are presented in Table 1.14 below with Panel A containing the low dispersion firms and Panel B containing the high dispersion firms. In Panel A with low levels of analyst dispersion, the results are as expected for opportunistic firms. Looking at the coefficient for *INVESTIGATION,* it is significantly positive in five out of the six columns (*FAV_NG* at 0.203,

AVOID_LOSS at 0.360, *AVOID_PY_DECREASE* at 0.104, *AVOID_PQ_DECREASE* at 0.120, and *BEAT* at 0.173), suggesting an increased level of opportunistic non-GAAP reporting when a firm is under investigation and the level of analyst forecast dispersion is low. Contrast this with the high dispersion sample in Panel B and we can see that the coefficients on *INVESTIGATION* are insignificant in five of the six columns and negatively significant for *NG_FIRST* (-0.204). This suggests that the incentive to report opportunistically is much lower when non-GAAP dispersion is high because it will have less of an effect.

Continuing to examine the high dispersion group in Panel B, we can see that the results are as expected for informative firms. The interaction coefficient, *INVESTIGATION*TRANSITORY_GAIN,* is significantly negative in four out of the six columns (*FAV_NG* at -0.536, *AVOID_PY_DECREASE* at -0.523, *AVOID_PQ_DECREASE* at -0.473, and *NG_FIRST* at -0.624). This means that informative firms are much less likely to report non-GAAP earnings opportunistically when forecast dispersion is high, because this is when the information is needed most. Where there is less analyst consensus, where firms would want to inform investors using non-GAAP. Contrast these results with those in Panel A for the low dispersion group. In that panel, the interaction coefficient, *INVESTIGATION*TRANSITORY_GAIN,* is significantly negative in only two of the six columns (*AVOID_LOSS* at -1.079 and *NG_FIRST* at -0.383) and for *NG_FIRST* the magnitude is smaller than in Panel B. In this situation, there is less need to inform because there is already analyst agreement on the earnings of the firm.

[INSERT TABLE 1.14 HERE]

Overall, the results of this analysis point towards a decreased incentive to report non-GAAP earnings opportunistically when analyst forecast dispersion is high, resulting in lower levels of opportunistic reporting for informative firms. On the other hand, when analyst forecast dispersion is low, there is less incentive to inform and more incentive to report opportunistically, which we see for opportunistic firms.

1.4.6.4. Earnings Response Coefficient (ERC)

In this analysis, I examine the relationship between GAAP earnings and stock returns, the Earnings Response Coefficient (ERC), and how the ERC affects SEC Investigations and non-GAAP reporting. I obtain earnings data from Compustat and return and price data from CRSP. Following Hayn (1995), I estimate Equation 4, presented below, for each firm.

$$R_t = \alpha + \beta X_t / P_{t-1} + \varepsilon_t \quad (4)$$

Where R_t is the 12-month return starting with the fourth month after the end of the firm's fiscal year $t-1$, X_t is the change in Earnings-per-share from year $t-1$ to year t, and P_{t-1} is the stock price at year $t-1$. The ERC for each firm is the coefficient estimate β. I divide the sample for Hypothesis 1 into high and low levels of ERC based on the sample median per year. I then re-estimate Equation (1) for the high and low ERC samples.

Since ERC is the informativeness of GAAP earnings, we should expect firms with a high level of ERC have less incentive to change their non-GAAP earnings during an SEC investigation because it will have less of an effect on stock returns and therefore public, board of directors, and SEC perception of the firm. By contrast, firms with a low level of ERC should have more of an incentive to change their non-GAAP earnings because, with earnings having less explanatory

power, non-GAAP earnings can provide additional information to the public, the board, and the SEC.

The results of this analysis are presented in Table 1.15 below, with the low ERC sample presented in Panel A and the high ERC sample presented in Panel B.

[INSERT TABLE 1.15 HERE]

The results confirm my expectations discussed above. In Panel A (Low ERC), *INVESTIGATION* is significantly positive at the 1% level in four of the six columns (FAV_NG at 0.233, *AVOID_PY_DECREASE* at 0.186, *AVOID_PQ_DECREASE* at 0.200, and *BEAT* at 0.146) and significantly positive at the 5% level in one column (*AVOID_LOSS* at 0.212). This suggests that firms with opportunistic firms are much more likely to use non-GAAP reporting opportunistically when the explanatory power of their GAAP earnings is low. In other words, this occurs when non-GAAP reporting is more likely to have an effect. By contrast, the interaction term *INVESTIGATION*TRANSITORY_GAIN,* is significantly negative at the 1% level in three of the six columns (*FAV_NG* at -0.423, *AVOID_PY_DECREASE* at -0.423, and *AVOID_PQ_DECREASE* at -0.377) and significantly negative at the 5% level in one column (*AVOID_LOSS* at -1.090). These results mean that firms with informative motives are much less likely to report non-GAAP earnings opportunistically when ERC is low and non-GAAP reporting is more likely to have an effect. These firms want to use non-GAAP earnings for informative purposes as expected. In Panel B (High ERC), the results are much more subdued. The joint effect found previously only occurs in one column, *NG_FIRST*, with the coefficient on *INVESTIGATION* (0.142) positively significant at the 5% level and the interaction term (-0.446) significantly

negative at the 10% level. The interaction term is insignificant for the other five columns and the coefficient on *INVESTIGATION* is significantly positive in one column (*AVOID_LOSS* at 0.243) and signficantly negative in another column (*AVOID_PY_DECREASE* at -0.091), both at the 5% level. Therefore we can see that, with the exception of *NG_FIRST*, when the explanatory power of earnings is high, firms are less likely to use non-GAAP earnings opportunistically because it will have less of an impact.

Overall, the results of this analysis confirm that when the informativeness of GAAP earnings is low, firms have more of an incentive to change their non-GAAP earnings because, with earnings having less explanatory power, non-GAAP earnings can provide additional information to stakeholders. By contrast, when GAAP informativeness is high, firms have less incentive to change their non-GAAP earnings because it will have less of an effect on stock returns and therefore stakeholder perceptions.

1.4.6.5. Non-GAAP Earnings Persistence

In my last set of analyses, I examine the persistence on non-GAAP earnings for firms under an SEC investigation. Prior literature also examines the persistence of non-GAAP earnings and non-GAAP exclusions to determine their predictive ability generally or if their ability to predict future earnings changes following certain events (Doyle et al., 2003; Kolev et al., 2008; Kyung et al., 2019). For example, Kolev et al. (2008) examine the change in non-GAAP earnings persistence following several SEC interventions in the non-GAAP area in the early 2000's. If I can find that non-GAAP earnings persistence changes during an SEC investigation, it would provide strong support for my main analysis.

I follow Kolev et al.'s (2008) methodology, regressing future operating income (operating income for the following four quarters) on non-GAAP exclusions (non-GAAP earnings less GAAP

earnings). I replace their *POST* variable with my *INVESTIGATION* indicator variable to examine the quality of non-GAAP exclusions while under investigation. I perform this analysis for my full investigation sample, and for opportunistically motivated (*TRANSITORY_GAIN* = 0) and informatively motivated (*TRANSITORY_GAIN* = 1) firms. I use Fama-French 48 industry as well as year-quarter fixed effects and I cluster standard errors by firm and year-quarter. I remove firms in the finanaial and utility industries and winsorize at the 1% and 99% levels.

My results (untabulated) have several interesting findings. As expected, non-GAAP earnings is significantly positive for all three groups at the 1% level (2.716, 2.749, and 2.428 for the full sample, opportunistic group, and informative group respectively) showing that non-GAAP earnings is significantly related to future operating income for all three groups. Non-GAAP exclusions, as expected, are significantly negative at the 1% level for all three groups (-0.612, -0.604, and -0.1510 respectively). The larger coefficient magnitude for the informative group means that their non-GAAP exclusions are higher quality as they are less related to future earnings. Conversely, this means that the opportunistic group excludes more relevant items from GAAP earnings. This strongly supports the separation of the two groups in earlier analysis. The *INVESTIGATION* variable also had interesting results. The full sample and the opportunistic group had significantly positive coefficients at the 1% level (0.008 and 0.010, respectively) suggesting that an investigation is associated with slightly higher operating income in the future for these firms. This is surprising given that firms see a decline in performance following the investigation (Blackburne et al., 2021). By contrast, the informative group had a negative coefficient (-0.011 at the 10% level) suggesting that an investigation is associated with slightly lower operating income in the future for these firms. I also interact the *INVESTIGATION* variable with non-GAAP exclusions, though the results are insignificant at conventional levels.

To examine the relationship between non-GAAP earnings and future operating earnings more directly, I also conduct a regression where I remove non-GAAP exclusions and interact *INVESTIGATION* directly with non-GAAP earnings. I continue to conduct the analysis for the full sample and partition the sample into opportunistic and informative firms. This regression is equally important as the first as it examines the persistence of non-GAAP earnings as a whole rather than the quality of the non-GAAP exclusions. The results are presented in Table 1.16 below along with the relevant variable definitions.

Similar to my first test, non-GAAP earnings is significantly positive for all three groups at the 1% level (2.742, 2.778, and 2.255 for the full sample, opportunistic group, and informative group respectively). This means that non-GAAP earnings is an important predictor of future operating performance. The results for *INVESTIGATION* are also similar to the first test. The full sample and the opportunistic group had significantly positive coefficients at the 1% level (0.007 and 0.09, respectively) while the informative group had a significantly negative coefficient at the 10% level (-0.012). The results are more interesting, however, when *INVESTIGATION* is interacted with non-GAAP earnings. For the full sample and the opportunistic group, the coefficients are negative and significant at the 1% levels (-0.262 and -0.288, respectively). For the informative group, the coefficient is insignificantly positive. When under an investigation, non-GAAP earnings is less predictive of future operating earnings, but only for opportunistic firms. Informative firms, on the other hand, actually make their non-GAAP earnings slightly more predictive of future operating earnings. This suggests that opportunistic firms manage their non-GAAP earnings during an investigation to improve perceptions as expected by my main analysis.

[INSERT TABLE 1.16 HERE]

Overall, the results of this analysis suggest two points. First, that non-GAAP earnings exclusions are higher quality for firms with transitory gains (informative firms) than those without them (opportunistic firms), supporting the findings of Curtis et al. (2014). Second, that the persistence of non-GAAP decreases for opportunistic firms during an SEC investigation, indicating that such firms exclude more persistent items from their non-GAAP earnings during an investigation to improve perceptions, which supports my main analysis.

CHAPTER 1.5. CONCLUSION

In this paper, I examine whether investigations by the US Securities and Exchange Commission (SEC) affect firm's non-GAAP reporting and propose Turnover-Performance Sensitivity as a mechanism by which this happens. I hypothesize and find that companies with opportunistic motives increase their level of opportunistic non-GAAP reporting while under an SEC investigation, consistent with the idea that they do so to improve investor perception and reduce the likelihood of being dismissed for poor performance. Conversely, companies with informative motives reduce their opportunistic non-GAAP reporting consistent with the regulatory observer effect. I examine the level of Turnover-Performance Sensitivity in more depth, finding that when opportunistically motivated companies use non-GAAP reporting to improve investor perceptions, Turnover-Performance Sensitivity is increased further. However, firms with informative motives do not see any changes to Turnover-Performance Sensitivity when they do the same. To examine Turnover-Performance Sensitivity as the mechanism for opportunistic companies, I examine the direct relationship between SEC Investigations and Turnover-Performance Sensitivity. I find that companies with opportunistic motives face an increased level

of Turnover-Performance Sensitivity when under investigation by the SEC while companies with informative do not. In additional analysis, I examine situations that may strengthen or weaken the relationship between SEC investigations and non-GAAP reporting. I find that the effect of an SEC investigation for informative firms is greater following the financial crisis of 2007-2008, consistent with increased regulator and public scrutiny following the high-profile market collapse. I also find that the effect of SEC investigations on opportunistic non-GAAP reporting is higher for firms with a higher level of financial expertise on the board of directors and the nomination committee, firms with a dual board chair-CEO position, and firms with a low Earnings Response Coefficient (ERC). Finally, I find that opportunistic firms have less persistent non-GAAP earnings during an SEC investigation, supporting the idea that the changes found in the main analysis were due to opportunistic use of non-GAAP earnings.

This study is the first to examine the effect of SEC investigations on non-GAAP disclosures. While prior work looks at the changes that follow SEC interventions on the whole market, this paper studies the effect of the SEC investigating specific firms during the investigation, when the regulatory observer effect is most likely to occur. This paper is also the first to examine the effect of SEC scrutiny on non-GAAP EPS prominence. Further, by using the SEC investigation dataset, this paper accompanies the work of other papers in the area (Blackburne et al., 2020, 2021; Blackburne & Quinn, 2022). Lastly, this paper answers the call for stewardship-related research (O'Connell, 2007)

These findings are based on a broad set of data encompassing all investigations conducted for over a decade and include periods of market-wide financial stability and distress. Thus, the results should generalize over time and across companies to show that SEC investigations affect companies' non-GAAP disclosure choices.

APPENDIX 1.A
Variable Definitions

INVESTIGATION	An indicator variable that takes a value of 1 if the firm is under an SEC investigation during that fiscal quarter and zero otherwise.
FAV_NG	An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS higher than GAAP EPS during the quarter and 0 otherwise.
AVOID_LOSS	An indicator variable that takes a value of 1 if the firm reports positive non-GAAP earnings and negative GAAP earnings and 0 otherwise.
AVOID_PY_DECREASE	An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the same quarter of the prior year and 0 otherwise.
AVOID_PQ_DECREASE	An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the previous quarter and 0 otherwise.
BEAT	An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to the most recent mean analyst forecast for that quarter provided by the IBES Summary History file and GAAP earnings less than the mean analyst forecast, and 0 otherwise.
NG_FIRST	An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS before GAAP EPS in the quarter's earnings announcement and 0 otherwise.
OPP	An indicator variable that takes a value of 1 if the firm presents non-GAAP earnings opportunistically using any of the other measures (*FAV_NG* = 1, *AVOID_LOSS* = 1, *AVOID_PY_DECREASE* = 1, *AVOID_PQ_DECREASE* = 1, *BEAT* = 1, or *NG_FIRST* = 1), and zero otherwise.
TRANSITORY_GAIN	An indicator variable that takes a value of 1 if the firm reports positive special items during the quarter (SPIQ > 0 in Compustat), and 0 otherwise.
Forced3yr	An indicator variable that takes a value of 1 if a forced CEO turnover event occurs during the three subsequent years and 0 otherwise.

ROA	Cumulative ROA for the periods t and t-1.
FUTURE_GROWTH	Sales (saleq from Compustat) in quarter *t* less sales in quarter *t+4*, scaled by total assets (atq in Compustat).
SALES_GROWTH	Cumulative sales growth for the periods t and t-1.
ΔROA	The change in ROA from period t-1 to period t.
ΔSALESGROWTH	The change in sales growth from period t-1 to period t.
RET	Annual stock return.
ACCRUAL	The absolute value of earnings before interest and taxes minus cash flow from operations, scaled by total assets.
LN_SALES	The natural log of total sales.
LEVERAGE	Total liabilities scaled by total assets.
SIZE	The natural logarithm of 1 + total assets (atq from Compustat).
BM	Book-to-market ratio, calculated as shareholder's equity (seqq from Compustat)/market value of equity (prc × shrout from CRSP, or mkvaltq or prccq × cshoq from Compustat if CRSP data are missing) following Chen et al. (2021).
LOSS	Indicator variable that equals one if net income is negative and equals zero otherwise.
LOSSES	Indicator variable that equals 1 if GAAP EPS before extraordinary items (epsfxq from Compustat) is negative in all four prior quarters, and equals 0 otherwise (Bowen et al., 2005; J. V. Chen et al., 2021).
CFO_VOL	The standard deviation of industry-median-adjusted quarterly operating cash flows over the previous 8 quarters.
STD_REV	Standard deviation of revenues over the preceding 16 quarters;
LN_AGE	The natural log of the number of years the firm is listed on the Compustat database.
LN_EMP	The natural log of the number of employees in thousands.

LN_FIRMS_IN_IND	The natural log of the number of firms in the same 3-digit SIC code.
LN_FIRMS_IN_STATE	The natural log of the number of firms in the same state.
VOLATILITY	Standard deviation of ROA (ibq from Compustat/atq from Compustat) over at least five of the preceding eight quarters (J. V. Chen et al., 2021)

All continuous variables are winsorized at the 1% and 99% level.

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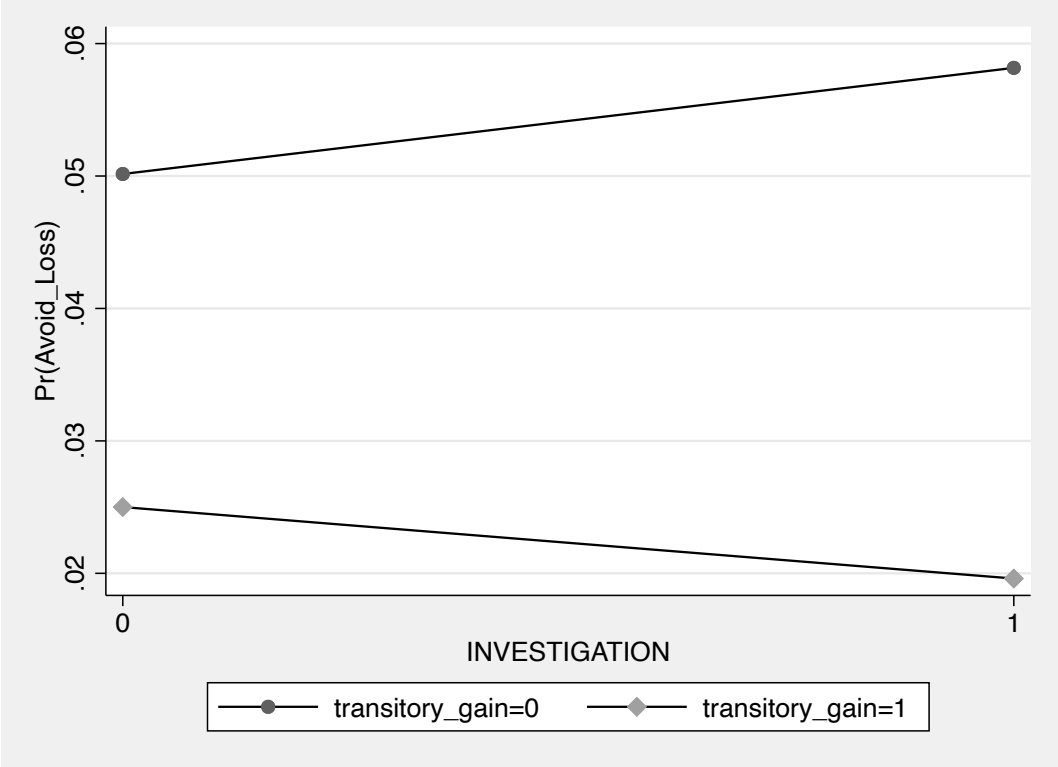
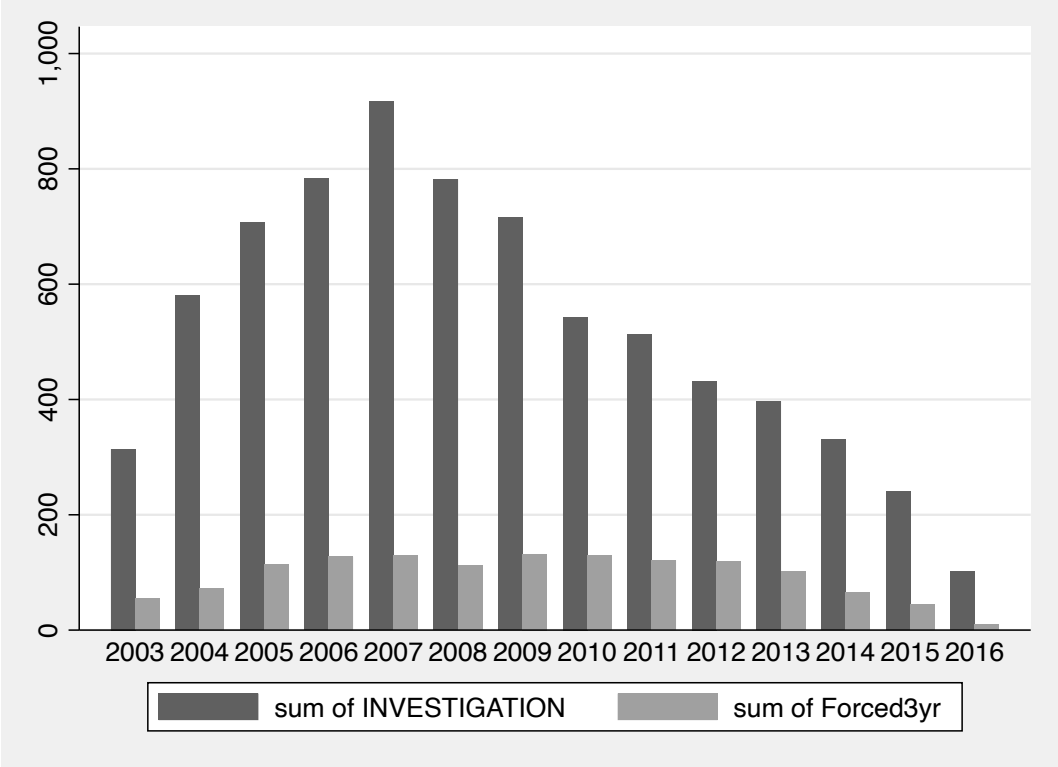
FIGURE 1.1
Likelihood of Using Non-GAAP Earnings to Avoid a Loss



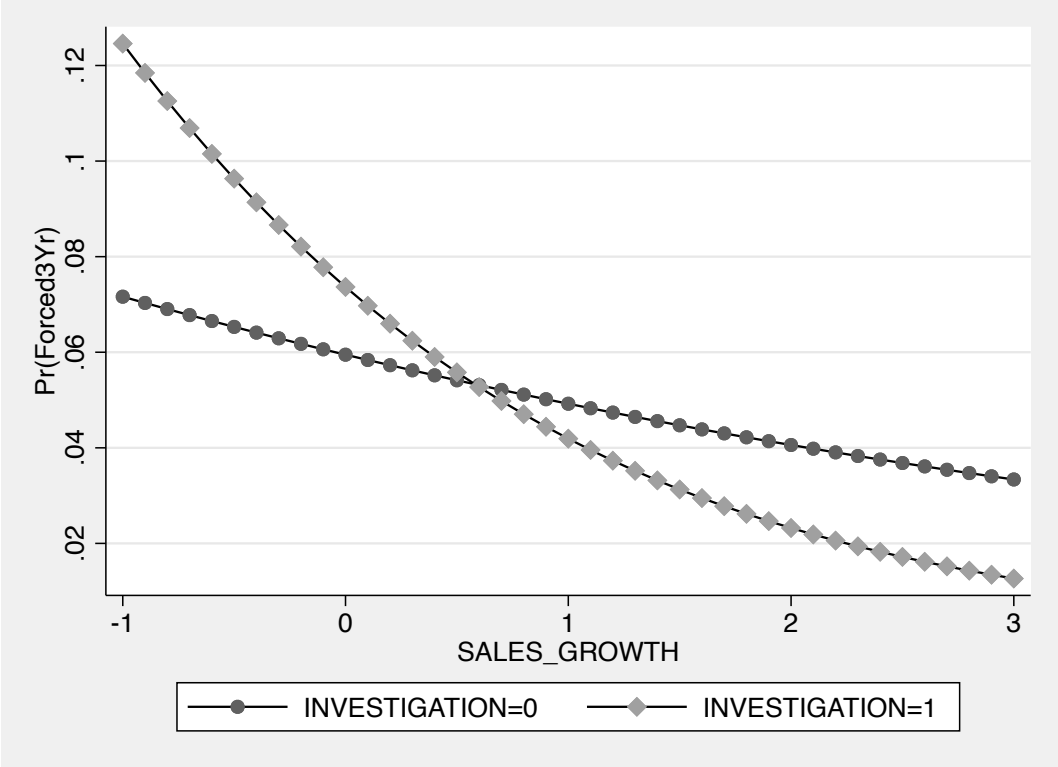
In the figure above, the estimated probability of using non-GAAP earnings to avoid a GAAP loss is presented when the firm is under an SEC investigation and not, for firms with opportunistic (*TRANSITORY_GAIN* = 0) and informative motives (*TRANSITORY_GAIN* = 1). Readers should see that firms with informative motives are less likely to avoid a loss using non-GAAP earnings than opportunistic firms and that the difference increases further when under an SEC investigation. The purpose of this graph is that it supports Hypothesis 1a and Hypothesis 1b, that use of opportunistic non-GAAP reporting increases for opportunistic firms under an SEC investigation and decreases for informative firms under an SEC investigation.

FIGURE 1.2
Number of SEC Investigations and Forced Turnovers (3-years leading)



In the figure above, I show the number of SEC investigations (*INVESTIGATION*) and forced turnover events (*Forced3yr*) over the sample period. Readers should see that the number of investigations peaks around the 2007-2008 financial crisis and steadily declines through the rest of the sample period. Turnover events follow a similar but less well-defined pattern. The purpose of this figure is twofold, it shows that there may be a strengthening effect around the financial crisis, and it indicates that there is a relationship between CEO turnover and SEC investigations.

FIGURE 1.3
Likelihood of CEO Turnover by Sales Growth



In the figure above, the estimated probability of the CEO being dismissed for each level of sales growth is presented, with and without an SEC investigation. Readers should see that for both lines there is a negative relationship between sales growth and being fired. However, when an SEC investigation is taking place, the relationship is much stronger as the line has a much steeper negative slope. The purpose of this graph is that it supports H3a, that Turnover-Performance Sensitivity increases for opportunistic firms who are under an SEC investigation.

TABLE 1.1
Sample Selection – Hypothesis 1 Sample

Firm-Quarter Observations	
Initial sample of firms with non-GAAP earnings data	198,695
Less:	
Observations not in sample period (January 2003 to June 2016)	(48,596)
Observations that were not investigated at all	(97,783)
Observations where investigation occurred outside of sample period	(6,302)
Observations missing control variables	(2,537)
Observations removed due to collinearity (e.g., 2-digit SIC industry does not report non-GAAP earnings throughout the period.)	(1,322)
Sample	42,155

TABLE 1.2
Descriptive Statistics – Hypothesis 1 Sample

	N	MEAN	STD. DEV.	MIN	MEDIAN	MAX
FAV_NG	42,155	0.330	0.470	0.000	0.000	1.000
AVOID_LOSS	42,155	0.050	0.217	0.000	0.000	1.000
AVOID_PY_DECREASE	42,155	0.294	0.456	0.000	0.000	1.000
AVOID_PQ_DECREASE	42,155	0.290	0.454	0.000	0.000	1.000
BEAT	42,155	0.147	0.354	0.000	0.000	1.000
NG_FIRST	42,155	0.094	0.292	0.000	0.000	1.000
INVESTIGATION	42,155	0.300	0.458	0.000	0.000	1.000
TRANSITORY_GAIN	42,155	0.096	0.295	0.000	0.000	1.000
ATQ	42,155	11,853.651	35,899.643	18.293	1,264.355	268,449.00 0
IBQ	42,155	107.611	363.683	-388.591	9.698	2,595.000
LOSSES	42,155	0.132	0.339	0.000	0.000	1.000
SIZE	42,155	7.281	2.075	2.960	7.143	12.500
BM	42,155	0.100	0.265	-0.011	0.001	1.446
VOLATILITY	42,155	72.382	188.412	0.314	11.965	1,302.577
FUTURE_GROWTH	42,155	-0.021	0.069	-0.350	-0.009	0.172

Table 1.2 presents the descriptive statistics for the final sample at the firm-year level. All continuous variables are winsorized at the 1% and 99% level. All variables are defined in Appendix A.

Variable definitions:
FAV_NG = An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS higher than GAAP EPS during the quarter and 0 otherwise.
AVOID_LOSS = An indicator variable that takes a value of 1 if the firm reports positive non-GAAP earnings and negative GAAP earnings and 0 otherwise.
AVOID_PY_DECREASE = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the same quarter of the prior year and 0 otherwise.
AVOID_PQ_DECREASE = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the previous quarter and 0 otherwise.
BEAT = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to the most recent mean analyst forecast for that quarter provided by the IBES Summary History file and GAAP earnings less than the mean analyst forecast, and 0 otherwise.
NG_FIRST = An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS before GAAP EPS in the quarter's earnings announcement and 0 otherwise.
INVESTIGATION = An indicator variable that takes a value of 1 if the firm is under an SEC investigation during that fiscal quarter and zero otherwise.
TRANSITORY_GAIN = An indicator variable that takes a value of 1 if the firm reports positive special items during the quarter (SPIQ > 0 in Compustat), and 0 otherwise.
ATQ = Total assets in millions on Compustat.
IBQ = Income before extraordinary items on Compustat.
LOSSES = Indicator variable that equals 1 if GAAP EPS before extraordinary items (epsfxq from Compustat) is negative in all four prior quarters and equals 0 otherwise.
SIZE = The natural logarithm of 1 + total assets (*ATQ*).
BM = Book-to-market ratio, calculated as shareholder's equity (seqq from Compustat)/market value of equity (prc × shrout from CRSP, or mkvaltq or prccq × cshoq from Compustat if CRSP data are missing).
VOLATILITY = Standard deviation of ROA (ibq from Compustat/atq from Compustat) over at least five of the preceding eight quarters.
FUTURE_GROWTH = Sales (saleq from Compustat) in quarter t less sales in quarter t+4, scaled by total assets (atq in Compustat).

TABLE 1.3
Pearson Correlation Matrix (N = 42.155) – Hypothesis 1 Sample

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1 FAV_NG	1.00											
2 AVOID _LOSS	0.33*	1.00										
3 AVOID_PY _DECREASE	0.70*	0.21*	1.00									
4 AVOID_PQ _DECREASE	0.72*	0.23*	0.69*	1.00								
5 BEAT	0.59*	0.27*	0.48*	0.48*	1.00							
6 NG_FIRST	0.36*	0.16*	0.33*	0.32*	0.24*	1.00						
7 INVEST- IGATION	0.01*	0.01*	0.00	0.00	0.01	-0.02*	1.00					
8 TRANSITORY _GAIN	-0.07*	-0.04*	0.04*	0.03*	-0.04*	-0.01	0.02*	1.00				
9 LOSSES	-0.08*	0.02*	-0.06*	-0.05*	-0.07*	-0.07*	0.02*	-0.01	1.00			
10 SIZE	0.17*	0.02*	0.18*	0.17*	0.12*	0.13*	0.06*	0.05*	-0.33*	1.00		
11 BM	-0.01	0.01	-0.03*	-0.02*	-0.15*	-0.01*	0.00	0.01	0.07*	-0.03*	1.00	
12 VOLATILITY	0.09*	0.04*	0.09*	0.09*	0.06*	0.08*	0.09*	0.05*	-0.04*	0.50*	-0.01*	1.00
13 FUTURE _GROWTH	0.04*	0.04*	0.04*	0.04*	0.03*	0.02*	0.03*	0.02*	0.02*	0.12*	0.05*	0.07*

Table 1.3 presents the Pearson correlation matrix. All continuous variables are winsorized at the 1% and 99% level. Correlations with an asterisk are significant at the 5% level or less. All variables are defined in Appendix A.

TABLE 1.4
Tests of Hypothesis 1

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.079***	0.162***	0.000	0.016	0.040	-0.070*
	(2.964)	(3.131)	(0.011)	(0.564)	(1.146)	(-1.670)
TRANSITORY_GAIN	-0.754***	-0.740***	0.247***	0.165***	-0.619***	-0.070
	(-14.618)	(-6.104)	(5.305)	(3.484)	(-8.937)	(-0.988)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.251***	-0.415*	-0.227***	-0.250***	-0.221*	-0.406***
	(-2.659)	(-1.744)	(-2.715)	(-2.928)	(-1.707)	(-2.869)
LOSSES	-0.091**	0.364***	0.087**	0.124***	-0.160***	-0.537***
	(-2.280)	(4.659)	(2.171)	(3.126)	(-2.754)	(-6.874)
SIZE	0.362***	0.091***	0.366***	0.348***	0.341***	0.277***
	(42.889)	(5.963)	(43.346)	(41.119)	(30.966)	(23.101)
BM	0.258***	0.081	-0.024	0.123***	-15.988***	0.132*
	(5.692)	(0.924)	(-0.508)	(2.648)	(-6.789)	(1.947)
VOLATILITY	-0.000***	0.000**	-0.001***	-0.000***	-0.001***	-0.000**
	(-4.882)	(2.146)	(-6.594)	(-4.850)	(-4.967)	(-2.028)
FUTURE_GROWTH	-0.127	1.528***	0.048	0.046	0.466*	-0.175
	(-0.686)	(4.103)	(0.251)	(0.239)	(1.797)	(-0.616)
Constant	-4.491***	-4.346***	-4.939***	-4.721***	-5.623***	-6.645***
	(-17.944)	(-8.409)	(-16.205)	(-16.733)	(-14.000)	(-8.723)
Observations	42,155	42,155	42,155	42,155	42,155	42,155
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	15.785	7.489	13.423	13.403	20.668	11.146

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.5
Sample Selection – Hypotheses 2 & 3 Sample

Firm-Quarter Observations	
Initial sample of firms with non-GAAP earnings data	198,695
Less:	
Observations not in sample period (January 2003 to June 2016)	(48,596)
Observations that were not investigated at all	(97,783)
Observations missing control variables	(24,062)
Observations where investigation occurred outside of sample period or investigation occurred for the whole sample period	(3,796)
Sample for Hypotheses 2 & 3	24,458

TABLE 1.6
Descriptive Statistics – Hypotheses 2 & 3 Sample

	N	MEAN	STD. DEV.	MIN	MEDIAN	MAX
Forced3yr	24,458	0.055	0.227	0.000	0.000	1.000
INVESTIGATION	24,458	0.301	0.459	0.000	0.000	1.000
FAV_NG	24,458	0.358	0.480	0.000	0.000	1.000
AVOID_LOSS	24,458	0.057	0.231	0.000	0.000	1.000
AVOID_PY_DECREASE	24,458	0.285	0.451	0.000	0.000	1.000
AVOID_PQ_DECREASE	24,458	0.306	0.461	0.000	0.000	1.000
BEAT	24,458	0.164	0.370	0.000	0.000	1.000
NG_FIRST	24,458	0.093	0.290	0.000	0.000	1.000
OPP	24,458	0.416	0.493	0.000	0.000	1.000
TRANSITORY_GAIN	24,458	0.094	0.291	0.000	0.000	1.000
ROA	24,458	-0.005	0.102	-0.468	0.018	0.186
SALES_GROWTH	24,458	0.101	0.420	-0.706	0.043	2.725
RET	24,458	0.147	0.569	-0.835	0.070	2.565
CFO_VOL	24,458	0.055	0.055	0.003	0.038	0.331
LEVERAGE	24,458	0.510	0.280	0.066	0.477	1.509
ACCRUAL	24,458	0.070	0.079	0.001	0.046	0.454
LN_SALES	24,458	4.992	1.931	-0.796	5.102	9.267
LN_AGE	24,458	8.297	0.608	6.340	8.412	9.292
LN_EMP	24,458	0.720	1.778	-3.219	0.742	4.585
LN_FIRMS_IN_INDUSTRY	24,458	9.027	0.181	8.846	8.921	9.340
LN_FIRMS_IN_STATE	24,458	7.413	1.149	4.454	7.573	8.731

Table 1.6 presents the descriptive statistics for the final sample at the firm-year level. All continuous variables are winsorized at the 1% and 99% level. All variables are defined in Appendix A.

Variable definitions:
Forced3yr = An indicator variable that takes a value of 1 if a forced CEO turnover event occurs during the three subsequent years and 0 otherwise.

INVESTIGATION = An indicator variable that takes a value of 1 if the firm is under an SEC investigation during that fiscal quarter and zero otherwise.
FAV_NG = An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS higher than GAAP EPS during the quarter and 0 otherwise.
AVOID_LOSS = An indicator variable that takes a value of 1 if the firm reports positive non-GAAP earnings and negative GAAP earnings and 0 otherwise.
AVOID_PY_DECREASE = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the same quarter of the prior year and 0 otherwise.
AVOID_PQ_DECREASE = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the previous quarter and 0 otherwise.
BEAT = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to the most recent mean analyst forecast for that quarter provided by the IBES Summary History file and GAAP earnings less than the mean analyst forecast, and 0 otherwise.
NG_FIRST = An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS before GAAP EPS in the quarter's earnings announcement and 0 otherwise.
OPP = An indicator variable that takes a value of 1 if the firm presents non-GAAP earnings opportunistically using any of the other measures (FAV_NG = 1, AVOID_LOSS = 1, AVOID_PY_DECREASE = 1, AVOID_PQ_DECREASE = 1, BEAT = 1, or NG_FIRST = 1), and zero otherwise.
TRANSITORY_GAIN = An indicator variable that takes a value of 1 if the firm reports positive special items during the quarter (SPIQ > 0 in Compustat), and 0 otherwise.
ROA = Cumulative ROA for the periods t and t-1.
SALES_GROWTH = Cumulative sales growth for the periods t and t-1.
RET = Annual stock return.
CFO_VOL = The standard deviation of industry-median-adjusted quarterly operating cash flows over the previous 8 quarters.
LEVERAGE = Total liabilities scaled by total assets.
ACCRUAL = The absolute value of earnings before interest and taxes minus cash flow from operations, scaled by total assets.
LN_SALES = The natural log of total sales.
LN_AGE = The natural log of the number of years the firm is listed on the Compustat database.
LN_EMP = The natural log of the number of employees in thousands.
LN_FIRMS_IN_INDUSTRY = The natural log of the number of firms in the same 3-digit SIC code.
LN_FIRMS_IN_STATE = The natural log of the number of firms in the same state.

TABLE 1.7
Pearson Correlation Matrix (N = 24,458) – Hypotheses 2 & 3 Sample

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1 Forced3yr	1.00								
2 INVESTIGATION	0.04*	1.00							
3 ROA	0.02*	-0.04*	1.00						
4 SALES_GROWTH	-0.02*	-0.01	-0.01*	1.00					
5 FAV_NG	0.05*	0.02*	0.03*	-0.04*	1.00				
6 AVOID_LOSS	0.02*	0.02*	-0.08*	-0.02*	0.33*	1.00			
7 AVOID_PY_DECREASE	0.05*	0.01*	0.11*	0.00	0.67*	0.21*	1.00		
8 AVOID_PQ_DECREASE	0.05*	0.01*	0.04*	0.01*	0.72*	0.24*	0.68*	1.00	
9 BEAT	0.04*	0.00	0.04*	-0.03*	0.59*	0.29*	0.47*	0.48*	1.00
10 NG_FIRST	0.03*	-0.01*	0.04*	-0.02*	0.34*	0.17*	0.29*	0.30*	0.22*
11 RET	-0.04*	-0.05*	-0.02*	-0.01	0.00	0.00	0.00	0.01	0.01
12 CFO_VOL	-0.02*	0.00	-0.38*	0.15*	-0.16*	-0.07*	-0.15*	-0.15*	-0.12*
13 LEVERAGE	0.00	0.04*	-0.16*	-0.01	-0.06	0.01	-0.03*	-0.04*	-0.04*
14 ACCRUAL	0.00	-0.01	-0.30*	0.10*	-0.07*	0.01*	-0.07*	-0.07*	-0.04*
15 LN_SALES	0.07*	0.03*	0.52*	-0.04*	0.21*	0.03*	0.21*	0.20*	0.16*
16 LN_AGE	0.04*	-0.03*	0.12*	-0.07*	0.07	-0.01	0.10*	0.07*	0.07*
17 LN_EMP	0.06*	0.01*	0.41*	-0.09*	0.16*	0.02*	0.16*	0.14*	0.14*
18LN_FIRMS_IN_INDUSTRY	-0.02*	0.02*	-0.01	0.07*	-0.17*	-0.06*	-0.20*	-0.15*	-0.13*
19 LN_FIRMS_IN_STATE	0.02*	0.01*	-0.06*	0.04*	0.09*	0.04*	0.07*	0.08*	0.10*

	10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
10 NG_FIRST	1.00								
11 RET	0.00	1.00							
12 CFO_VOL	-0.09*	-0.01*	1.00						
13 LEVERAGE	0.03*	0.02*	0.01*	1.00					
14 ACCRUAL	-0.05*	0.01	0.41*	0.04*	1.00				
15 LN_SALES	0.14*	0.00	-0.45*	0.18*	-0.22*	1.00			
16 LN_AGE	0.04*	-0.01	-0.13*	0.05*	-0.05*	0.26*	1.00		
17 LN_EMP	0.10*	0.00	-0.43*	0.14*	-0.18*	0.87*	0.25*	1.00	
18 LN_FIRMS_IN_INDUSTRY	-0.10*	0.07*	0.04*	-0.11*	0.01	-0.18*	-0.34*	-0.12*	1.00
19 LN_FIRMS_IN_STATE	0.03*	0.00	0.06*	-0.19*	0.01*	-0.09*	-0.07*	-0.10*	0.01

Table 1.7 presents the Pearson correlation matrix. All continuous variables are winsorized at the 1% and 99% level. Correlations with an asterisk are significant at the 5% level or less. All variables are defined in Appendix A.

TABLE 1.8
Test of Hypothesis 2

Panel A: Opportunistic Firms (TRANSITORY_GAIN = 0)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NON-GAAP VARIABLES (NG)	FAV_NG	AVOID_LOSS	AVOID_PY_DECREASE	AVOID_PQ_DECREASE	BEAT	NG_FIRST	OPP
VARIABLES	Forced3yr	Forced3yr	Forced3yr	Forced3yr	Forced3yr	Forced3yr	Forced3yr
INVESTIGATION	0.022	0.206*	0.124	0.109	0.167	0.264**	-0.067
	(0.151)	(1.839)	(0.959)	(0.852)	(1.415)	(2.297)	(-0.435)
ROA	-2.315***	-1.708**	-1.988***	-1.881**	-1.581**	-1.625**	-2.174**
	(-2.654)	(-2.291)	(-2.614)	(-2.285)	(-2.076)	(-2.191)	(-2.396)
*INVESTIGATION *ROA*	2.538**	0.365	0.959	1.144	0.441	-0.019	2.651**
	(2.101)	(0.376)	(0.916)	(1.046)	(0.444)	(-0.020)	(2.005)
NG	0.201	0.371*	0.167	0.135	0.163	0.375**	0.199
	(1.633)	(1.786)	(1.302)	(1.135)	(1.157)	(2.173)	(1.588)
*INVESTIGATION*NG*	0.411**	0.177	0.374**	0.340*	0.325	-0.136	0.543***
	(2.203)	(0.585)	(1.965)	(1.886)	(1.568)	(-0.453)	(2.846)
*NG*ROA*	3.207**	5.121**	3.114**	1.903	0.902	1.079	2.404*
	(2.436)	(2.171)	(2.038)	(1.404)	(0.560)	(0.629)	(1.827)
INVESTIGATION* NG*ROA	**-6.203*** **	**-5.870** **	**-5.428*** **	**-3.485** **	**-4.025***	**-0.773**	**-5.642*** **
	(-3.616)	**(-1.969)**	**(-2.890)**	**(-2.071)**	**(-1.913)**	**(-0.304)**	**(-3.202)**
SALES_GROWTH	-0.108	-0.233**	-0.223*	-0.221*	-0.214*	-0.196*	-0.154
	(-0.927)	(-2.053)	(-1.822)	(-1.742)	(-1.837)	(-1.717)	(-1.277)
INVESTIGATION SALES_GROWTH*	-0.390*	-0.360	-0.481**	-0.343	-0.526**	-0.530**	-0.283
	(-1.698)	(-1.644)	(-1.992)	(-1.423)	(-2.333)	(-2.259)	(-1.240)
NG SALES_GROWTH*	-0.460*	0.360	-0.058	-0.064	-0.014	-0.195	-0.239
	(-1.848)	(0.695)	(-0.190)	(-0.225)	(-0.036)	(-0.503)	(-0.987)
INVESTIGATION* NG*SALES_ GROWTH	**0.169**	**-0.874**	**0.140**	**-0.261**	**0.396**	**1.133***	**-0.161**
	(0.353)	**(-1.169)**	**(0.281)**	**(-0.569)**	**(0.675)**	**(1.819)**	**(-0.351)**
RET	-0.412***	-0.409***	-0.410***	-0.411***	-0.414***	-0.412***	-0.413***
	(-3.968)	(-3.949)	(-3.932)	(-3.958)	(-3.981)	(-3.963)	(-3.976)
CFO_VOL	1.588	1.553	1.640	1.636	1.642	1.589	1.713
	(1.248)	(1.194)	(1.289)	(1.288)	(1.269)	(1.210)	(1.361)
LEVERAGE	0.215	0.188	0.205	0.210	0.199	0.188	0.209
	(0.985)	(0.855)	(0.935)	(0.963)	(0.902)	(0.853)	(0.951)
ACCRUAL	0.333	0.344	0.328	0.350	0.307	0.344	0.331
	(0.616)	(0.637)	(0.619)	(0.661)	(0.575)	(0.651)	(0.615)
LN_SALES	0.553***	0.569***	0.547***	0.550***	0.559***	0.564***	0.543***
	(6.191)	(6.420)	(6.204)	(6.141)	(6.294)	(6.355)	(6.059)
LN_AGE	0.330***	0.321***	0.329***	0.325***	0.320***	0.326***	0.328***
	(2.623)	(2.591)	(2.635)	(2.608)	(2.589)	(2.641)	(2.622)
LN_EMP	-0.421***	-0.412***	-0.409***	-0.410***	-0.417***	-0.409***	-0.416***
	(-4.635)	(-4.547)	(-4.546)	(-4.517)	(-4.594)	(-4.520)	(-4.594)

LN_FIRMS_IN_INDUSTRY	4.859***	4.728***	4.828***	4.785***	4.753***	4.750***	4.829***
	(2.649)	(2.589)	(2.645)	(2.619)	(2.585)	(2.591)	(2.634)
LN_FIRMS_IN_STATE	0.014	0.021	0.016	0.018	0.012	0.020	0.011
	(0.286)	(0.438)	(0.327)	(0.363)	(0.255)	(0.411)	(0.233)
Constant	-53.386***	-52.193***	-53.082***	-52.665***	-52.297***	-52.382***	-53.058***
	(-3.190)	(-3.133)	(-3.186)	(-3.158)	(-3.118)	(-3.132)	(-3.171)
Observations	19,035	19,035	19,035	19,035	19,035	19,035	19,035
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year	Firm & Year	Firm & Year	Firm & Year	Firm & Year	Firm & Year	Firm & Year
Pseudo R-squared	0.108	0.103	0.106	0.104	0.104	0.103	0.109

Panel B: Informative Firms (TRANSITORY_GAIN = 1)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NON-GAAP VARIABLES (NG)	FAV_NG	AVOID_LOSS	AVOID_PY_DECREASE	AVOID_PQ_DECREASE	BEAT	NG_FIRST	OPP
VARIABLES	Forced3yr	Forced3yr	Forced3yr	Forced3yr	Forced3yr	Forced3yr	Forced3yr
INVESTIGATION	-0.178	0.012	-0.223	-0.225	0.117	0.001	-0.312
	(-0.624)	(0.051)	(-0.766)	(-0.786)	(0.465)	(0.006)	(-0.937)
ROA	-3.692	-4.024*	-4.773**	-4.476*	-3.832*	-3.618*	-4.446*
	(-1.506)	(-1.894)	(-2.035)	(-1.872)	(-1.695)	(-1.735)	(-1.891)
*INVESTIGATION*ROA*	1.011	0.818	3.579	0.506	0.160	0.188	3.031
	(0.381)	(0.376)	(1.491)	(0.202)	(0.069)	(0.086)	(1.189)
NG	0.055	-0.895	-0.319	-0.188	0.355	0.275	-0.195
	(0.200)	(-1.391)	(-1.125)	(-0.688)	(1.033)	(0.741)	(-0.675)
*INVESTIGATION*NG*	0.617	2.686**	0.812*	0.726*	-0.215	0.953	0.683
	(1.346)	(2.341)	(1.740)	(1.772)	(-0.392)	(1.464)	(1.517)
*NG*ROA*	0.501	-0.591	3.027	2.032	1.654	-0.757	1.890
	(0.146)	(-0.162)	(1.015)	(0.633)	(0.447)	(-0.196)	(0.626)
INVESTIGATION*NG*ROA	**-0.464**	**18.723**	**-12.860*** **	**0.122**	**0.654**	**-0.349**	**-5.177**
	(-0.122)	**(0.355)**	**(-2.593)**	**(0.035)**	**(0.144)**	**(-0.046)**	**(-1.368)**
SALES_GROWTH	-0.404	-0.532	-0.734	-0.603	-0.662	-0.485	-0.496
	(-0.934)	(-1.216)	(-1.236)	(-1.145)	(-1.277)	(-1.086)	(-0.975)
*INVESTIGATION*SALES_GROWTH*	0.786	0.456	0.205	0.895	0.524	0.519	0.032
	(1.107)	(0.642)	(0.269)	(1.080)	(0.621)	(0.731)	(0.044)
*NG*SALES_GROWTH*	-1.094	-3.991**	0.246	-0.199	0.032	-1.643	-0.489
	(-1.152)	(-2.272)	(0.246)	(-0.184)	(0.023)	(-1.245)	(-0.564)
INVESTIGATION*NG*SALES_GROWTH	**-0.337**	**5.732**	**0.707**	**-1.198**	**0.115**	**-0.730**	**1.076**
	(-0.270)	**(1.539)**	**(0.566)**	**(-0.884)**	**(0.070)**	**(-0.302)**	**(0.870)**
RET	-0.583**	-0.604**	-0.587**	-0.591**	-0.585**	-0.610**	-0.591**
	(-1.992)	(-2.042)	(-1.993)	(-2.013)	(-1.987)	(-2.015)	(-1.987)
CFO_VOL	0.940	0.800	0.480	0.926	1.444	1.517	0.368

	(0.305)	(0.258)	(0.151)	(0.305)	(0.472)	(0.482)	(0.118)
LEVERAGE	0.086	0.125	0.021	0.012	0.096	0.054	0.061
	(0.195)	(0.280)	(0.046)	(0.027)	(0.219)	(0.119)	(0.138)
ACCRUAL	-3.328	-3.178	-3.548*	-3.340	-3.346	-3.052	-3.175
	(-1.570)	(-1.555)	(-1.663)	(-1.635)	(-1.602)	(-1.483)	(-1.557)
LN_SALES	0.572***	0.554***	0.616***	0.579***	0.568***	0.589***	0.590***
	(3.340)	(3.161)	(3.590)	(3.356)	(3.277)	(3.460)	(3.396)
LN_AGE	0.281	0.304	0.316	0.320	0.320	0.319	0.297
	(0.974)	(1.064)	(1.094)	(1.125)	(1.123)	(1.113)	(1.034)
LN_EMP	-0.281*	-0.260	-0.300*	-0.286*	-0.278*	-0.282*	-0.297*
	(-1.801)	(-1.622)	(-1.954)	(-1.833)	(-1.775)	(-1.802)	(-1.904)
LN_FIRMS_IN_INDUSTRY	40.033	47.063	49.763	49.095	45.626	43.310	45.799
	(0.829)	(0.992)	(1.057)	(1.028)	(0.954)	(0.887)	(0.963)
LN_FIRMS_IN_STATE	0.074	0.109	0.113	0.100	0.078	0.095	0.094
	(0.641)	(0.958)	(0.990)	(0.868)	(0.697)	(0.816)	(0.819)
Constant	-365.033	-427.653	-451.826	-445.764	-414.942	-394.684	-416.261
	(-0.853)	(-1.016)	(-1.083)	(-1.053)	(-0.979)	(-0.912)	(-0.988)
Observations	1,925	1,925	1,925	1,925	1,925	1,925	1,925
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year	Firm & Year	Firm & Year	Firm & Year	Firm & Year	Firm & Year	Firm & Year
Pseudo R-squared	0.160	0.160	0.165	0.159	0.156	0.161	0.159

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.9
Test of Hypothesis 3

VARIABLES	(1) TRANSITORY_GAIN = 0 Forced3yr	(2) TRANSITORY_GAIN = 1 Forced3yr
INVESTIGATION	0.244**	0.071
	(2.247)	(0.305)
ROA	-1.552**	-3.739*
	(-2.196)	(-1.937)
*INVESTIGATION*ROA*	-0.089	0.397
	(-0.096)	(0.191)
SALES_GROWTH	-0.211*	-0.661
	(-1.907)	(-1.387)
*INVESTIGATION*SALES_GROWTH*	-0.420**	0.573
	(-2.015)	(0.790)
RET	-0.409***	-0.593**
	(-3.943)	(-2.006)
CFO_VOL	1.425	0.872
	(1.083)	(0.280)
LEVERAGE	0.207	0.044
	(0.949)	(0.098)
ACCRUAL	0.317	-3.220
	(0.600)	(-1.563)
LN_SALES	0.567***	0.572***
	(6.438)	(3.316)
LN_AGE	0.316**	0.313
	(2.549)	(1.103)
LN_EMP	-0.410***	-0.274*
	(-4.534)	(-1.753)
LN_FIRMS_IN_INDUSTRY	4.681**	47.363
	(2.557)	(1.000)
LN_FIRMS_IN_STATE	0.022	0.100
	(0.456)	(0.885)
Constant	-51.686***	-430.372
	(-3.095)	(-1.025)
Observations	19,035	1,925
Industry FE	Yes	Yes
Year FE	Yes	Yes
SE Clustering	Firm & Year	Firm & Year
Pseudo R-squared	0.101	0.154

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.10
Additional Analysis: Post-Financial Crisis

Panel A: Post-Financial Crisis

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.120***	0.140**	0.034	0.014	0.084*	-0.075
	(3.506)	(2.266)	(0.962)	(0.406)	(1.956)	(-1.526)
TRANSITORY_GAIN	-0.750***	-0.813***	0.267***	0.182***	-0.611***	-0.072
	(-12.075)	(-5.725)	(4.625)	(3.114)	(-7.573)	(-0.894)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.347***	-0.662**	-0.277**	-0.277**	-0.257	-0.347**
	(-2.916)	(-2.076)	(-2.535)	(-2.517)	(-1.640)	(-2.100)
LOSSES	-0.204***	0.350***	0.077	0.111**	-0.288***	-0.424***
	(-4.097)	(3.807)	(1.517)	(2.236)	(-3.994)	(-4.732)
SIZE	0.345***	0.050***	0.356***	0.332***	0.319***	0.265***
	(32.058)	(2.748)	(33.031)	(31.027)	(23.668)	(18.456)
BM	0.238***	-0.054	-0.022	0.123**	-15.327***	-0.035
	(4.356)	(-0.524)	(-0.374)	(2.222)	(-5.041)	(-0.430)
VOLATILITY	-0.000***	0.000***	-0.001***	-0.000***	-0.001***	-0.000
	(-4.697)	(2.739)	(-6.566)	(-5.087)	(-4.635)	(-1.064)
FUTURE_GROWTH	-0.703***	1.345***	-0.215	-0.400	-0.238	-0.549
	(-2.816)	(2.948)	(-0.842)	(-1.566)	(-0.726)	(-1.569)
Constant	-4.166***	-3.609***	-5.075***	-4.623***	-5.053***	-7.035***
	(-15.320)	(-6.592)	(-14.038)	(-14.642)	(-12.096)	(-6.786)
Observations	24,961	24,961	24,961	24,961	24,961	24,961
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	15.168	6.954	13.171	12.573	19.734	10.054

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel B: Pre-Financial Crisis

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	-0.006	0.179*	-0.097**	-0.020	-0.099	-0.154*
	(-0.140)	(1.783)	(-2.062)	(-0.421)	(-1.514)	(-1.827)
TRANSITORY_GAIN	-0.768***	-0.513**	0.168**	0.088	-0.602***	0.010
	(-7.849)	(-2.144)	(2.010)	(1.016)	(-4.299)	(0.065)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.121	-0.232	-0.119	-0.166	-0.235	-0.656**
	(-0.751)	(-0.599)	(-0.860)	(-1.159)	(-0.964)	(-2.250)
LOSSES	0.035	0.280*	0.081	0.095	0.044	-0.929***
	(0.513)	(1.836)	(1.198)	(1.382)	(0.434)	(-5.813)
SIZE	0.395***	0.198***	0.388***	0.380***	0.396***	0.319***
	(26.858)	(6.329)	(26.257)	(25.439)	(19.222)	(13.282)
BM	0.283***	0.501***	-0.075	0.073	-17.745***	0.550***
	(3.289)	(2.756)	(-0.839)	(0.815)	(-5.146)	(4.193)
VOLATILITY	-0.000	-0.000	-0.000	0.000	-0.000	-0.001*
	(-0.589)	(-0.096)	(-0.107)	(0.528)	(-1.119)	(-1.759)
FUTURE_GROWTH	0.148	1.368**	0.097	0.199	1.330***	0.181
	(0.496)	(1.962)	(0.322)	(0.648)	(2.760)	(0.342)
Constant	-4.000***	-4.704***	-3.934***	-4.035***	-6.047***	-5.229***
	(-9.289)	(-4.376)	(-8.773)	(-8.518)	(-5.440)	(-4.840)
Observations	15,802	15,802	15,802	15,802	15,712	15,802
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	12.836	6.894	11.713	11.991	19.168	8.985

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.11
Additional Analysis: Board Expertise

Panel A: Low Expertise

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.076	0.325***	-0.045	0.051	0.054	0.011
	(1.268)	(2.778)	(-0.741)	(0.838)	(0.741)	(0.115)
TRANSITORY_GAIN	-1.014***	-0.881***	0.148	0.062	-0.922***	-0.193
	(-9.063)	(-3.202)	(1.455)	(0.596)	(-6.358)	(-1.192)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.379*	-1.002	-0.155	-0.344*	-0.319	-0.527*
	(-1.908)	(-1.547)	(-0.891)	(-1.917)	(-1.173)	(-1.674)
LOSSES	0.244**	0.708***	0.308***	0.410***	0.111	-0.285
	(1.972)	(3.763)	(2.646)	(3.469)	(0.757)	(-1.526)
SIZE	0.173***	-0.232***	0.201***	0.182***	0.166***	0.039
	(6.202)	(-4.031)	(7.252)	(6.602)	(4.906)	(0.903)
BM	0.444***	-0.094	0.210*	0.301**	-14.183***	0.221
	(3.494)	(-0.366)	(1.659)	(2.407)	(-7.100)	(1.086)
VOLATILITY	0.000***	0.001***	-0.000	0.000	0.000*	0.001***
	(2.630)	(4.048)	(-0.024)	(0.905)	(1.714)	(2.683)
FUTURE_GROWTH	1.899***	4.670***	2.319***	2.053***	1.375**	1.290
	(3.310)	(3.780)	(4.234)	(3.625)	(1.973)	(1.319)
Constant	-1.437	-0.623	-1.866*	-3.110***	-2.730***	-1.452***
	(-1.482)	(-0.849)	(-1.810)	(-3.089)	(-5.761)	(-2.638)
Observations	7,743	7,577	7,759	7,752	7,754	7,625
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	15.754	13.432	12.663	12.688	18.893	13.562

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel B: High Expertise

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.169***	0.265**	0.099	0.011	0.024	0.131*
	(2.740)	(2.144)	(1.624)	(0.174)	(0.328)	(1.651)
TRANSITORY_GAIN	-0.755***	-0.705***	0.390***	0.115	-0.715***	-0.071
	(-7.070)	(-2.592)	(3.685)	(1.102)	(-5.413)	(-0.500)
INVESTIGATION TRANSITORY_GAIN*	-0.265	-0.309	-0.519***	-0.148	0.119	-0.570**
	(-1.429)	(-0.671)	(-2.976)	(-0.859)	(0.522)	(-2.236)
LOSSES	0.137	0.622***	0.261*	0.438***	0.251	0.094
	(0.996)	(2.825)	(1.932)	(3.363)	(1.534)	(0.530)
SIZE	0.127***	-0.236***	0.136***	0.128***	0.178***	0.110***
	(4.824)	(-4.289)	(5.317)	(5.006)	(5.583)	(3.187)
BM	0.492***	0.497**	0.142	0.418***	-21.928***	0.500***
	(3.700)	(2.014)	(1.041)	(3.073)	(-4.438)	(3.266)
VOLATILITY	-0.000***	0.001***	-0.000*	-0.000	-0.000**	0.000
	(-2.809)	(3.517)	(-1.896)	(-1.542)	(-2.010)	(0.697)
FUTURE_GROWTH	0.262	5.297***	0.375	0.502	0.743	0.451
	(0.460)	(4.421)	(0.644)	(0.889)	(1.031)	(0.623)
Constant	-2.202**	0.017	-3.433***	-2.564***	-2.627***	-3.525***
	(-2.419)	(0.020)	(-4.112)	(-3.118)	(-2.686)	(-3.099)
Observations	7,479	7,045	7,514	7,521	7,430	6,897
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	15.255	10.609	13.189	11.858	20.334	9.593

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.12
Additional Analysis: Nomination Committee Expertise

Panel A: Low Expertise

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.135**	0.448***	-0.001	0.040	-0.009	0.124
	(2.151)	(3.663)	(-0.017)	(0.636)	(-0.122)	(1.303)
TRANSITORY_GAIN	-0.870***	-1.156***	0.239**	0.181*	-0.849***	-0.193
	(-7.709)	(-3.509)	(2.293)	(1.700)	(-5.820)	(-1.197)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.201	0.123	-0.054	-0.143	0.142	-0.568*
	(-0.978)	(0.225)	(-0.289)	(-0.761)	(0.524)	(-1.705)
LOSSES	-0.107	0.352*	0.045	0.147	-0.084	-0.469***
	(-0.892)	(1.713)	(0.375)	(1.265)	(-0.543)	(-2.627)
SIZE	0.162***	-0.220***	0.190***	0.157***	0.199***	0.052
	(5.753)	(-3.944)	(6.828)	(5.673)	(5.844)	(1.271)
BM	0.268**	-0.082	0.112	0.241*	-22.001***	0.794***
	(2.093)	(-0.299)	(0.879)	(1.903)	(-4.767)	(4.623)
VOLATILITY	0.000	0.001***	-0.000	0.000	0.000	0.000***
	(1.026)	(3.161)	(-0.356)	(0.926)	(0.133)	(2.686)
FUTURE_GROWTH	2.415***	5.616***	3.183***	2.297***	1.721**	1.867**
	(4.223)	(4.541)	(5.619)	(4.078)	(2.435)	(2.088)
Constant	-2.128***	1.935*	-1.039	-2.366**	-3.897***	-2.298***
	(-4.784)	(1.655)	(-0.578)	(-2.292)	(-2.698)	(-3.581)
Observations	7,180	6,793	7,192	7,195	7,155	6,989
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	15.903	14.100	12.765	12.077	19.561	12.702

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel B: High Expertise

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.187***	0.261**	0.124**	0.089	0.125*	0.104
	(2.925)	(2.111)	(1.966)	(1.394)	(1.680)	(1.217)
TRANSITORY_GAIN	-0.800***	-0.334	0.353***	0.061	-0.615***	-0.088
	(-6.981)	(-1.361)	(3.085)	(0.547)	(-4.457)	(-0.550)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.296	-1.330**	-0.409**	-0.222	-0.229	-0.499*
	(-1.556)	(-2.370)	(-2.299)	(-1.245)	(-0.985)	(-1.854)
LOSSES	0.494***	0.935***	0.548***	0.715***	0.346**	0.282
	(3.332)	(4.470)	(3.861)	(5.055)	(2.118)	(1.534)
SIZE	0.111***	-0.284***	0.124***	0.116***	0.144***	0.132***
	(3.769)	(-4.735)	(4.298)	(4.041)	(4.142)	(3.204)
BM	0.595***	0.417	0.191	0.507***	-15.832***	0.224
	(4.075)	(1.601)	(1.260)	(3.375)	(-4.485)	(1.195)
VOLATILITY	-0.000***	0.001***	-0.000**	-0.000**	-0.000	-0.000
	(-2.610)	(4.201)	(-2.545)	(-2.085)	(-1.276)	(-0.410)
FUTURE_GROWTH	-0.557	3.727***	-0.545	0.273	0.298	-0.600
	(-0.930)	(3.046)	(-0.926)	(0.459)	(0.390)	(-0.778)
Constant	-2.422***	-0.731	-3.476***	-2.756***	-3.242***	-3.186***
	(-2.846)	(-0.694)	(-4.389)	(-3.385)	(-3.605)	(-3.578)
Observations	6,982	6,437	6,971	6,961	6,866	6,489
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	16.318	10.920	13.833	12.903	19.511	11.116

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.13
Additional Analysis: CEO-Board Chair Duality

Panel A: Separate Board Chair and CEO Positions

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.050	0.161***	-0.027	-0.009	0.000	-0.223***
	(1.614)	(2.768)	(-0.824)	(-0.274)	(0.010)	(-4.399)
TRANSITORY_GAIN	-0.712***	-0.623***	0.254***	0.172***	-0.551***	-0.092
	(-12.024)	(-4.816)	(4.745)	(3.147)	(-6.906)	(-1.111)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.239**	-0.606**	-0.153	-0.203**	-0.171	-0.276
	(-2.159)	(-2.219)	(-1.556)	(-2.018)	(-1.130)	(-1.621)
LOSSES	-0.018	0.385***	0.196***	0.205***	-0.094	-0.544***
	(-0.414)	(4.578)	(4.462)	(4.703)	(-1.461)	(-6.265)
SIZE	0.425***	0.153***	0.415***	0.405***	0.406***	0.354***
	(39.340)	(8.325)	(38.236)	(37.293)	(28.378)	(23.288)
BM	0.223***	0.064	-0.036	0.088*	-16.552***	0.162**
	(4.437)	(0.655)	(-0.689)	(1.715)	(-4.544)	(2.155)
VOLATILITY	-0.001***	0.000	-0.001***	-0.001***	-0.001***	-0.000***
	(-4.412)	(0.929)	(-6.351)	(-4.665)	(-6.874)	(-2.975)
FUTURE_GROWTH	-0.142	1.496***	-0.035	0.023	0.332	0.090
	(-0.708)	(3.685)	(-0.169)	(0.111)	(1.144)	(0.290)
Constant	-4.920***	-4.858***	-5.252***	-5.140***	-5.968***	-7.314***
	(-18.765)	(-9.153)	(-16.709)	(-17.367)	(-13.945)	(-9.391)
Observations	33,330	33,277	33,330	33,325	33,245	33,330
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	17.020	8.455	14.341	14.661	21.843	12.810

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel B: Dual Board Chair and CEO Positions

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.183***	0.231*	0.084	0.096*	0.137*	0.337***
	(3.211)	(1.917)	(1.477)	(1.682)	(1.931)	(4.179)
TRANSITORY_GAIN	-0.961***	-1.477***	0.230**	0.125	-0.868***	-0.045
	(-9.036)	(-4.024)	(2.330)	(1.258)	(-5.946)	(-0.297)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.224	0.466	-0.385**	-0.329**	-0.254	-0.725***
	(-1.219)	(0.862)	(-2.317)	(-1.976)	(-0.977)	(-2.713)
LOSSES	0.259*	0.736***	0.271**	0.472***	0.335**	0.125
	(1.891)	(3.455)	(2.022)	(3.519)	(2.071)	(0.681)
SIZE	0.140***	-0.190***	0.153***	0.141***	0.182***	0.105***
	(5.504)	(-3.531)	(6.117)	(5.597)	(5.594)	(2.586)
BM	0.499***	0.457**	0.062	0.339***	-22.936***	0.129
	(4.419)	(2.262)	(0.553)	(3.038)	(-4.497)	(0.728)
VOLATILITY	0.000	0.001***	0.000	0.000	0.000	0.000
	(0.869)	(2.583)	(0.214)	(0.527)	(0.919)	(1.492)
FUTURE_GROWTH	0.095	2.599**	0.986*	0.611	1.115*	-0.376
	(0.180)	(2.365)	(1.826)	(1.156)	(1.690)	(-0.465)
Constant	-2.848***	-0.604	-3.125***	-2.797***	-4.221***	-3.781***
	(-7.835)	(-0.834)	(-8.566)	(-7.664)	(-8.102)	(-6.622)
Observations	8,750	8,425	8,799	8,799	8,751	8,313
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	14.776	11.886	12.981	12.471	20.331	12.368

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.14
Additional Analysis: Analyst Forecast Dispersion

Panel A: Low Dispersion

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.203***	0.360***	0.104**	0.120***	0.173***	0.098
	(4.576)	(4.437)	(2.355)	(2.689)	(3.564)	(1.544)
TRANSITORY_GAIN	-0.695***	-0.349**	0.358***	0.263***	-0.592***	-0.033
	(-8.747)	(-2.197)	(4.693)	(3.400)	(-6.546)	(-0.292)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.090	-1.079***	-0.128	-0.157	-0.208	-0.383*
	(-0.627)	(-2.829)	(-0.924)	(-1.128)	(-1.239)	(-1.737)
LOSSES	-0.006	1.049***	0.141*	0.209***	0.164*	-0.399***
	(-0.075)	(8.768)	(1.873)	(2.764)	(1.893)	(-2.926)
SIZE	0.300***	-0.057**	0.320***	0.295***	0.300***	0.137***
	(20.247)	(-2.210)	(21.720)	(20.048)	(18.400)	(7.007)
BM	-1.855	0.446	-3.736	-1.059	-2.163	-7.471***
	(-1.255)	(0.400)	(-1.608)	(-0.924)	(-0.901)	(-3.300)
VOLATILITY	-0.000**	0.001***	-0.000**	-0.000**	-0.000	0.000
	(-1.967)	(3.518)	(-2.264)	(-2.429)	(-1.583)	(0.962)
FUTURE_GROWTH	1.241***	2.941***	1.008***	0.678*	1.368***	1.054**
	(3.462)	(4.094)	(2.843)	(1.876)	(3.287)	(2.032)
Constant	-4.218***	-4.265***	-4.652***	-4.408***	-5.817***	-4.260***
	(-9.955)	(-3.965)	(-9.709)	(-9.936)	(-7.851)	(-5.346)
Observations	15,781	15,626	15,781	15,781	15,775	15,461
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	18.159	10.196	16.046	15.803	17.345	8.279

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel B: High Dispersion

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.038	0.133	-0.016	0.009	-0.087	-0.204***
	(0.861)	(1.457)	(-0.337)	(0.196)	(-1.541)	(-2.779)
TRANSITORY_GAIN	-0.770***	-0.996***	0.316***	0.174**	-0.679***	-0.027
	(-8.691)	(-4.335)	(4.017)	(2.182)	(-5.945)	(-0.229)
INVESTIGATION TRANSITORY_GAIN*	-0.536***	-0.433	-0.523***	-0.473***	-0.349	-0.624**
	(-3.176)	(-0.960)	(-3.657)	(-3.266)	(-1.570)	(-2.554)
LOSSES	-0.166**	0.225	-0.006	0.044	-0.190**	-0.453***
	(-2.391)	(1.553)	(-0.083)	(0.627)	(-2.070)	(-3.365)
SIZE	0.330***	0.120***	0.351***	0.314***	0.305***	0.383***
	(21.219)	(3.870)	(22.380)	(20.007)	(15.951)	(15.066)
BM	1.122	2.739***	-1.446	2.128*	1.144	0.269
	(1.305)	(3.368)	(-1.385)	(1.880)	(1.339)	(0.187)
VOLATILITY	-0.000***	-0.000	-0.001***	-0.000***	-0.000*	-0.001***
	(-3.827)	(-0.020)	(-4.863)	(-3.300)	(-1.706)	(-3.515)
FUTURE_GROWTH	-0.764**	2.447***	0.060	0.207	-0.092	-0.183
	(-2.319)	(3.479)	(0.169)	(0.596)	(-0.221)	(-0.331)
Constant	-3.713***	-3.870***	-4.271***	-4.043***	-4.989***	-6.456***
	(-8.969)	(-4.709)	(-9.318)	(-9.154)	(-8.775)	(-9.383)
Observations	14,402	14,246	14,384	14,384	14,384	14,143
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	12.355	8.135	10.198	9.755	10.302	14.383

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.15
Additional Analysis: Earnings Response Coefficient (ERC)

Panel A: Low ERC

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.233***	0.212**	0.186***	0.200***	0.146***	-0.089
	(5.404)	(2.384)	(4.219)	(4.479)	(2.724)	(-1.333)
TRANSITORY_GAIN	-0.766***	-0.791***	0.430***	0.247***	-0.554***	0.044
	(-9.160)	(-3.866)	(5.722)	(3.228)	(-5.496)	(0.425)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.423***	-1.090**	-0.423***	-0.377***	-0.285	-0.329
	(-2.796)	(-2.192)	(-3.184)	(-2.747)	(-1.545)	(-1.625)
LOSSES	0.310***	0.815***	0.493***	0.544***	0.239**	-0.484***
	(3.755)	(5.800)	(5.992)	(6.775)	(2.245)	(-2.960)
SIZE	0.384***	0.032	0.367***	0.359***	0.334***	0.244***
	(27.650)	(1.303)	(26.817)	(26.180)	(20.045)	(12.850)
BM	-0.232**	-0.290	-0.134	-0.164	-14.759***	-0.134
	(-1.978)	(-1.148)	(-1.158)	(-1.421)	(-5.401)	(-0.824)
VOLATILITY	-0.001***	0.000	-0.001***	-0.001***	-0.001***	-0.001***
	(-6.531)	(1.314)	(-5.960)	(-6.011)	(-4.150)	(-3.252)
FUTURE_GROWTH	-0.117	0.880	0.379	0.016	0.874**	0.899*
	(-0.363)	(1.369)	(1.145)	(0.050)	(2.121)	(1.919)
Constant	-4.231***	-3.084***	-4.443***	-4.321***	-5.206***	-5.053***
	(-10.699)	(-4.455)	(-10.059)	(-10.194)	(-7.996)	(-6.242)
Observations	16,350	16,103	16,341	16,383	16,304	16,278
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	17.127	9.190	14.566	14.833	17.689	11.133

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel B: High ERC

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
INVESTIGATION	0.033	0.243***	-0.091**	-0.055	-0.020	0.142**
	(0.780)	(2.966)	(-2.058)	(-1.265)	(-0.378)	(2.198)
TRANSITORY_GAIN	-0.849***	-1.144***	0.140*	0.107	-0.812***	-0.322***
	(-10.331)	(-4.886)	(1.835)	(1.391)	(-7.542)	(-2.614)
*INVESTIGATION** *TRANSITORY_GAIN*	-0.067	0.024	-0.104	-0.165	-0.049	-0.446*
	(-0.457)	(0.060)	(-0.757)	(-1.220)	(-0.248)	(-1.816)
LOSSES	-0.023	0.594***	0.138*	0.201***	-0.041	-0.577***
	(-0.303)	(4.563)	(1.813)	(2.722)	(-0.431)	(-3.995)
SIZE	0.323***	0.058**	0.351***	0.314***	0.335***	0.233***
	(22.893)	(2.234)	(24.743)	(22.318)	(19.792)	(11.667)
BM	0.564***	0.047	0.182	0.407***	-9.990***	1.280***
	(3.935)	(0.149)	(1.228)	(2.815)	(-4.825)	(6.098)
VOLATILITY	-0.000**	0.000	-0.000***	-0.000**	-0.000***	-0.000*
	(-1.979)	(1.425)	(-4.440)	(-2.544)	(-3.421)	(-1.680)
FUTURE_GROWTH	-0.236	3.571***	-0.424	0.082	0.144	-0.023
	(-0.738)	(5.103)	(-1.294)	(0.246)	(0.354)	(-0.045)
Constant	-4.427***	-4.621***	-5.200***	-4.798***	-5.794***	-4.997***
	(-12.327)	(-5.332)	(-11.665)	(-11.632)	(-10.848)	(-13.037)
Observations	16,121	16,107	16,107	16,107	16,107	15,560
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	17.063	9.374	14.507	14.095	17.902	15.120

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 1.16
Additional Analysis: Non-GAAP Earnings Persistence

	(1)	(2)	(3)
	Full Sample	Opportunistic	Informative
VARIABLES	*future_operating_income*	*future_operating_income*	*future_operating_income*
ng_earnings	2.742***	2.778***	2.255***
	(54.447)	(53.450)	(10.725)
INVESTIGATION	0.007***	0.009***	-0.012*
	(3.932)	(4.812)	(-1.844)
*INVESTIGATION *ng_earnings*	-0.262***	-0.288***	0.294
	(-3.563)	(-3.777)	(1.087)
sales_growth	0.082***	0.076***	0.093
	(3.827)	(3.405)	(1.255)
log_total_assets	0.010***	0.009***	0.013***
	(14.282)	(13.055)	(5.761)
earnings_volatility	-0.312***	-0.284***	-0.409***
	(-9.267)	(-7.859)	(-4.352)
loss	-0.032***	-0.035***	-0.018**
	(-12.723)	(-13.271)	(-1.988)
book_to_market	-0.074***	-0.073***	-0.087***
	(-15.435)	(-14.587)	(-5.188)
log_age	0.011***	0.010***	0.023***
	(6.381)	(5.836)	(3.378)
Constant	0.022	0.025	0.049
	(1.018)	(1.137)	(1.086)
Observations	25,752	23,368	2,384
R-squared	0.685	0.697	0.540
Industry FE	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
R-squared (%)	68.397	69.612	51.929

Robust t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1
Variable Definitions following main analysis:
INVESTIGATION = An indicator variable that takes a value of 1 if the firm is under an SEC investigation during that fiscal quarter and zero otherwise.
ng_earnings = non-GAAP earnings per share provided by Bentley et al. (2018).

Variable Definitions following Kolev et al. (2008):
future Operating Income = Operating Income q summed over four quarters starting with quarter *t + 1.*
sales_growth = quarter-over-quarter increase in sales, on a per share basis.
log_total_assets = log of the total assets in millions and corresponds to quarter q.
earnings_volatility = standard deviation of return on assets over at least six of the preceding eight quarters.
loss = an indicator variable equal to 1 if earnings before extraordinary items for the quarter (#25) is less than 0, and 0 otherwise.
book_to_market = book value of equity divided by the book value of debt plus market value of equity.
log_age = log of the number of years since the company first appeared in Compustat.

PART 2. FIRM-LEVEL POLITICAL RISK AND OPPORTUNISTIC NON-GAAP REPORTING

Abstract

Firm-level political risk is the likelihood a firm will face losses due to political factors and can influence investment and other aspects of firm behavior. I examine the effect of firm-level political risk on opportunistic non-GAAP reporting using the novel political risk measure developed by Hassan et al. (2019). Using 129,937 firm-quarter observations between 2003 and 2020, I find that firms with opportunistic motives are less likely to report non-GAAP earnings opportunistically as political risk increases. Also, I find that non-GAAP earnings are more persistent for opportunistic firms when political risk is high. However, I do not find these effects for firms with informative motives. In additional analysis, I find that economic policy risk has the strongest effect on non-GAAP reporting among eight topic-specific measures. I also find evidence that the effect of political risk is stronger following the 2007-2008 financial crisis and during the COVID-19 pandemic. This study has implications for regulators, investors, and analysts. Regulators can apply pressure on firms to reduce opportunistic behaviors and investors and analysts should be wary of non-GAAP reporting for firms with low levels of political risk.

Keywords: political risk, non-GAAP earnings, COVID-19 pandemic

CHAPTER 2.1. INTRODUCTION

In this research study, I examine the relationship between firm-level political risk and non-GAAP reporting. Specifically, I examine how firm-level political risk affects the likelihood that a firm will choose to report non-GAAP earnings opportunistically. Generally Accepted Accounting Principles (GAAP) are a set of accounting rules firms must follow when preparing their financial statements. The standards provide details on recognition, measurement, and disclosure to be used in preparing financial statements. They are issued by the Financial Accounting Standards Board (FASB) and the US Securities and Exchange Commission (SEC) requires publicly traded companies to follow GAAP. However, in earnings announcements, conference calls, press releases, and other disclosures, firms often disclose an adjusted measure of net income that excludes amounts that would normally be included in the comparable GAAP measure. For example, a firm may choose to exclude the loss on the sale of an asset because such a loss will not affect how the company performs in the future. This results in an adjusted income that is higher than the comparable GAAP measure because it does not include the loss.

These measures are called non-GAAP disclosures, as they do not follow the rules set out by the FASB. Non-GAAP disclosures are under the purview of the SEC. More precisely, the SEC has two regulations, called Regulation G and Regulation S-K, that deal with non-GAAP disclosures (SEC, 2003). Regulation G, that defines non-GAAP financial measures, requires firms to present a reconciliation between their non-GAAP measure and the most comparable GAAP measure. It also requires that the non-GAAP measure cannot be misleading or contain untrue information. Item 10(e) of Regulation S-K, requires presentation of the most comparable GAAP measure with equal or greater prominence to the non-GAAP measure in press releases and documents filed with the SEC. This means that the non-GAAP measure cannot come first in the

documents or be presented in a bolder or larger font that emphasizes it over the GAAP measure (SEC, 2018).

The official reason for using non-GAAP measures is to provide better information than GAAP measures about the firm's specific situation by excluding items that are temporary or not a part of "core earnings." As an example of non-GAAP disclosures, take Hawaiian Holdings, Inc (NASDAQ: HA).[2] In their press release for the fourth quarter of 2021, Hawaiian Holdings excludes a loss on the extinguishment of debt "*to allow investors to better analyze [their] core operational performance and more readily compare [their] results to other airlines.*" Researchers have found evidence confirming that companies do provide non-GAAP measures to inform investors. For example, non-GAAP earnings are more persistent (Bhattacharya et al., 2003) and are preferred by the market for valuation (Bradshaw & Sloan, 2002) which can be interpreted as evidence that non-GAAP earnings are provided for informational purposes (D. E. Black et al., 2018). Informativeness is the primary motivation for reporting non-GAAP earnings in the presence of transitory gains (Curtis et al., 2014).

However, despite the official reason for using non-GAAP measures, they are also used unofficially for the benefit of the firm's manager by meeting earnings targets or avoiding losses. Returning to the Hawaiian Airlines example, excluding the loss and other amounts reduced the company's loss per share from $1.81 (GAAP) to $1.37 (non-GAAP) in that quarter. The non-GAAP loss per share was smaller than the mean analyst forecast of $1.48, allowing the company to beat earnings forecasts for the quarter if the non-GAAP measure was used. Corroborating this anecdotal evidence, researchers examining non-GAAP disclosures have found evidence of

[2] Hawaiian Holdings, Inc.'s press release for the fourth quarter of 2021 can be found here: https://newsroom.hawaiianairlines.com/releases/hawaiian-holdings-reports-2021-fourth-quarter-and-full-year-financial-results

companies using the measures opportunistically to meet earnings targets. For example, Barth et al. (2012) demonstrate that firms exclude stock-based compensation expense, a recurring expense of the business that should be included, to increase earnings, smooth earnings, and meet earnings benchmarks. Black and Christensen (2009) examine the types of expenses that are often excluded to create non-GAAP measures, finding that depreciation, research and development, and stock-based compensation expense are excluded to meet earnings targets. These are all recurring expenses and are consistent with the opportunistic use of non-GAAP reporting. Similarly Black et al. (2017) show that companies are more likely to report non-GAAP earnings and exclude recurring expenses if they are unable to meet analyst forecasts using other means. Finally, in a recent paper, Chen et al. (2021) find that 36% of firms report non-GAAP measures more prominently than GAAP measures, despite not being allowed under Item 10(e) of Regulation S-K (SEC, 2003).

Several studies show that the use and importance of non-GAAP measures has increased over time. Early on, Bradshaw and Sloan (2002) notice that non-GAAP earnings had replaced GAAP earnings as the dominant determinant of stock prices. Bhattacharya at al. (2003) showed soon after that investors believe non-GAAP earnings are more representative of the firm's "core earnings" than GAAP earnings. The importance of non-GAAP measures has only increased from that point. Bentley et al. (2018) find that between 2003 and 2013, the use of non-GAAP measures increased from close to 30% of firms to almost 60%. A recent report by PwC finds that 76% of S&P 500 firms report non-GAAP measures (PwC, 2021a). This shows that non-GAAP use is even greater among the largest firms. McVay et al. (2021) suggest that non-GAAP measures are so widely and routinely used that they have become the "generally accepted" earnings measure.

Therefore, examining topics that affect a firm's presentation of non-GAAP measures is extremely important, as they can affect investors' decisions.

In this paper, I explore the relationship between levels of political risk and non-GAAP reporting choices. Political risk at the company level is the risk that the company will face losses due to the political system of the location where the company is situated. Hassan et al. (2019) define it more completely as a risk caused by "the political system and [its] effects on investment, employment, and other aspects of firm behavior." To use a recent example to illustrate the concept more clearly, political risk recently spiked around the beginning of the Covid-19 pandemic in the second quarter of 2020, as governments developed policies to slow the spread of the virus. These policies would include border closures and lockdowns, which had a significant effect on the businesses of travel and entertainment companies, reducing investment and employment in those areas. Another example is the surprise presidential election win of Donald Trump in 2016. Political risk levels increased in the third and fourth quarters of 2016 as companies assessed the unexpected impact of the election on government spending, taxes, and regulations. Political risk increased in both cases because firms had to assess the potential impact of these events on their businesses. As time progressed and the effects became known, the political risk levels subsequently decreased. This eventual decrease shows that while political risk is affected by political changes it is not biased against any specific event or group. It simply measures the level of political risk at a particular time.

The accounting literature has explored the effect of political risk on GAAP reporting choices. For example, accounting conservatism (Dai & Ngo, 2020) and accounting quality (El Ghoul et al., 2020). However, a review of the literature has revealed that there is a lack of

knowledge about the effects of political risk on a company's non-GAAP reporting and disclosure behaviors, thus I examine the relationship between the two variables in this study.

This paper's motivation for studying political risk and its effect on opportunistic non-GAAP reporting is threefold. First, political risk has a significant impact on financial reporting and operating decisions (Dai & Ngo, 2020; El Ghoul et al., 2020; Hasan et al., 2022; Hassan et al., 2019). Hassan et al. (2019) also found that increased political risk is associated with increase in stock return volatility. Because non-GAAP reporting is another reporting decision made by the business, political risk should have a significant influence non-GAAP reporting as well. Second, non-GAAP reporting is currently one of the most closely followed financial measures (Bentley et al., 2018; McVay et al., 2021; PwC, 2021a) and is an important determinant of stock prices (Bhattacharya et al., 2003; Bradshaw & Sloan, 2002). For example, from October 2020 to September 2021, the SEC issued the greatest number of comment letters for non-GAAP disclosures (PwC, 2021b). Recent Compliance and Disclosure Interpretations (C&DIs) issued by the SEC also suggest their focus is on the prominence of non-GAAP earnings with relation to GAAP earnings (a measure studied in this paper), reconciliations between GAAP and non-GAAP measures, and appropriateness of adjustments (PwC, 2022b; SEC, 2022). Thus, reducing opportunistic non-GAAP reporting is a focus of regulators as well. As a result, knowing the determinants of non-GAAP reporting, and in particular opportunistic reporting, is of key importance to accountants, capital market participants, and regulators. Third, with the recent COVID-19 pandemic, we experienced the highest levels of political risk in recent memory (See Figure 2.1, presented in Section III). Investors should know how the current environment affects accounting policy and reporting decisions so they can be accounted for in their investing decisions.

This paper takes those three motivations into account, studying political risk as a determinant of opportunistic non-GAAP reporting.

The accounting research literature has numerous examples of firms reporting opportunistically (Barth, Landsman, et al., 2012; D. E. Black & Christensen, 2009; E. L. Black, Christensen, Joo, et al., 2017) or informatively (Bhattacharya et al., 2003; Bradshaw & Sloan, 2002; Curtis et al., 2014), depending on the situation of the firm and the firm's earnings targets. Based on this, I hypothesize that the effect of political risk on opportunistic non-GAAP reporting is also situation dependent. Specifically, firms that were previously inclined to report non-GAAP earnings opportunistically will decrease their use of opportunistic non-GAAP measures during times of high political risk. This could be as a result of the greater information asymmetry caused by political risk, leading firms to become more conservative (Dai & Ngo, 2020) or increase their accounting quality (El Ghoul et al., 2020). These GAAP based responses to political risk should also apply to non-GAAP disclosures. The reduction in opportunistic non-GAAP disclosures could also be as a result of firms making more conservative operating decisions more broadly (Hasan et al., 2022). Or, the change could be viewed as an attempt to influence the political process and avoid political costs (Han & Wang, 1998; Jones, 1991; Watts & Zimmerman, 1986). Conversely, I hypothesize that firms that were previously inclined to report informatively will have no such effect. This could be because of the lower amount of information asymmetry for previously informative firms. Higher political risk would have less of an impact on the information asymmetry, resulting in no changes to non-GAAP reporting for informative firms. Using the findings of Curtis et al. (2014), I operationalize the inclination to report opportunistically or informatively by including firms with transitory gains as informative, and those without them as opportunistic. Using transitory gains to operationalize firm motives has the benefit that it is

supported by prior literature (Bentley et al., 2018; D. E. Black et al., 2018; E. L. Black, Christensen, Kiosse, et al., 2017; Blankespoor et al., 2020). It also separates firms into income-increasing (opportunistic) and income-decreasing (informative) groups (Leung & Veenman, 2018) and it shows variation over time (D. E. Black et al., 2018). In my analysis, firms with transitory gains (informative) should not respond to political risk with opportunistic non-GAAP reporting, while firms without them (opportunistic) should see a decrease in opportunistic non-GAAP reporting.

In this research study, I use several dichotomous response variables in my analysis to show the pervasive nature of the effect of political risk on non-GAAP reporting. Reporting non-GAAP earnings that is higher than GAAP earnings (*FAV_NG*) is measured as one if the firm reports non-GAAP earnings greater than GAAP earnings. Reporting non-GAAP earnings that avoids a loss (*AVOID_LOSS*) is measured as one if the firm reports positive non-GAAP earnings and negative GAAP earnings. Avoiding a decrease from the prior year's or the prior quarter's earnings (*AVOID_PY_DECREASE* and *AVOID_PQ_DECREASE*), are measured as one if the firm reports non-GAAP earnings that are higher than GAAP earnings in the prior year or quarter, but current GAAP earnings is lower than GAAP earnings in the prior year or quarter. Meeting or beating analyst forecasts (*BEAT*) is measured as one if the firm reports non-GAAP earnings that are higher than the mean analyst forecast, but reports GAAP earnings lower than the mean analyst forecast. Finally, non-GAAP earnings prominence (NG_FIRST) is measured as one if the firm reports non-GAAP EPS before GAAP EPS in the quarter's earnings announcement. All variables are a natural binary phenomenon based on the firm's reporting choices. The firm chooses to report non-GAAP earnings either opportunistically or not. Thus, the outcome variables used in this paper are based on a true underlying binary phenomenon.

I use a model similar to Chen et al. (2021). In their paper examining non-GAAP earnings prominence, Chen et al. (2021) use several control variables that are related to the likelihood of reporting non-GAAP EPS. These variables include common firm characteristics such as firm size, book-to-market ratio, whether they had several recent losses, the volatility of their GAAP earnings, and their sales growth. The authors include fiscal quarter and industry fixed effects to account for firm and time invariant factors, respectively. Chen et al. (2021) cluster standard errors by firm and calendar year-quarter following Petersen (2009). This methodology has support in earlier papers, such as Lougee and Marquardt (2004) and Bowen et al. (2005). Lougee and Marquardt (2004) examine how the quality of the firm's GAAP earnings affects the likelihood of reporting non-GAAP earnings. Bowen et al. (2005) examine the determinants of the emphasis placed on non-GAAP earnings. In my analysis, I also add a control variable for transitory gains. Curtis et al. (2014) find that the primary motivation for firms with transitory gains is informative. By including transitory gains in my regressions and interacting it with political risk I can find whether the effect is different for firms with opportunistic or informative motives. I build the model with the control variables, Political Risk, and fixed effects. I examine the significance of each coefficient and the model R-Squared to determine model fit and the support for my hypothesis.

I find that political risk is negatively related to opportunistic non-GAAP reporting for opportunistic firms, which suggests firms being more careful about reporting non-GAAP earnings in times of high political risk. Specifically, when political risk is high, I find that opportunistic firms are less likely to use non-GAAP exclusions to increase earnings, avoid a loss, avoid decreases, meet or beat analyst forecasts, and are less likely to report non-GAAP earnings more prominently than GAAP earnings. I also find that firms are less likely to use non-GAAP earnings to meet or beat analyst forecasts when political risk is high, but only when the firms have

informative motives. I perform several additional analyses for robustness. First, I examine whether the effect of political risk is stronger following the 2007-2008 financial crisis. The results suggest that political risk has an especially strong effect on opportunistic non-GAAP reporting when the average level of political risk is high. Second, I examine the topic-specific risk measures developed by Hassan et al. (2019). There are 8 different kinds of risk used in this analysis: economic policy and budget risk, environmental risk, healthcare risk, institutions and political process risk, security and defense risk, tax risk, technology and infrastructure risk, and trade risk. I find that economic policy risk had the strongest effect on non-GAAP reporting and that the results for all topics mirror the main results. Third, I examine political risk and non-GAAP reporting during the COVID-19 pandemic. I find evidence that, like the financial crisis, the pandemic has larger coefficient magnitudes suggesting a stronger effect. I also examine health-specific risk during the pandemic and find that coefficient magnitudes are even larger than the main political risk measure as would be expected. Finally, I use an alternative measure of political risk, election margin during U.S. Gubernatorial elections. This is similar to Dai and Ngo (2020) who use this measure in examining the effect of political risk on accounting conservatism. Election margin is also used to combat the endogeneity concerns associated with the firm-level measure of political risk, as the political risk measure is based on firm disclosures. I examine the periods before and after the 2016 presidential election, as the post-2016 period represents a level of increased polarization and risk. I find that the coefficients are larger and consistently negative in the post-2016 period. Finally, I examine the persistence of non-GAAP earnings and how it relates to political risk, finding that the persistence of non-GAAP earnings increases for opportunistic firms during times of high political risk but informative firms see no change to their non-GAAP earnings persistence.

This paper contributes to the research literature in several ways. Specifically, it contributes to the use of the firm-level measure and topic-specific measures of non-GAAP political risk created by Hassan et al. (2019), to show how political risk affects accounting-related outcomes. In additional analysis, it makes use of U.S. Gubernatorial Election Margin as a measure of political risk similar to Dai and Ngo (2020). It also contributes to the non-GAAP literature examining the opportunistic use of non-GAAP reporting (Barth, Gow, et al., 2012; D. E. Black & Christensen, 2009; E. L. Black, Christensen, Kiosse, et al., 2017). More broadly though, this paper also contributes to the literature examining how companies respond to political costs and interventions using non-GAAP reporting (Heflin & Hsu, 2008; Kolev et al., 2008).

I organize the rest of the paper as follows. Chapter 2.2 presents my hypothesis development, Chapter 2.3 describes my research methods, Chapter 2.4 presents my empirical results and additional analysis, and Chapter 2.5 concludes with a discussion.

CHAPTER 2.2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Political risk has previously been examined in conjunction with GAAP accounting choices. The two concepts have been shown to be related in several important ways. For example, Dai and Ngo (2020) use the variation in political uncertainty caused by US Gubernatorial Elections from 1993 to 2016 to examine the effect of political risk on accounting. They hypothesized and found that increased political risk leads to greater information asymmetry between managers and investors, increasing the need for accounting conservatism. Accounting conservatism is a beneficial characteristic of accounting that safeguards investors because it reports bad news early, giving investors time to divest from the company if they choose. In another paper, El Ghoul et al. (2020) find, using data from 19 countries over the period from 1990 to 2015, that accounting

quality increases during periods of higher economic policy uncertainty. This effect is stronger for firms that face higher levels of political risk, measured following Hassan et al. (2019). Accounting quality is measured following Nikolaev (2018) as how closely accounting accruals match the company's underlying economic performance. Higher accounting quality is considered a beneficial characteristic to have, as well. Similarly, Duong et al. (2020) find that firms hold more cash in response to higher economic policy uncertainty. The authors find that the effect is more pronounced in firms that face higher levels of political risk, measured following Hassan et al. (2019). In their recent paper, Hasan et al. (2022) directly examine the question of political risk on cash holdings. Using the firm-level political risk measure developed by Hassan et al. (2019) and a sample of firms covering the period of 2002 to 2021, they find that firms with higher levels of political risk hold more cash. Hasan et al. (2022) propose that one reason for this is that managers become more conservative in response to political risk. Having more cash can be considered a positive for firms in times of high political risk. It can help to overcome operational cash shortfalls and help the firm avoid overly high interest payments on bank loans. Overall, therefore, we can conclude that higher political risk leads to companies improving the quality of their accounting choices.

This could apply with non-GAAP disclosures as well. Political risk may cause firms managers to make more conservative decisions and increase the quality of their non-GAAP reporting to reduce the amount of information asymmetry between managers and investors. Higher quality non-GAAP reporting would help investors more accurately predict the firm's future cash flows and future value and is, thus, very important in times of high political risk. As opportunistic non-GAAP reporting choices are not considered to be of high quality, we could see opportunistic non-GAAP reporting to decrease in times of higher political risk.

It is also possible that companies use their non-GAAP disclosures as a way of influencing the political process and avoiding political costs. Watts and Zimmerman (1986) hypothesized that companies would change their accounting disclosures for several reasons, one of which being to reduce political costs. Archival researchers showed that this was the case. For example, Jones (1991) showed that industries under investigation by the International Trade Commission managed their GAAP earnings in a way to influence the regulator, reducing their income during import relief investigation periods to show that the industry required relief. Similarly, Han and Wang (1998) demonstrated that oil and gas companies reduced their GAAP income during the 1990 Persian Gulf crisis to avoid political costs associated with making money during that turbulent period. More recent papers have shown that this is the case with non-GAAP disclosures as well. For example, several papers (Bowen et al., 2005; Heflin & Hsu, 2008; Kolev et al., 2008; Marques, 2006) examined non-GAAP reporting following the SEC's 2001 warning regarding its use, finding that companies became less likely to report non-GAAP measures, or increased the quality of their disclosures afterward. Therefore, this may apply to a broader level of political risk as well, causing companies to reduce the level of opportunistic non-GAAP reporting in response to heightened levels of political risk.

On the other hand, there is tension as it is possible that firms increase their opportunistic reporting in response to political risk. Firms opportunistically report non-GAAP earnings to meet influence investor perceptions (Barth, Gow, et al., 2012; D. E. Black & Christensen, 2009; E. L. Black, Christensen, Kiosse, et al., 2017). Black and Christensen (2009) find in their paper that firms exclude one-time items such as restructuring charges, as well as recurring items such as depreciation and R&D expense, to meet strategic targets. Firms also use non-GAAP earnings opportunistically to increase earnings, smooth earnings, and meet earnings benchmarks (Barth,

Gow, et al., 2012). Hsu et al. (2022) examine the relationship between non-GAAP earnings and stock price crash risk. They find that income increasing non-GAAP earnings is associated with increased stock price crash risk, indicating that managers use non-GAAP measures to withhold bad news from investors.

When political risk increases, firms may decide it is more important to meet forecasts amid the uncertain times to show that the firm is performing well and will continue to be a going concern. This would cause them to increase the amount of opportunistic non-GAAP reporting they engage in. Thus, we could also see an increase in opportunistic non-GAAP reporting during times of higher political risk.

A third possibility is that the effect is situation dependent. Research on non-GAAP reporting has been conflicted on whether firms report non-GAAP earnings informatively or opportunistically when they examine different contexts. For example, Curtis et al. (2014) find that the primary motivation for reporting non-GAAP earnings in periods with transitory gains is informative. I refer to Curtis et al. (2014) extensively in this paper, therefore a short discussion on their results is warranted here.

In their paper, Curtis et al. (2014) obtain a sample of 1,920 firm-quarters between 2004 to 2009 that report transitory gains in Compustat for their quarterly or annual filings. The authors then read the relevant sections of the companies' earnings announcements. If the company provides a non-GAAP earnings per share that excludes the transitory gain and it is given by to the tenth sentence of the earnings announcement, they are classified as informative disclosers. Otherwise, they are classified as opaque disclosers. Following Doyle et al. (2003), they show that transitory gains are not significantly related to future operating earnings, only for informative disclosers. For opaque disclosers, the gains are negatively related to future operating earnings as

expected, because they are not a part of the firm's core operations and will not persist into the future. Next, the authors show that for opaque disclosers, the transitory gains are positively associated with price reactions. This is even though the gains are associated with a future decrease in income, indicative of opportunism. However, they find that the market later realizes this and corrects the stock price when the 10-Q/10-K is filed, as the filing date return is negatively associated with transitory gains for opaque disclosers. Informative disclosers, on the other hand, see no effects related to transitory gains, indicating that the reason for excluding such gains is to inform as expected. In additional analysis, the authors find that transitory losses are associated with opaque disclosing, consistent with the argument that opaque disclosing is done with opportunism in mind. They also find, consistent with opportunism, that the longer the time between the earnings announcement and the filing date, the more likely firms are to report opaquely. Overall, Curtis et al. (2014) show that non-GAAP earnings are more informative than GAAP earnings in the presence of transitory gains.

Returning to the idea that the effect is situation dependent, other papers have found opportunism in non-GAAP reporting. For example, Barth et al. (2012) examine how firms responded to SFAS 123R's requirement to recognize stock-based compensation expense in income. They found that firms opportunistically exclude the expense from non-GAAP to meet earnings targets. A recent review of the non-GAAP literature by Black et al. (2018), concludes that non-GAAP measures are generally motivated by an incentive to provide informative or value relevant information to shareholders, however, research finds numerous examples of opportunism and potentially misleading non-GAAP disclosures. Hsu et al. (2022), in their examination of stock price crash risk, discuss the literature on non-GAAP reporting and conclude that, while non-GAAP

earnings became less biased following Regulation G in 2003, aggressive reporting still occurs in some situations.

It is possible that this situation specific result also occurs with political risk. Firms who were previously inclined to report non-GAAP earnings opportunistically, will decrease their use of opportunistic non-GAAP measures during times of high political risk. This could be as a result of the greater information asymmetry caused by political risk, leading firms to become more conservative (Dai & Ngo, 2020), or to increase their accounting quality (El Ghoul et al., 2020). Alternatively, the reduction could also be as a result of firms making more conservative operating decisions (Hasan et al., 2022), or an attempt to influence the political process and avoid political costs (Han & Wang, 1998; Jones, 1991; Watts & Zimmerman, 1986). However, firms that were previously inclined to report informatively should see no such change. This could be because of the lower amount of information asymmetry for previously informative firms. Higher political risk would have less of an impact on the information asymmetry, resulting in no changes to non-GAAP reporting for informative firms.

Examining the prior literature related to political risk, I expect that the nuanced view is the most likely. That is, when political risk increases, firms that already present non-GAAP earnings opportunistically would reduce their opportunism. However, firms that previously reported non-GAAP earnings informatively would not see an effect. I formalize my main hypothesis as follows.

H1a: When companies have opportunistic motives, political risk is negatively associated with the likelihood of reporting non-GAAP earnings opportunistically.

H1b: When companies have informative motives, political risk is not associated with the likelihood of reporting non-GAAP earnings opportunistically.

CHAPTER 2.3. RESEARCH METHODS

For my empirical analysis, I obtain five sets of data. I obtain political risk data from Hassan et al. (2019). The political risk dataset contains 342,524 quarterly observations between 2002 and 2021.[3] The political risk measure is calculated based on information taken from companies' quarterly conference calls. The measure is discussed in more detail below. Information on Non-GAAP Earnings Per Share (EPS) use is made publicly available by Bentley et al. (2018). The dataset contains information on whether managers disclosed non-GAAP EPS for 198,695 firm-quarters between 2003 and 2020. The EPS data is obtained from firm's quarterly earnings announcements filed with the SEC. Non-GAAP earnings prominence data between 2003 and 2016 are provided by Chen et al. (2021). I also obtain financial statement data from Compustat, and consensus analyst forecast data from IBES. Companies file this information with the SEC, and it is gathered by data providers. I combine the datasets to get a final sample of 129,937 firm-quarter observations between 2003 and 2020. The size of the sample is reasonable given the length of the sample period. In their examination of political risk and cash holdings, Hasan et al. (2022) had a sample size of 129,750 between 2002 and 2021. It is also worth noting that because the sample begins in 2003 it should not be affected by the announcement and effective dates of Regulation G and Item 10(e) of Regulation S-K. Both regulations became effective on March 28, 2003 (SEC, 2003) which means all observations in my sample are covered by Regulation G and Regulation S-K equally. Further, because the regulations attempt to restrict the use of opportunistic non-GAAP reporting it should bias against finding results, making any significant results more important. With regards to non-GAAP earnings prominence, I use a subsample rather than end my full sample at 2016. Thus the sample for non-GAAP earnings prominence is slightly smaller at 95,402 firm-

[3] The most up-to-date dataset is publicly available at https://www.firmlevelrisk.com/download.

quarter observations between 2003 and 2016. The sample selection process for the main sample is presented in Table 2.1 below.

[INSERT TABLE 2.1 HERE]

For my analysis, I use two statistical software packages. I use SAS 9.4 for data merging, and Stata 16.1 for winsorization and statistical analysis. I use Maximum Likelihood for parameter estimation. Using Maximum Likelihood estimation has several important benefits. First, it is the standard estimation method and will aid in directly comparing any competing models. Second, the maximum likelihood estimator is unbiased in larger samples such as the one used in this paper. And third, the maximum likelihood estimator is the most efficient choice, in that it has the smallest variance or mean squared error. Observations with missing control variables will be deleted. In total, approximately 20% of the initial sample of firms with political risk data are missing at least one control variable and have been deleted. The sample selection is comparable with prior non-GAAP literature. As an example, Bentley et al. (2018) match non-GAAP data to financial information from Compustat, but are unable to find matches for 25% of the observations. For observations with missing non-GAAP data, I assume that they do not report non-GAAP earnings opportunistically during the period. That is, the measures discussed below are all equal to zero.

I measure opportunistic non-GAAP reporting in six different ways. Whether non-GAAP earnings are favorable (*FAV_NG*) is measured as one if the firm reports non-GAAP earnings greater than GAAP earnings, and zero otherwise. Whether non-GAAP earnings avoids a loss (*AVOID_LOSS*) is measured as one if the firm reports positive non-GAAP earnings and negative GAAP earnings, and zero otherwise. Whether a firm avoids a decrease from the prior year's or the

prior quarter's earnings (*AVOID_PY_DECREASE* and *AVOID_PQ_DECREASE*) are measured as one if the firm reports non-GAAP earnings that are higher than GAAP earnings in the prior year or quarter, but current GAAP earnings is lower than GAAP earnings in the prior year or quarter, and zero otherwise. I also measure whether the firm meets or beats analyst forecasts. Meeting or beating analyst forecasts (*BEAT*) is measured as one if the firm reports non-GAAP earnings that is higher than the mean analyst forecast and GAAP earnings that is lower than the mean forecast, and zero otherwise. Finally, non-GAAP earnings prominence (NG_FIRST) is measured as one if the firm reports non-GAAP EPS before GAAP EPS in the quarter's earnings announcement, and zero otherwise. These dependent variables in my analysis have support in prior literature. The likelihood of reporting favorable non-GAAP earnings has been used in several contexts (Bentley et al., 2018; T.-Y. Chen et al., 2018), as has avoiding a loss and meeting-or-beating analyst forecasts (Bentley et al., 2018; Doyle et al., 2013).

The main independent variable in my analysis is firm-level political risk. In their paper, Hassan et al. (2019) develop a firm-level measure of political risk. Calculated as the share of quarterly earnings conference calls devoted to political risks. Specifically, Hassan et al. (2019) collect the transcripts of all earnings conference calls for US companies between 2002 and 2016 (the authors have extended the dataset to 2021 since the paper was published). The authors construct a library of words and two-word phrases related to discussions of politics. They then count the number of times the two-word phrases occur within the 10 words surrounding a synonym for "risk" or "uncertainty" and then divide by the total number of two-word phrases in the transcript. The authors validate their measure by showing that it increases significantly surrounding federal elections, and is correlated with the economic policy uncertainty index of Baker et al. (2016), as expected. The authors found that political risk is positively associated with

the volatility of stock returns and the volatility of the stock options. In this paper, I decile rank the measure created by Hassan et al. (2019) to make interpretation easier. An increase of one decile rank is equal to a 10-percentile increase. Therefore, the coefficients which will be presented later are the change for a 10-percentile increase in political risk.[4]

The firm-level political risk measure developed by Hassan et al. (2019) has been used in several recent accounting papers. For example, Pan et al. (2019) find that political risk, measured following Hassan et al. (2019), is negatively associated with firm debt maturity and leverage. This suggests that political risk negatively affects the financing environment, causing firms to borrow less and for shorter lengths of time. Similarly, Wang et al. (2021) find that "sin" firms (firms providing products and services in the alcohol, tobacco, gambling, and firearms industries) face higher levels of political risk, as measured by Hassan et al. (2019). These firms show less tax avoidance than those in other industries. Hasan et al. (2022) used the political risk measure developed by Hassan et al. (2019) to examine the relationship between firm-level political risk and cash holdings, finding that firms with a higher level of political risk hold more cash. Finally, Duong et al. (2020) and El Ghoul et al. (2020) use the political risk measure in the cross-sectional tests of their papers. As the Hassan et al. (2019) measure of political risk has been validated and used in several published papers, its use is justified here. In this paper, I use this measure as well. However, in my analysis, I standardize the measure to aid in interpretation, as coefficients can be read as the change for a one standard deviation increase in political risk.

Next, I discuss the model used in my analysis. The distribution of the outcome variables (*FAV_NG, AVOID_LOSS, AVOID_PY_DECREASE, AVOID_PQ_DECREASE, BEAT, NG_FIRST*) are expected to be binomial, expressed as $Y_i \sim B(1, \pi_i)$, as there are two outcomes that

[4] In two untabulated robustness tests, I decile-rank the political risk measure by year and year-industry, respectively. The inferences of the main results remain unchanged in both cases.

could occur over the number of quarters the firm has in the sample. I assume that the outcomes for each trial (i.e., each quarter that the firm reports non-GAAP measures) are independent. That is, the choice to report non-GAAP opportunistically or not in one quarter is not affected by the decision in previous quarters. The mean and variance of this random binomial variable are equal to π_i and $(1 - \pi_i)$, respectively.

The linear component of the model can be written as $\eta_i = \beta_0 + \beta_1 X_{i1} + \ldots + \beta_p X_{ip}$ where η_i is the link function, β_p are the estimated coefficients, and X_{ip} are the set of predictors. Political risk (*RISK*) is the main predictor used and is a continuous measure developed by Hassan et al. (2019). They calculate the measure of political risk using companies' quarterly conference calls; measuring the weighted share of the conversation devoted to politics. The authors use the same methodology to develop several measures of specific risks, including economic policy and budget risk, environment risk, trade risk, institution and political process risk, and tax policy risk. I also include several predictors based on Chen et al. (2021) that could be related to the likelihood of reporting non-GAAP EPS (Bowen et al., 2005; Lougee & Marquardt, 2004). *LOSSES* is an indicator variable equal to one if the firm has four consecutive quarters of GAAP losses, and zero otherwise. That is, if the firm had a positive GAAP income in any of the previous four quarters, *LOSSES* = 0. *LOSSES* should affect non-GAAP reporting as a firm with many quarters of losses should be motivated to make the situation appear less dire through non-GAAP measures. *SIZE* is firm size, equal to the natural logarithm of total assets. *BM* is the book-to-market ratio, measured as shareholders' equity divided by the market value of equity. *SIZE* and *BM* are commonly included firm characteristics because they are easily measurable and can affect many aspects of reporting. *VOLATILITY* is the volatility of GAAP earnings, equal to the standard deviation of Return on Assets (ROA) over at least five of the last eight preceding quarters. Firms with more

volatile earnings should be more likely to use non-GAAP earnings to make their situation look less volatile to investors, helping them to better predict the value of the firm. Finally, *FUTURE_GROWTH* is equal to the sales in quarter *t* less sales in quarter *t+4* scaled by total assets. Firms with low levels of future growth should want to use non-GAAP measures to make their results appear more promising. Conversely, firms with high levels of future growth do not need non-GAAP measures, as their GAAP results are already positive. In addition to the control variables above, I also add an indicator variable that represents whether the firm had transitory gains in the period (*TRANSITORY_GAIN*). Curtis et al. (2014) find in their paper that the main motivation for firms with transitory gains is informative. By including *TRANSITORY_GAIN* in my regressions and interacting it with *PRISK*, I can determine whether firms with informative motives are less likely to engage in opportunistic non-GAAP reporting as expected. More importantly, I can determine whether the effect of political risk differs based on the motives of the firm.

I focus on transitory gains specifically because it is an oft cited and acknowledged situation representing managers' motives in the non-GAAP research literature. For example, Bentley et al. (2018), whose non-GAAP earnings data I gratefully use in this paper, cite the work of Curtis et al. (2014) and include transitory items in their analysis of manager and analyst non-GAAP reporting. Bentley et al. (2018) find that transitory items have lower explanatory power in the manager dataset, because they are more willing to exclude income-increasing transitory items, consistent with Curtis et al. (2014). In another paper, Black et al. (2018) discuss in their review of the non-GAAP literature; the fact that managers exclude transitory gains, resulting in lower income but also a more accurate picture of core performance of the firm, citing Curtis et al. (2014). Importantly, Black et al. (2018) also mention that one type of opportunistic behavior seen in the literature is the inconsistent exclusion of transitory items. So, firms may exclude transitory gains

if being informative, or they may include transitory losses if being opportunistic. Other non-GAAP research papers cite Curtis et al. (2014) in their review of the literature (Allee & Deangelis, 2015; E. L. Black, Christensen, Joo, et al., 2017), or follow their research methods in their analysis (Leung & Veenman, 2018). In another strand of the research literature, Blankespoor et al. (2020) cite Curtis et al. (2014) in their review of the disclosure processing cost literature. Blankespoor et al. (2020) refer to situations where managers help investors process important information such as transitory items. Therefore, the use of transitory gains in this paper is well supported by prior literature.

As discussed by Leung & Veenman (2018), focusing on transitory gains also solves an empirical issue. It is an issue that arises when trying to separate informative and opportunistic firms. Both types of firms are predicted to report non-GAAP earnings greater than GAAP earnings. That is, opportunistic firms are likely to inflate earnings to improve investor perceptions while informative firms are likely to remove uninformative, income-decreasing transitory items. Focusing on transitory gains solves this problem as firms can be clearly split between opportunistic and informative motives. Firms with transitory gains are shown to be more informative, and firms without them are more opportunistic. If firms are split in this manner, opportunistic firms will report higher non-GAAP earnings, while informative firms will report lower non-GAAP earnings. This allows me to analyze the two groups separately. Furthermore, as discussed above, firms can be inconsistent in their exclusion of transitory items (D. E. Black et al., 2018). This means that firms can change their motives over time, providing more variation to use in the analysis. Both factors make transitory gains an excellent candidate to use in my analysis for empirical reasons.

Complete variable definitions for all variables discussed above are presented in Appendix A. Calendar year-quarter and industry fixed effects (using 2-digit SIC codes) are included to

account for firm and time invariant factors, respectively. As recommended by Petersen (2009), standard errors are clustered by firm and calendar year-quarter.

In this case, there are several link functions that may be selected. However, I use the logit link function to aid in interpretation. The logit link function can map the probability of the outcome occurring on the real line. By exponentiating the logit, I can then obtain the odds ratio, which can be interpreted directly or converted into a probability. I can write the full expression of the logit link function as:

$$\eta_i = \text{logit}(\pi(x_i)) = \ln(\frac{\pi(x_i)}{1-\pi(x_i)}) = \beta_0 + \beta_1 X_{i1} + \ldots + \beta_p X_{ip}$$

If I substitute the outcomes and predictors discussed above for the general terms, I obtain the following expression, listed as Equation (1):

$$\begin{aligned}\text{logit}(OUTCOME_{it}) = {} & \beta_0 + \beta_1 PRISK_{it} + \beta_2 TRANSITORY\_GAIN_{it} \\ & + \beta_3 PRISK_{it} * TRANSITORY\_GAIN_{it} + \beta_4 LOSSES_{it} + \beta_5 SIZE_{it} \\ & + \beta_6 BM_{it} + \beta_7 VOLATILITY_{it} + \beta_8 FUTURE\_GROWTH_{it} + \varepsilon_{it} \qquad (1)\end{aligned}$$

Where $OUTCOME_{it}$ is one of the six outcome variables: FAV_NG_{it}, $AVOID\_LOSS_{it}$, $AVOID\_PY\_DECREASE_{it}$, $AVOID\_PQ\_DECREASE_{it}$, $BEAT$, NG_FIRST_{it}

Equation (1) is the main equation used in my analysis. β_1 represents the effect of political risk for opportunistic firms while β_3 represents the effect of political risk for informative firms. To support my hypothesis β_1 should be negative and β_3 should be insignificant.

CHAPTER 2.4. RESULTS

2.4.1. Descriptive Statistics

The descriptive statistics for the full sample of 129,937 observations are presented in Table 2.2. There is evidence of opportunistic non-GAAP reporting using multiple outcome measures. Non-GAAP earnings are higher than GAAP earnings (*FAV_NG* = 1) in over one-third (35.6%) of the firm-quarter observations. Six percent (6%) of the observations use non-GAAP earnings to report a non-GAAP profit when they would otherwise report a GAAP loss (*AVOID_LOSS* = 1). Firms use non-GAAP earnings to avoid decreases compared to the prior fiscal year and prior fiscal quarter, 31.8% and 31.3% of the time, respectively (*AVOID_PY_DECREASE* and *AVOID_PQ_DECREASE*). Non-GAAP earnings are used to meet or beat the analyst consensus estimate 16.7% of the time, and non-GAAP earnings is presented more prominently than GAAP earnings 7.5% of the time.

Political risk has been decile ranked to make interpretation of the variable easier. As such, it has a minimum of 1 and maximum of 10. The mean of the decile ranked measure is 5.459, with a standard deviation of 2.928. This suggests that political risk is approximately normally distributed, with most firms enjoying mean levels of political risk. Examining the control variables, transitory gain has a mean of 9.1%, suggesting that the non-GAAP reporting choices of those firms can be explained using the informational perspective of non-GAAP reporting (Bhattacharya et al., 2003; D. E. Black et al., 2018; Bradshaw & Sloan, 2002), while the remaining 88.9% of observations are more likely to report non-GAAP opportunistically. Firm assets (*ATQ*) range from $19.229 million to $160.518 billion, suggesting that a wide range of firms are represented, from small to large. The mean net income for the sample is a profit of $70.400 million, but 14% of the sample have faced recurring losses. The future growth of the sample is, on average, 1.8%. A

positive value for future growth is expected, as firms should expect to grow on average to stay in business.

Examining the time-series trends for the sample (untabulated), the number of firms presenting non-GAAP earnings has almost doubled over the sample period, from 28.6% in 2003 to 50.1% in 2020. The trend is similar to that found by Bentley et al. (2018), however, the percentage is slightly lower than the 60% they found, likely due to firms missing the political risk measure or control variables.

[INSERT TABLE 2.2 HERE]

Figure 2.1 shows the mean level of political risk over the sample period. Political risk was at its lowest in 2005, with a marked increase in 2008 due to the recession and presidential election. It remained elevated for the next four years. Political risk decreased to around the sample mean following the 2012 presidential election and remained low for the next two years, before increasing once again in 2016, likely due to the 2016 presidential election. Political risk decreased once again in 2018 before increasing in 2020 due to the Covid-19 pandemic, where it increased to its highest level, ever. Overall, the graph shows that there is meaningful variation in political risk levels over time, which should be helpful when conducting this analysis. It also shows that the level of political risk generally spikes around presidential elections, as found by Hassan et al. (2019).

[INSERT FIGURE 2.1 HERE]

Table 2.3 presents the Pearson Correlations for the variables. Examining the non-GAAP measures first, we can see that five of the six are negatively correlated with political risk (*PRISK)* at the 5% level, providing initial evidence that firms are less likely to report non-GAAP earnings opportunistically during times of high political risk, although multivariate analysis is required to make a complete conclusion. *NG_FIRST* is not significantly correlated with *PRISK* however, showing that non-GAAP earnings prominence may not be affected by political risk. *TRANSITORY_GAIN* is also significantly correlated with five of the non-GAAP measures. Firms with transitory gains are negatively correlated with *FAV_NG* and *AVOID_LOSS,* indicating that firms are less likely to report opportunistically as expected from the study conducted by Curtis et al. (2014). However, firms are more likely to avoid a prior year decrease, avoid a prior quarter decrease, and beat analyst forecasts using non-GAAP earnings, suggesting some opportunism still occurs. *NG_FIRST* is not correlated with transitory gains, suggesting that non-GAAP earnings prominence is not significantly affected by political risk.

Examining the control variables in more depth, I find that *LOSSES*, *BM*, *VOLATILITY*, and *FUTURE_GROWTH* are negatively related with reporting non-GAAP earnings opportunistically (with minor exceptions for *NG_FIRST* and *BEAT*). This suggests that firms at the extreme ends of performance are less likely to report non-GAAP measures opportunistically. For example, firms with high *FUTURE_GROWTH* and high *BM* are less likely to report non-GAAP measures opportunistically, possibly because they have better prospects. However, firms with *LOSSES* and *VOLATILITY* are also less likely to report non-GAAP measures opportunistically. The only control variable positively associated with reporting non-GAAP measures opportunistically is *SIZE,* suggesting larger firms are more likely to report non-GAAP measures opportunistically. However, this could also be because larger firms are more likely to report non-GAAP measures overall.

Untabulated results show that reporting non-GAAP earnings is significantly positively correlated with firm size at the 5% level. This corroborates the anecdotal evidence found by PwC in their report on the non-GAAP disclosures of S&P 500 firms (PwC, 2021a).

[INSERT TABLE 2.3 HERE]

2.4.2. Main Results

In this section, I estimate the regression in Equation (1) for each of the six main dependent variables; likelihood of reporting favorable non-GAAP earnings (*FAV_NG*); likelihood of using non-GAAP earnings to avoid a loss (*AVOID_LOSS*); likelihood of using non-GAAP earnings to avoid a decrease in earnings from the prior fiscal year (*AVOID_PY _DECREASE*); likelihood of using non-GAAP earnings to avoid a decrease in earnings from the prior fiscal quarter (*AVOID_PQ_DECREASE*); likelihood of meeting or beating the analyst consensus forecast using non-GAAP earnings (*BEAT*); and likelihood of reporting non-GAAP earnings more prominently than GAAP earnings (*NG_FIRST*). The results are presented in Table 2.4 below. Each column uses a different measure of opportunistic non-GAAP earnings use. All columns include industry and year-quarter fixed effects as well as standard error clustering at the firm and year-quarter level. Once again it is worth noting that Column (6) using *NG_FIRST* uses a smaller sample than the other measures as the sample period ends in 2016.

[INSERT TABLE 2.4 HERE]

Examining the first row of Table 2.4, the coefficients for *PRISK* are significantly negative at the 1% level for all variables. This suggests that opportunistic firms are less likely to report non-GAAP earnings opportunistically if political risk is high, consistent with H1a. In terms of economic significance, the coefficients on *FAV_NG* and *NG_FIRST* of -0.020 mean that an increase of political risk by one decile reduces the odds of reporting non-GAAP earnings opportunistically by 2.0%. It is interesting to note that the coefficient on *NG_FIRST* is significant despite the correlation between *PRISK* and *NG_FIRST* being insignificant in Table 2.3. This could occur when there is no relationship between the two variables when examined on their own, but when additional control variables and fixed effects are added, a relationship between the two emerges. For example, some of the positive variation in the use of non-GAAP earnings prominence, *NG_FIRST,* is explained by the size of the firm (*SIZE*), the book-to-market ratio (*BM*), and earnings volatility (*VOLATILITY*). Taking these into account allows the negative effect of *PRISK* on *NG_FIRST* to emerge, which would explain the results seen in Tables 2.3 and 2.4.

When we examine the interaction coefficient between *PRISK* and *TRANSITORY_GAIN*, the interaction term is insignificant for all six outcome variables. In real terms, an increase in political risk does not have an effect on opportunistic non-GAAP reporting when the firm was previously inclined to report informatively. This is supportive of H1b.

Looking next at the control variables, the one consistent result across all six outcome variables is *SIZE*, which is significantly negative at the 1% level in all cases. This suggests that larger firms are significantly less likely to report non-GAAP earnings opportunistically. The robust z-statistics for the size coefficients are quite large, relative to the other control variables, suggesting that the standard error is small due to low variation in size. Firms with *TRANSITORY_GAINS* are less likely to use non-GAAP earnings to increase GAAP earnings, avoid a loss, or meet or beat

analyst forecasts. However, they are more likely to have higher non-GAAP earnings than the prior year or prior quarter. Results for the other control variables are mixed. For example, firms with repeated losses are more likely to use non-GAAP earnings to avoid having a loss and avoid a decrease from the prior quarter. However, they are less likely to have higher non-GAAP earnings than GAAP earnings, meet or beat analyst forecasts, or report non-GAAP earnings more prominently than GAAP earnings.

The model R-Squared ranges from 7.122% for the regression with *AVOID_LOSS* as the outcome variable to 15.262% for the regression with *BEAT* as the outcome variable. This suggests that some information is provided by the control variables and fixed effects. Nonetheless, there is still a significant amount of variation left unexplained by other factors.

Finally, we examine one of the models' predictions graphically in Figure 2.2. Figure 2.2 estimates the likelihood of using non-GAAP earnings to avoid a prior year decrease in GAAP earnings (*AVOID_PY_DECREASE*). The purpose of this graph is to examine the results of Table 2.4 visually so we can better understand the results and see if they support Hypothesis 1a or 1b. I select avoiding a prior year decrease as the non-GAAP variable, as it has one of the greatest coefficient magnitudes in Table 2.4, and a larger sample mean relative to *BEAT*. Thus, we should see the greatest change using that variable.

In the figure presented, we can see that the likelihood of reporting non-GAAP earnings to avoid a decrease from the prior year decreases as political risk increases. If we move from the sample median (*PRISK* = 5) to the top decile of *PRISK*, the likelihood of avoiding a prior year decrease changes from approximately 32.0% to 29.7%, a 2.3% change. This is supportive of Hypothesis 1a.

[INSERT FIGURE 2.2 HERE]

Overall, I can conclude that political risk is significantly related to the likelihood of reporting non-GAAP earnings opportunistically. Specifically, as political risk increases, the likelihood of reporting non-GAAP earnings opportunistically decreases for opportunistic firms, in support of H1a. Firms with motives to inform see no such change, in support of H1b. In the following sections I conduct additional analysis to lend additional support to my main results and to explore other aspects of political risk.

2.4.3. Additional Analysis

2.4.3.1. Political Risk Post-2007-2008 Financial Crisis

Prior to the start of the COVID-19 pandemic in 2020, the highest period of political risk in the sample period was during the 2007-2008 financial crisis and subsequent recession. Because the increase happened suddenly, was caused by exogenous events, and led to drastic changes in the economic environment, it is an excellent opportunity to examine whether especially high levels of political risk strengthen the relationship between political risk and non-GAAP reporting. In this section, I compare the estimated coefficients for observations before and after these two events.

For the 2007-2008 financial crisis, I partition the observations into two groups: one from 2007 and earlier years, and the other from 2008 and later years, and re-estimate Equation (1) using each of the six outcome variables. I choose to split the sample this way to include the buildup of the financial crisis in the pre-2008 sample, and the fallout of the financial crisis in the post-2008 sample. The results are shown below in Table 2.5. Panel A estimates the regressions for pre-2008, and Panel B estimates the regressions for post-2008. The results shown in the table are striking. In the Pre-2008 period, for *FAV_NG, AVOID_LOSS, AVOID_PY_ DECREASE,*

AVOID_PQ_DECREASE, and *BEAT,* the coefficients on *PRISK* are insignificant at the 10% level and extremely close to zero. In the Post-2008 period these coefficients are all significant at the 1% level and larger than the coefficients in the main results. These results can have two possible interpretations. Either political risk did not have as large an effect on these types of non-GAAP reporting before the 2008 financial crisis, or the effect of political risk is greater during times when political risk is higher on average.

The results for *NG_FIRST* are slightly different, however. The coefficient on *PRISK* is significant at the 10% level pre-2008 and slightly smaller in magnitude than post-2008 and in the main results. This suggests that the effect for *NG_FIRST* has not changed as much as it has for the other outcome variables.

Looking at the model R-Squared in Panels A and B we can see that the values are greater in the post-2008 sample with the highest result for *BEAT* at 14.127% in the post-2008 sample. This suggests that, in addition to the effect being greater, the model has more explanatory power in the post-financial crisis period.

Also noteworthy in the results for the control variables, is that the coefficient for *SIZE* is relatively consistent across time periods and outcome variables. In all columns for Panels A and B, the coefficients are significantly positive at the 1% level and range between 0.15 to 0.35. This suggests that larger firms are more likely to use non-GAAP earnings opportunistically across the sample period.

[INSERT TABLE 2.5 HERE]

Overall, the results of this additional analysis suggest that political risk has an especially strong effect on opportunistic non-GAAP reporting in the years following the 2007-2008 financial crisis. Further analysis in later sections will determine if this is due to the financial crisis itself or the higher-than-average level of political risk following the financial crisis.

2.4.3.2. Topic-Specific Political Risk

In their paper, Hassan et al. (2019) take their approach to measuring political risk one step further by identifying the level of political risk associated with specific politically-related topics. They develop measures for eight political risk-related topics in this way: economic policy and budget risk, environmental risk, healthcare risk, institutions and political process risk, security and defense risk, tax risk, technology and infrastructure risk, and trade risk. For each measure, they develop libraries of words and two-word phrases related to that specific topic, similar to how they created the original measure of political risk. The authors then count the number of times the two-word phrases occur within political risk discussions in conference calls and calculate the share of those conversations related to that topic.

In this section, I use replace the general political risk measure with the eight topic-specific measures to see how they compare with the main results. The topic-specific measures are decile ranked as in the main analysis to make interpretation easier. Table 2.6 contains the summarized results from this analysis. For each panel, I report the coefficients and robust z-statistics for the coefficients on the topic-specific political risk measure as well as the interaction term with *TRANSITORY_GAIN*. The control variables, fixed effects, and standard error clustering remain the same as the main analysis for easy comparison across panels.

[INSERT TABLE 2.6 HERE]

There are two noteworthy takeaways from this table. The first is that the results for the topic-specific measures mirror the main analysis. The coefficients for the topic-specific measures are significantly negative at the 1% level for all six outcome variables (apart from *AVOID_LOSS* and the measures for technology risk and trade risk). This further supports Hypothesis H1a. Like the main results the interaction term is insignificant in almost all cases (apart from *AVOID_PY_DECREASE* and *AVOID_PY_DECREASE* for trade risk). This provides additional support for the H1b. In addition, the model R-Squared for each outcome is similar across all topic-specific measures. For example, the model R-Squared for *FAV_NG* ranges from 13.067 to 13.104, only a 0.037 difference. This suggests that the explanatory power of the model remains similar across topic-specific measures. Second, the results show that economic policy and budget risk have the largest effect. In fact, the coefficient magnitudes are greater than those of the main results for four of the six outcome variables. This result is logical as economic policy and budget risk would likely have the greatest impact on the prospects of all firms regardless of industry. Other measures may have greater impacts on specific industries. For example, health risk on the healthcare industry. Also noteworthy is the effect of environment risk on opportunistic non-GAAP reporting. Next to economic policy risk, it has the greatest impact on non-GAAP reporting, as shown by the magnitude of the coefficients. This is indicative of the increasing importance of environment risk on businesses. A recent survey of firms on their Environmental, Social, and Governance (ESG) practices found nearly 81% of respondents considered ESG an important part of their business strategy, and 82% of senior company officers have ESG targets included in their pay. (PwC, 2022a)

In summary, this additional analysis continues to show that political risk has an impact on non-GAAP reporting in support of my hypotheses. In particular, economic policy and budget risk

has the largest effect, however, the effect is robust to all of the topic-specific measures developed by Hassan et al. (2019).

2.4.3.3. Political Risk & Health Risk During the COVID-19 Pandemic

As discussed in earlier sections, the highest level of political risk by far occurred during the COVID-19 pandemic in 2020. Like the analysis of the 2007-2008 financial crisis, this is also an excellent opportunity to study whether high levels of political risk strengthen the relationship between political risk and non-GAAP reporting. However, it has two other benefits. First, it provides an opportunity to test a situation where the topic-specific risks might have a strengthened effect. I am referring to health risk, which should have a greater effect during a public health crisis such as the COVID-19 pandemic. Second, by examining only a small period pre- and post-pandemic, it allows us to determine whether the results in the section examining the 2007-2008 financial crisis were due solely to the post-2008 period, or if they were due to higher-than-average periods of political risk overall. In this section, I compare the estimated coefficients for observations that occur just before and just after the start of the COVID-19 pandemic, for both political risk and health risk.

Specifically, the 2020 observations contain those from after the World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020. (World Health Organization, 2020) until the end of November 2020, which are the most recent ones available with non-GAAP data that also include all the control variables. I compare these to the data from March 11, 2019, until November 30, 2019, to keep the samples comparable in size and types of firms. That is, the same dates in the previous year. Results are qualitatively similar if I use the first three quarters of 2019 or all four quarters of 2019. However, using the same dates in each year keeps the sample sizes

and compositions similar. I repeat the analyses conducted in for the 2007-2008 financial crisis except for the variable *NG_FIRST,* which does not have data during this period.

I compare the means of the control variables for the 2019 and 2020 samples in Table 2.7. We can see that the mean level of political risk is significantly higher at the 1% level in 2020 as expected. The table also shows that the pre-and post-pandemic samples are as similar as possible. The means of *SIZE*, *BM*, and *VOLATILITY* are not significantly different from each other, as would be expected if the samples are similar. The mean of *LOSSES* is significantly higher in 2020 as many firms faced several quarters of losses during the pandemic, however the difference at 1.9% is small. The mean level of *FUTURE_GROWTH* is significantly different as well, as firms in 2019 faced the pandemic in their future while firms in 2020 had the 2021 recovery to look forward to. That difference was large at 4.5% but is unavoidable given the context of the pandemic. Interestingly, *TRANSITORY_GAIN* is also significantly higher in 2020 than it was in 2019 by 1.6%. This could signify opportunistic GAAP reporting or real earnings management to increase income during the pandemic.

[INSERT TABLE 2.7 HERE]

The results of this pandemic analysis are presented in Tables 2.8 and 2.9 below. Table 2.8 uses the original measure of political risk used in the main analysis. As we can see in Panel A, the only negatively significant coefficients in 2019 for *PRISK* are on *AVOID_PY_DECREASE* and *BEAT*. The other three outcome variables have insignificant coefficients on *PRISK,* and the interaction coefficient is not significant in any of the 5 columns. In Panel B, all five coefficients for *PRISK* are negatively significant at the 1% level and greater in magnitude than those in 2019.

Using this information, we can disentangle the results for the 2007-2008 financial crisis. These results strongly suggests that the effect of political risk on non-GAAP reporting is greater when the overall level of political risk is higher rather than it being specific to the post-2008 period. Examining the model R-Squared of each model, we can see that the values are higher in the pandemic period. Like the financial crisis analysis, this suggests that the explanatory power of the model is greater in times of higher-than-average political risk.

[INSERT TABLE 2.8 HERE]

Table 2.9 shows the results using the health-specific measure of risk. During a public health crisis such as COVID-19, we would expect to see health risk have a greater than normal effect on non-GAAP reporting. The results in Table 2.9 confirm this. In 2019, all outcome variables have insignificant coefficients on *PRISK_HEALTH* and the interaction coefficient is not significant. The coefficients on *PRISK_HEALTH* are also relatively close to zero. By contrast, the coefficients for *PRISK_HEALTH* are significantly negative at the 1% level for all five outcome variables. Further, the coefficients are larger in magnitude than the ones in 2019 and they are larger than the coefficients in the *PRISK* analysis in Table 2.8. These results show that the increased effect of risk on non-GAAP reporting during periods of higher risk also applies for topic-specific risks such as health risk. Examining the model R-Squared of each model, we can see that, like the previous table, the values are higher in the pandemic period. This continues to suggest that the explanatory power of the model is greater in times of higher-than-average political risk. This would suggest that the explanatory power of the model is robust to using the main political risk measure or the topic-specific measures.

[INSERT TABLE 2.9 HERE]

In summary, this analysis shows that the effect of political risk on non-GAAP reporting is greater when the overall level of political risk is higher, such as was the case at the outset of the COVID-19 pandemic in 2020. This effect also applies to topic-specific risks when the overall level of topic-specific risk is elevated. This section uses health risk during the COVID-19 pandemic as an example, however it should also apply to other topics and time periods such as economic risk during recessions or tax risk during the passage of major tax legislation. More research in this area is needed to confirm the generalizability of these results.

2.4.3.4. Gubernatorial Election Margin as An Alternative Measure of Political Risk and the 2016 Presidential Election

In their recent paper, Dai and Ngo (2020) use the variation in political uncertainty caused by US Gubernatorial Elections to examine the effect of political risk on accounting. One of the measures the authors used as a proxy for the level of uncertainty was the election margin. I use *ELECTION_MARGIN* in this paper as an alternative measure of political risk. It has the benefit of being unrelated to firm disclosure decisions unlike firm-level political risk, which is based on firm conference call transcripts. It is also a continuous measure of political risk, unlike the binary election variable also used by Dai and Ngo (2020) in their paper.

To create my *ELECTION_MARGIN* measure, I obtain the official gubernatorial election results for each state from 2000 to 2020 from each state's secretary of state website or the state government website. I then construct the raw election margin as the difference between the percentage of the vote allocated to the winner and the percentage of the vote allocated to the runner

up. I inverse the raw election margin (1 – raw election margin) so that greater values indicate greater risk. That is, the smaller the election margin of victory, the closer the final measure will be to one, indicating higher levels of risk. I use this measure of political risk for all observations prior to a gubernatorial election in the state where the firm is headquartered. In the sample for this analysis, the smallest value for *ELECTION_MARGIN* is 0.421, and the largest is 1.000. This indicates that where the value of *ELECTION_MARGIN* is 0.421, the margin of victory between the winner and runner up was 57.9%. Similarly, where the value of *ELECTION_MARGIN* is 1.000, the margin of victory was less than 0.01%. These elections occurred in Utah in 2008 (*ELECTION_MARGIN* = 0.421) and Washington state in 2004 (*ELECTION_MARGIN* = 1.000), respectively.

In this section, I examine the period when political risk, as measured by gubernatorial elections, is likely to have the most impact on non-GAAP reporting. That is, the period following the 2016 presidential election. The post-2016 period is characterized by increased polarization and risk, which should result in firms being less likely to use non-GAAP reporting opportunistically. Like the COVID-19 analysis in the previous section, the outcome *NG_FIRST* is not included as it does not have data for the post-2016 period.

The results of my analysis are presented in Table 2.10 below. Panel A reflects the pre-2016 period while Panel B reflects post-2016. The results do indicate a change following the 2016 election. Pre-2016 the effects of *ELECTION_MARGIN* on non-GAAP reporting were much more mixed. The coefficients for *ELECTION_MARGIN* are negatively related to on outcome variable (*AVOID_LOSS*), and positively related to two of the five outcome variables: *FAV_NG* and *AVOID_PY_DECREASE*. Therefore, we can conclude that the results are mixed for the pre-2016 period. In the post-2016 period, however, the results are much more straightforward. In all five of

the outcome measures the coefficient on *ELECTION_MARGIN* is negative and significant at the 1% (*BEAT*), the 5% (*FAV_NG, AVOID_PY_DECREASE, AVOID_PQ_DECREASE),* or the 10% level (*AVOID_LOSS)*. This provides further support for H1a using *ELECTION_MARGIN* as an alternative measure of political risk. The interaction coefficient tells a slightly different story to the main results. Three of the five outcome variables are significantly negative, the exceptions being *AVOID_PY_DECREASE* and *AVOID_PQ_DECREASE*. This does not support Hypothesis 1b but instead indicates that informative firms with higher levels of political risk reduce their opportunistic non-GAAP reporting even further.

Examining the model R-Squared of each model, we can see that the values are higher than in the main analysis, lending additional support for the use of this measure. The R-Squared of *AVOID_PY_DECRASE* is 19.799 in the post-2016 period, which represents a relatively high level of explanatory power for an accounting-based model. Further, the R-Squared levels are higher in the post-2016 period than the pre-2016 period. Like prior sections, this suggests that the explanatory power of the model is greater in times of higher-than-average political risk.

Among the control variables there are two results worth noting. Like prior sections the coefficient on *SIZE* remains positive and significant at the 1% level across time periods and outcome variables. The coefficients also only vary in magnitude between 0.2 and 0.45. It is the most consistent predictor of opportunistic non-GAAP reporting, indicating that larger firms are more likely to engage in that behavior. The results for *VOLATILITY* are also interesting. In the pre-2016 period the coefficients are positive and significant at the 1% level across all outcome variables. In the post-2016 period, however, the coefficients are negative and significant at the 1% level, and the coefficient magnitudes more than double in absolute terms. This indicates a major change as firms with volatile earnings were more likely to use opportunistic non-GAAP reporting

pre-2016, and significantly less likely to engage in the behavior post-2016. This may be indicative of a change in how non-GAAP earnings are used opportunistically and is worth a look in future research.

[INSERT TABLE 2.10 HERE]

Overall, these results continue to suggest political risk, measured using gubernatorial election margin, has a significant effect on opportunistic non-GAAP use in the post-2016 period, particularly for firms with opportunistic motives. This provides additional support for Hypothesis 1a using an alternative measure of political risk.

2.4.3.5. *Non-GAAP Earnings Persistence*

In the final section of this paper, I examine how political risk affects the persistence on non-GAAP earnings. Doyle et al. (2003) were the first to examine the persistence of non-GAAP earnings and non-GAAP exclusions, showing that exclusions are negatively related with future cash flows. Later researchers examined whether events affect non-GAAP earnings and exclusion persistence. For example, Kolev et al. (2008) examine the change in non-GAAP earnings persistence following several SEC interventions in the non-GAAP area in the early 2000's, finding that non-GAAP earnings are more persistent and exclusions are more transitory following the interventions. This is a sign of higher quality exclusions following the interventions. If I can find that non-GAAP earnings persistence changes as a result of political risk changes, it would provide strong support for my main analysis.

I follow Kolev et al.'s (2008) methodology, regressing future operating income (operating income for the following four quarters) on non-GAAP earnings (non-GAAP earnings less GAAP earnings). I do not include non-GAAP exclusions in my analysis because of collinearity issues. I replace their *POST* variable with my *PRISK* variable to examine the quality of non-GAAP exclusions in relation to political risk. I perform this analysis for my full sample, and for opportunistically motivated (*TRANSITORY_GAIN* = 0) and informatively motivated (*TRANSITORY_GAIN* = 1) firms. I use Fama-French 48 industry as well as year-quarter fixed effects and I cluster standard errors by firm and year-quarter. I remove firms in the financial and utility industries, and winsorize at the 1% and 99% levels. The results are presented in Table 2.11, below, along with the relevant variable definitions.

Non-GAAP earnings is significantly positive for all three groups at the 1% level (1.692, 1.739, and 1.352 for the full sample, opportunistic group, and informative group respectively). This means that non-GAAP earnings is an important predictor of future operating performance. The coefficients for *PRISK* (-0.001 in all three columns) are significant at the 1% level for the full sample and the opportunisitc group, and significant at the 10% level for the informative group. When *PRISK* is interacted with non-GAAP earnings, the coefficients are positive and significant at the 1% levels (0.033 for both). For the informative group, the coefficient is insignificantly positive (0.033). This means that as a response to political risk, non-GAAP earnings is more predictive of future operating earnings, but only for opportunistic firms. Informative firms see no statistically significant effect. This suggests that opportunistic firms make their non-GAAP earnings more informative during an investigation as expected by my main analysis.

[INSERT TABLE 2.11 HERE]

Overall, the results of this analysis suggest that the persistence of non-GAAP earnings increases for opportunistic firms during times of high political risk, indicating that such firms become less opportunistic. On the other hand, informative firms see no change to their non-GAAP earnings persistence. This supports my hypotheses and my main analysis.

CHAPTER 2.5. DISCUSSION

In my analysis, I studied whether firm-level political risk is related to opportunistic non-GAAP disclosures. I found that political risk is negatively related to opportunistic non-GAAP reporting for opportunistic firms. Firms are less likely to use non-GAAP measures to increase earnings, avoid a loss, avoid decreases, meet or beat forecasts, and are less likely to report non-GAAP earnings more prominently than GAAP earnings if they have opportunistic motives, in support of my hypothesis. In addition, I find that firms with informative motives see no such change during times of higher political risk, supporting a more nuanced view of the effect of political risk.

I perform several additional analyses for robustness. First, I examine whether the effect of political risk is stronger following the 2007-2008 financial crisis. The results show that the effect is stronger in the years following the financial crisis. Second, I examine the topic-specific risk measures developed by Hassan et al. (2019). I find that economic policy risk had the strongest effect on non-GAAP reporting and that the results for all topics mirror the main results. Third, I examine political risk and non-GAAP reporting during the COVID-19 pandemic. I find that political risk has a greater effect on opportunistic non-GAAP disclosures during the pandemic, suggesting that the effect in this and the financial crisis analysis are due to the average level of political risk being higher than usual. I examine health-specific risk during the pandemic and find

that coefficient magnitudes are even larger than the main political risk measure. Fourth, I use an alternative measure of political risk, election margin during U.S. Gubernatorial elections to add additional support for my results. I find that the coefficients are larger and consistently negative in the post-2016 period for opportunistic firms. Finally, I find that the persistence of non-GAAP increases for opportunistic firms during times of high political risk, but informative firms see no change to their non-GAAP earnings persistence.

My motivation for studying political risk and its effect on opportunistic non-GAAP reporting is threefold. First, political risk has a significant impact on other operating and financial decisions and should, therefore, influence non-GAAP reporting. Second, non-GAAP reporting is currently one of the most closely followed financial measures. Third, with the recent COVID-19 pandemic we experienced the highest levels of political risk in recent memory. Thus, it is especially important in the current environment to know how political risk affects accounting policy and reporting decisions. This paper meets all three of those goals.

This study has important implications for regulators, investors, and analysts. It shows that the level of political risk influences non-GAAP reporting choices, making companies report less opportunistically, which is considered a positive outcome. Regulators may use this information to their advantage. If they apply more pressure on firms with opportunistic non-GAAP disclosures, it is possible the firms will reduce such opportunistic behaviors. Importantly, firms must also recognize this additional pressure so that the risk is reflected in conference calls and disclosures. Investors and analysts, meanwhile, should be wary of non-GAAP reporting for firms with low levels of political risk as they may be more opportunistic in nature. Further, the effects of political risk are greater when there is a higher level of political risk on average, meaning that investors and

analysts should be extra cautious during relatively stable periods such as before the 2007-2008 financial crisis.

There are several limitations for this study worth noting. This analysis mainly relies on the measure of political risk created by Hassan et al. (2019), as well as US Gubernatorial Election Margin. Using a different measure of risk or political uncertainty may give different results. Further, I use a sample of non-GAAP data collected by Bentley et al. (2018), which causes my sample period to end in 2020 and a sample of non-GAAP earnings prominence collected by Chen et al. (2021) that ends in 2016. Using a different data provider may provide a different time period or different firms included in the sample. Finally, I use six measures of opportunistic non-GAAP reporting commonly used in the literature. Using different measures of opportunistic non-GAAP reporting may affect the results as well. These questions are left for future research to address.

APPENDIX 2.A
Variable Definitions

PRISK	The share of companies' quarterly conference calls devoted to politics. As measured by Hassan et al. (2019). The measure is decile ranked to enable interpretation.
FAV_NG	An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS higher than GAAP EPS during the quarter and 0 otherwise.
AVOID_LOSS	An indicator variable that takes a value of 1 if the firm reports positive non-GAAP earnings and negative GAAP earnings and 0 otherwise.
AVOID_PY_DECREASE	An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the same quarter of the prior year and 0 otherwise.
AVOID_PQ_DECREASE	An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the previous quarter and 0 otherwise.
BEAT	An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to the most recent mean analyst forecast for that quarter provided by the IBES Summary History file and GAAP earnings less than the mean analyst forecast, and 0 otherwise.
NG_FIRST	An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS before GAAP EPS in the quarter's earnings announcement and 0 otherwise.
TRANSITORY_GAIN	An indicator variable that takes a value of 1 if the firm reports positive special items during the quarter (SPIQ > 0 in Compustat), and 0 otherwise.
FUTURE_GROWTH	Sales (saleq from Compustat) in quarter t less sales in quarter t+4, scaled by total assets (atq in Compustat).
SIZE	The natural logarithm of 1 + total assets (atq from Compustat).
BM	Book-to-market ratio, calculated as shareholder's equity (seqq from Compustat)/market value of equity (prc × shrout from CRSP, or mkvaltq or prccq × cshoq from Compustat if CRSP data are missing) following Chen et al. (2021).

LOSSES	Indicator variable that equals 1 if GAAP EPS before extraordinary items (epsfxq from Compustat) is negative in all four prior quarters, and equals 0 otherwise (Bowen et al., 2005; J. V. Chen et al., 2021)**.**
VOLATILITY	Standard deviation of ROA (ibq from Compustat/atq from Compustat) over at least five of the preceding eight quarters (J. V. Chen et al., 2021)

Appendix A presents the variable definitions. All continuous variables are winsorized at the 1% and 99% level.

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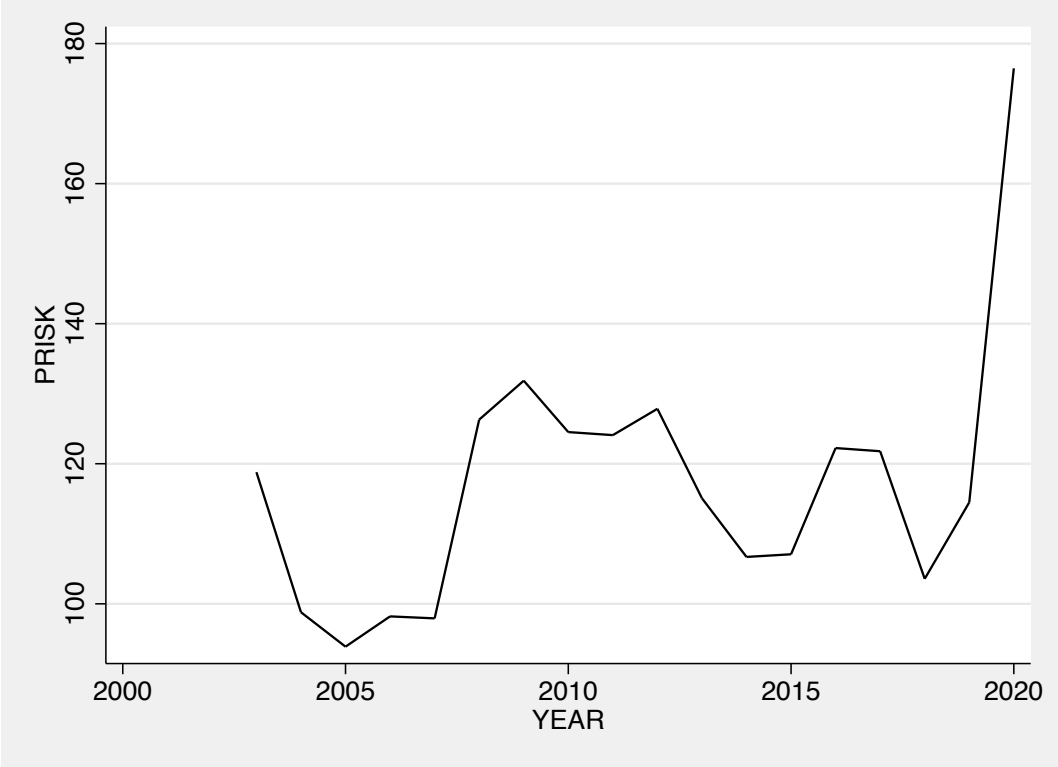
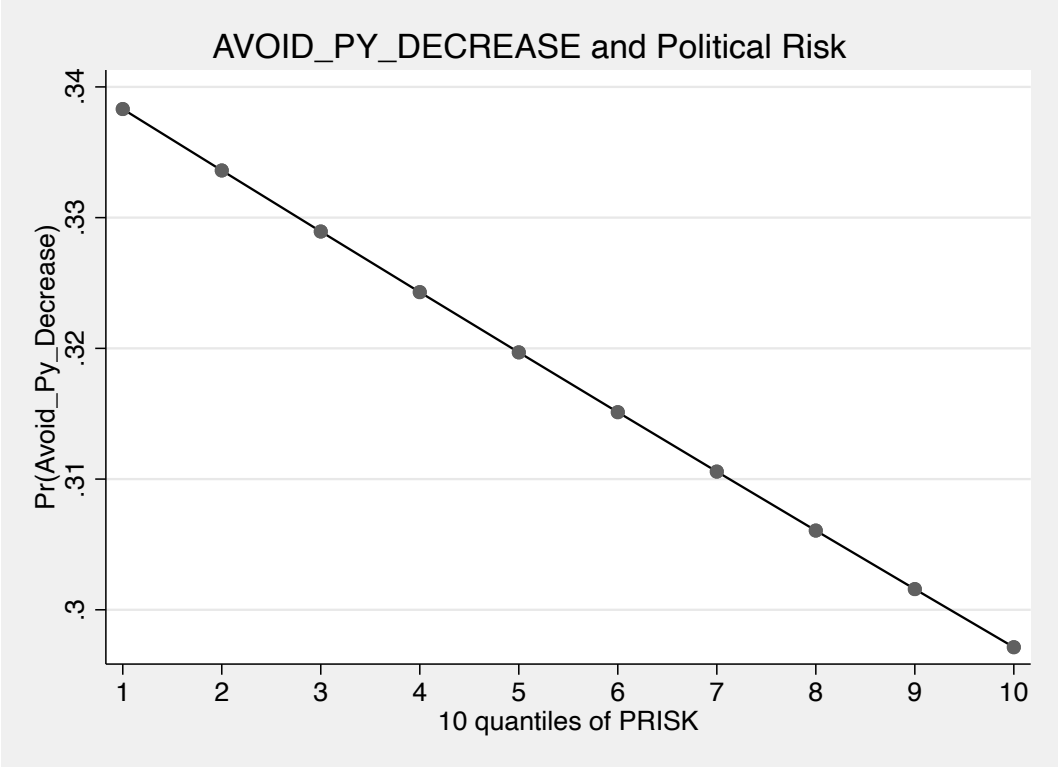
FIGURE 2.1
Mean Political Risk Level Over Time



The figure above shows the mean level of political risk for the sample over the sample period. Readers should see that political risk is highest around presidential elections (2004, 2008, 2012, 2016, and 2012) as well as major world events such as the 2007-2008 financial crisis and subsequent recession and the COVID-19 pandemic. The purpose of this graph is twofold, it shows that there is meaningful variation in political risk levels over time and that the level of political risk in this sample follows the findings of Hassan et al. (2019) that it is higher surrounding presidential elections.

FIGURE 2.2
Likelihood of Reporting Non-GAAP Earnings to Avoid a Decrease from Prior Year



The figure above shows the likelihood of using non-GAAP earnings to avoid a prior year decrease in GAAP earnings (*AVOID_PY_DECREASE*). Readers should see that the likelihood of reporting non-GAAP earnings to avoid a decrease from the prior year decreases as political risk increases. This is supportive of H1a. The purpose of this graph is to examine the model results of Table 2.4 visually so we can better understand the results and see if they support Hypothesis 1a.

TABLE 2.1
Sample Selection

Firm-Quarter Observations	
Initial sample of firms with political risk data	342,524
Less:	
Observations not in sample period (2003 to 2020)	(23,777)
Observations that could not be matched with other data	(120,052)
Observations missing control variables	(67,857)
Observations where the firm does not change their non-GAAP reporting (i.e., *NG_INCLUDED = 0* or *1* for all the firm's observations)	(901)
Sample	129,937

TABLE 2.2
Descriptive Statistics

	N	MEAN	STD. DEV.	MIN	MEDIAN	MAX
FAV_NG	129,937	0.356	0.479	0.000	0.000	1.000
AVOID_LOSS	129,937	0.060	0.238	0.000	0.000	1.000
AVOID_PY_DECREASE	129,937	0.318	0.466	0.000	0.000	1.000
AVOID_PQ_DECREASE	129,937	0.313	0.464	0.000	0.000	1.000
BEAT	129,937	0.167	0.373	0.000	0.000	1.000
NG_FIRST	129,937	0.075	0.264	0.000	0.000	1.000
PRISK (original)	129,937	117.118	163.726	0.000	62.308	972.863
PRISK (decile ranked)	129,937	5.459	2.928	1.000	5.000	10.000
TRANSITORY_GAIN	129,937	0.091	0.287	0.000	0.000	1.000
ATQ	129,937	7,846.059	22,094.735	19.229	1,186.625	160,518.000
IBQ	129,937	70.400	243.278	-310.355	8.454	1,707.000
LOSSES	129,937	0.140	0.347	0.000	0.000	1.000
SIZE	129,937	7.153	1.925	3.007	7.080	11.986
BM	129,937	0.126	0.323	-0.013	0.001	1.758
VOLATILITY	129,937	0.025	0.040	0.000	0.010	0.254
FUTURE_GROWTH	129,937	0.018	0.064	-0.175	0.008	0.302

Table 2.2 presents the descriptive statistics for the final sample at the firm-year level. All continuous variables are winsorized at the 1% and 99% level. All variables are defined in Appendix A.

Variable definitions:
FAV_NG = An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS higher than GAAP EPS during the quarter and 0 otherwise.
AVOID_LOSS = An indicator variable that takes a value of 1 if the firm reports positive non-GAAP earnings and negative GAAP earnings and 0 otherwise.
AVOID_PY_DECREASE = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the same quarter of the prior year and 0 otherwise.
AVOID_PQ_DECREASE = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to GAAP earnings in the previous quarter and 0 otherwise.
BEAT = An indicator variable that takes a value of 1 if the firm reports non-GAAP earnings that are greater than or equal to the most recent mean analyst forecast for that quarter provided by the IBES Summary History file and GAAP earnings less than the mean analyst forecast, and 0 otherwise.
NG_FIRST = An indicator variable that takes a value of 1 if the firm reports non-GAAP EPS before GAAP EPS in the quarter's earnings announcement and 0 otherwise.

PRISK = The share of companies' quarterly conference calls devoted to politics. As measured by Hassan et al. (2019). The measure is decile ranked to enable interpretation.
TRANSITORY_GAIN = An indicator variable that takes a value of 1 if the firm reports positive special items during the quarter (SPIQ > 0 in Compustat), and 0 otherwise.
ATQ = Total assets in millions on Compustat.
IBQ = Income before extraordinary items on Compustat.
LOSSES = Indicator variable that equals 1 if GAAP EPS before extraordinary items (epsfxq from Compustat) is negative in all four prior quarters and equals 0 otherwise.
SIZE = The natural logarithm of 1 + total assets (*ATQ*).
BM = Book-to-market ratio, calculated as shareholder's equity (seqq from Compustat)/market value of equity (prc × shrout from CRSP, or mkvaltq or prccq × cshoq from Compustat if CRSP data are missing).
VOLATILITY = Standard deviation of ROA (ibq from Compustat/atq from Compustat) over at least five of the preceding eight quarters.
FUTURE_GROWTH = Sales (saleq from Compustat) in quarter t less sales in quarter t+4, scaled by total assets (atq in Compustat).

TABLE 2.3
Pearson Correlation Matrix (N = 129,937)

	1	2	3	4	5	6	7	8	9	10	11	12
1 FAV_NG	1.00											
2 AVOID _LOSS	0.34*	1.00										
3 AVOID_PY _DECREASE	0.68*	0.22*	1.00									
4 AVOID_PQ _DECREASE	0.70*	0.25*	0.68*	1.00								
5 BEAT	0.60*	0.29*	0.48*	0.48*	1.00							
6 NG_FIRST	0.28*	0.12*	0.25*	0.25*	0.17*	1.00						
7 PRISK (decile ranked)	-0.02*	-0.01*	-0.02*	-0.01*	-0.02*	0.00	1.00					
8 TRANSITORY _GAIN	-0.07*	-0.04*	0.02*	0.02*	-0.05*	0.00	0.00	1.00				
9 LOSSES	-0.06*	0.04*	-0.05*	-0.03*	-0.03*	-0.07*	0.02*	0.00	1.00			
10 SIZE	0.16*	0.01*	0.18*	0.16*	0.12*	0.10*	0.09*	0.04*	-0.35*	1.00		
11 BM	-0.03*	0.01*	-0.05*	-0.02*	-0.13*	0.03*	0.04*	0.00	0.06*	0.00	1.00	
12 VOLATILITY	-0.05*	0.02*	-0.06*	-0.04*	-0.05*	-0.03*	0.00	0.01*	0.33*	-0.37*	0.05*	1.00
13 FUTURE _GROWTH	-0.01*	-0.02*	-0.02*	-0.02*	-0.00	-0.02*	-0.01	-0.01*	0.00	-0.09*	-0.07*	0.02*

Table 2.3 presents the Pearson correlation matrix. All continuous variables are winsorized at the 1% and 99% level. Correlations with an asterisk are significant at the 5% level or less. All variables are defined in Appendix A.

TABLE 2.4
Tests of Hypothesis 1

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY DECREASE	(4) AVOID_PQ DECREASE	(5) BEAT	(6) NG_FIRST
PRISK	-0.020***	-0.015***	-0.024***	-0.018***	-0.026***	-0.020***
	(-8.468)	(-3.394)	(-9.889)	(-7.438)	(-8.644)	(-4.826)
TRANSITORY_GAIN	-0.849***	-0.851***	0.157***	0.102**	-0.772***	-0.084
	(-16.409)	(-7.537)	(3.339)	(2.141)	(-11.174)	(-0.989)
*PRISK** *TRANSITORY_GAIN*	0.009	0.004	-0.009	-0.010	0.010	-0.001
	(1.109)	(0.212)	(-1.110)	(-1.326)	(0.841)	(-0.042)
LOSSES	-0.165***	0.413***	0.025	0.069***	-0.013	-0.589***
	(-7.789)	(10.851)	(1.155)	(3.252)	(-0.494)	(-11.969)
SIZE	0.326***	0.138***	0.331***	0.312***	0.297***	0.268***
	(73.272)	(19.314)	(74.388)	(70.518)	(56.344)	(38.183)
BM	-0.020	0.126***	-0.202***	-0.059***	-2.425***	0.226***
	(-0.931)	(3.363)	(-8.968)	(-2.725)	(-31.828)	(7.028)
VOLATILITY	0.531***	1.164***	-0.062	0.435**	-1.028***	1.093***
	(2.951)	(3.774)	(-0.323)	(2.369)	(-3.937)	(3.194)
FUTURE_GROWTH	0.488***	-0.839***	0.253**	0.251**	0.483***	0.160
	(4.622)	(-4.096)	(2.325)	(2.306)	(3.575)	(0.828)
Constant	-3.862***	-5.911***	-4.049***	-4.108***	-5.011***	-4.712***
	(-17.867)	(-8.048)	(-17.391)	(-17.116)	(-13.167)	(-11.609)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	13.097	7.122	11.943	11.307	15.262	11.487

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

TABLE 2.5
Opportunistic Non-GAAP Use Pre & Post-2008 Financial Crisis

Panel A: Pre-2008

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	FAV_NG	AVOID_LOSS	AVOID_PY_DECREASE	AVOID_PQ_DECREASE	BEAT	NG_FIRST
PRISK	-0.001	-0.001	-0.009	0.002	-0.009	-0.019*
	(-0.271)	(-0.082)	(-1.592)	(0.393)	(-1.127)	(-1.930)
TRANSITORY_GAIN	-0.823***	-0.396	0.128	0.073	-0.730***	-0.078
	(-7.227)	(-1.567)	(1.314)	(0.731)	(-4.334)	(-0.416)
*PRISK**	0.006	-0.076	0.014	0.007	0.015	-0.018
TRANSITORY_GAIN	(0.331)	(-1.606)	(0.829)	(0.425)	(0.519)	(-0.544)
LOSSES	-0.062	0.172*	0.036	0.081	-0.017	-0.695***
	(-1.269)	(1.646)	(0.735)	(1.640)	(-0.233)	(-6.327)
SIZE	0.311***	0.159***	0.326***	0.314***	0.301***	0.266***
	(32.369)	(8.485)	(33.801)	(32.238)	(22.887)	(17.441)
BM	0.199***	0.446***	-0.047	0.125**	-5.170***	0.382***
	(3.746)	(4.063)	(-0.870)	(2.310)	(-12.509)	(4.623)
VOLATILITY	1.728***	2.105***	1.819***	1.528***	0.763	-0.517
	(4.649)	(3.102)	(4.793)	(4.040)	(1.342)	(-0.599)
FUTURE_GROWTH	-0.271	-1.924***	0.175	-0.103	-0.768**	-0.344
	(-1.253)	(-3.769)	(0.796)	(-0.456)	(-2.282)	(-0.850)
Constant	-4.512***	-6.157***	-4.864***	-4.668***	-5.423***	-4.549***
	(-11.546)	(-5.959)	(-11.375)	(-12.159)	(-7.030)	(-15.906)
Observations	32,828	32,330	32,828	32,828	32,595	31,562
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	9.639	6.162	9.116	8.857	13.750	7.459

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel B: Post-2008

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
PRISK	-0.025***	-0.017***	-0.029***	-0.024***	-0.029***	-0.022***
	(-9.636)	(-3.588)	(-10.591)	(-8.745)	(-8.906)	(-4.551)
TRANSITORY_GAIN	-0.876***	-0.948***	0.149***	0.096*	-0.797***	-0.089
	(-14.954)	(-7.534)	(2.760)	(1.766)	(-10.486)	(-0.929)
*PRISK**	0.012	0.019	-0.012	-0.013	0.011	0.004
TRANSITORY_GAIN	(1.299)	(0.944)	(-1.371)	(-1.439)	(0.914)	(0.294)
LOSSES	-0.205***	0.446***	0.009	0.055**	-0.017	-0.565***
	(-8.712)	(10.849)	(0.383)	(2.332)	(-0.573)	(-10.251)
SIZE	0.330***	0.135***	0.332***	0.312***	0.295***	0.272***
	(65.350)	(17.367)	(65.823)	(62.403)	(51.241)	(34.235)
BM	-0.064***	0.075*	-0.226***	-0.095***	-2.186***	0.186***
	(-2.705)	(1.885)	(-9.042)	(-3.951)	(-29.448)	(5.287)
VOLATILITY	0.215	0.922***	-0.571***	0.152	-1.344***	1.527***
	(1.044)	(2.665)	(-2.582)	(0.724)	(-4.578)	(4.038)
FUTURE_GROWTH	0.788***	-0.555**	0.306**	0.415***	0.818***	0.307
	(6.460)	(-2.484)	(2.429)	(3.314)	(5.479)	(1.369)
Constant	-3.319***	-5.298***	-3.709***	-3.807***	-4.548***	-4.873***
	(-15.330)	(-7.328)	(-15.988)	(-15.858)	(-12.198)	(-11.910)
Observations	97,080	97,080	97,080	97,080	97,080	62,559
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	12.485	6.445	11.783	10.782	14.127	10.536

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 2.6
Aspects of Political Risk

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT	(6) NG_FIRST
Panel A: Economic Risk						
PRISK_ECONOMIC	-0.021***	-0.016***	-0.027***	-0.021***	-0.027***	-0.020***
	(-8.706)	(-3.706)	(-10.723)	(-8.457)	(-8.693)	(-4.603)
*PRISK_ECONOMIC**	-0.005	-0.000	-0.009	-0.008	-0.010	-0.008
TRANSITORY_GAIN	(-0.617)	(-0.019)	(-1.189)	(-0.993)	(-0.832)	(-0.561)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.104	7.126	11.955	11.317	15.270	11.485
Panel B: Environment Risk						
PRISK_ENVIRONMENT	-0.020***	-0.014***	-0.026***	-0.019***	-0.027***	-0.020***
	(-8.396)	(-3.222)	(-10.356)	(-7.650)	(-8.762)	(-4.631)
*PRISK_ENVIRONMENT**	-0.009	-0.014	-0.010	-0.007	-0.016	-0.002
TRANSITORY_GAIN	(-1.072)	(-0.750)	(-1.307)	(-0.840)	(-1.357)	(-0.126)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.102	7.123	11.950	11.307	15.274	11.484
Panel C: Health Risk						
PRISK_HEALTH	-0.018***	-0.013***	-0.023***	-0.017***	-0.021***	-0.016***
	(-7.250)	(-3.019)	(-9.247)	(-6.855)	(-6.988)	(-3.581)
*PRISK_ HEALTH**	-0.001	-0.010	-0.008	-0.009	-0.012	0.001
TRANSITORY_GAIN	(-0.058)	(-0.514)	(-0.998)	(-1.145)	(-1.051)	(0.090)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.087	7.120	11.933	11.301	15.246	11.468
Panel D: Institutions Risk						
PRISK_INSTITUTIONS	-0.021***	-0.016***	-0.025***	-0.018***	-0.023***	-0.020***
	(-8.865)	(-3.513)	(-10.280)	(-7.314)	(-7.475)	(-4.517)
*PRISK_ INSTITUTIONS**	0.003	-0.000	-0.007	-0.008	-0.011	0.004
TRANSITORY_GAIN	(0.379)	(-0.022)	(-0.904)	(-0.948)	(-0.919)	(0.318)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.102	7.124	11.947	11.304	15.252	11.480
For all Regressions						
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 2.6 (continued)
Aspects of Political Risk

VARIABLES	(1) FAV_NG	(2) AVOID LOSS	(3) AVOID_PY DECREASE	(4) AVOID_PQ DECREASE	(5) BEAT	(6) NG_FIRST
Panel E: Security Risk						
PRISK_SECURITY	-0.020***	-0.015***	-0.026***	-0.017***	-0.024***	-0.018***
	(-8.122)	(-3.280)	(-10.464)	(-7.042)	(-7.926)	(-4.242)
*PRISK_ SECURITY**	-0.001	-0.010	-0.008	-0.011	-0.011	-0.003
TRANSITORY_GAIN	(-0.163)	(-0.535)	(-1.068)	(-1.447)	(-0.982)	(-0.231)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.096	7.123	11.950	11.304	15.259	11.478
Panel F: Tax Risk						
PRISK_TAX	-0.017***	-0.014***	-0.021***	-0.017***	-0.023***	-0.017***
	(-7.023)	(-3.166)	(-8.374)	(-6.737)	(-7.492)	(-4.065)
*PRISK_TAX**	-0.008	0.004	-0.011	-0.010	-0.010	-0.013
TRANSITORY_GAIN	(-0.965)	(0.202)	(-1.352)	(-1.223)	(-0.843)	(-0.973)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.088	7.120	11.925	11.300	15.252	11.480
Panel G: Technology Risk						
PRISK_TECHNOLOGY	-0.011***	-0.005	-0.017***	-0.011***	-0.017***	-0.016***
	(-4.546)	(-1.093)	(-6.799)	(-4.394)	(-5.736)	(-3.661)
*PRISK_ TECHNOLOGY**	0.004	-0.000	-0.009	-0.004	-0.000	-0.007
TRANSITORY_GAIN	(0.418)	(-0.027)	(-1.111)	(-0.472)	(-0.017)	(-0.511)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.067	7.105	11.907	11.279	15.228	11.472
Panel H: Trade Risk						
PRISK_TRADE	-0.013***	-0.007	-0.020***	-0.013***	-0.021***	-0.010**
	(-5.700)	(-1.578)	(-8.238)	(-5.351)	(-7.134)	(-2.362)
*PRISK_ TRADE**	-0.006	-0.022	-0.013*	-0.014*	-0.018	-0.010
TRANSITORY_GAIN	(-0.728)	(-1.191)	(-1.726)	(-1.767)	(-1.627)	(-0.727)
Observations	129,937	129,937	129,937	129,937	129,937	95,402
Pseudo R-squared (%)	13.077	7.111	11.926	11.291	15.252	11.459
For all Regressions						
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 2.7
Comparing Means for 2019 (Pre-Pandemic Period) and 2020 (Pandemic Period)

	2019		2020			
	N	MEAN	N	MEAN	t-stat	p-value
PRISK (original)	6,273	110.843	6,290	177.113	21.221	0.000
TRANSITORY_GAIN	6,273	0.084	6,290	0.100	3.198	0.001
LOSSES	6,273	0.196	6,290	0.215	2.617	0.009
SIZE	6,273	7.399	6,290	7.426	0.748	0.454
BM	6,273	0.112	6,290	0.112	0.051	0.959
VOLATILITY	6,273	0.028	6,290	0.029	0.669	0.503
FUTURE_GROWTH	6,273	-0.005	6,290	0.040	36.701	0.000

Mean-comparison t-tests, unequal variances assumed.

TABLE 2.8
Opportunistic Non-GAAP Use Before and During COVID-19 (PRISK)

Panel A: 2019

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT
PRISK	-0.016	0.022	-0.022**	-0.008	-0.029**
	(-1.537)	(1.189)	(-2.091)	(-0.800)	(-2.457)
TRANSITORY_GAIN	-0.835***	-0.577	-0.011	0.065	-0.931***
	(-3.411)	(-1.152)	(-0.051)	(0.288)	(-3.103)
*PRISK**	0.009	-0.031	-0.013	-0.030	0.019
TRANSITORY_GAIN	(0.230)	(-0.379)	(-0.354)	(-0.780)	(0.384)
LOSSES	-0.357***	0.167	-0.152*	-0.152*	-0.021
	(-4.021)	(1.058)	(-1.652)	(-1.677)	(-0.203)
SIZE	0.394***	0.118***	0.369***	0.372***	0.359***
	(19.424)	(3.902)	(18.793)	(18.669)	(16.582)
BM	-0.085	0.497***	-0.155	-0.040	-1.526***
	(-0.833)	(3.115)	(-1.424)	(-0.383)	(-6.015)
VOLATILITY	-1.626*	-2.396	-3.222***	-2.543***	-5.400***
	(-1.851)	(-1.638)	(-3.290)	(-2.694)	(-4.420)
FUTURE_GROWTH	-0.012	-0.542	-0.629	-1.044**	1.042*
	(-0.025)	(-0.620)	(-1.295)	(-2.127)	(1.856)
Constant	-1.939***	-3.133***	-3.334***	-3.731***	-2.998***
	(-6.598)	(-6.560)	(-4.452)	(-4.297)	(-9.455)
Observations	6,213	5,772	6,223	6,226	6,182
Industry FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	16.319	7.973	15.579	14.863	17.393

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel B: 2020					
VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT
PRISK	-0.041***	-0.046***	-0.032**	-0.035***	-0.063***
	(-3.519)	(-2.604)	(-2.513)	(-2.974)	(-4.483)
TRANSITORY_GAIN	-0.909***	-1.278**	0.032	-0.170	-0.596*
	(-3.095)	(-2.516)	(0.115)	(-0.631)	(-1.729)
*PRISK**	0.037	0.078	0.017	0.039	0.011
TRANSITORY_GAIN	(0.920)	(1.125)	(0.433)	(1.067)	(0.232)
LOSSES	-0.459***	0.541***	-0.034	-0.116	0.079
	(-5.314)	(4.038)	(-0.360)	(-1.317)	(0.770)
SIZE	0.364***	0.195***	0.313***	0.308***	0.334***
	(18.560)	(7.349)	(15.611)	(16.166)	(15.412)
BM	-0.214**	-0.157	-0.093	-0.124	-1.116***
	(-2.182)	(-1.061)	(-0.865)	(-1.217)	(-5.979)
VOLATILITY	-1.814**	-0.984	-2.991***	-1.639*	-3.656***
	(-2.125)	(-0.740)	(-2.991)	(-1.869)	(-2.832)
FUTURE_GROWTH	0.105	-0.340	-2.300***	-1.020**	-0.361
	(0.244)	(-0.489)	(-4.423)	(-2.254)	(-0.674)
Constant	-2.075***	-3.244***	-3.263***	-2.700***	-2.844***
	(-4.327)	(-7.227)	(-5.835)	(-4.438)	(-5.347)
Observations	6,257	5,967	6,263	6,262	6,183
Industry FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	16.679	8.781	16.633	14.177	16.058

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 2.9
Opportunistic Non-GAAP Use Before and During COVID-19 (PRISK_HEALTH)

Panel A: 2019

VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT
PRISK_HEALTH	-0.001	0.009	-0.010	0.003	-0.008
	(-0.115)	(0.449)	(-0.918)	(0.254)	(-0.642)
TRANSITORY_GAIN	-0.592**	-0.358	-0.017	0.093	-0.705**
	(-2.471)	(-0.829)	(-0.074)	(0.409)	(-2.472)
*PRISK_ HEALTH**	-0.038	-0.080	-0.013	-0.036	-0.025
TRANSITORY_GAIN	(-0.908)	(-1.052)	(-0.335)	(-0.928)	(-0.487)
LOSSES	-0.360***	0.170	-0.155*	-0.153*	-0.028
	(-4.053)	(1.080)	(-1.676)	(-1.697)	(-0.268)
SIZE	0.393***	0.119***	0.367***	0.370***	0.357***
	(19.319)	(3.917)	(18.692)	(18.549)	(16.472)
BM	-0.088	0.504***	-0.160	-0.043	-1.534***
	(-0.859)	(3.140)	(-1.470)	(-0.407)	(-6.037)
VOLATILITY	-1.621*	-2.419*	-3.204***	-2.532***	-5.369***
	(-1.843)	(-1.651)	(-3.272)	(-2.681)	(-4.395)
FUTURE_GROWTH	-0.011	-0.519	-0.644	-1.053**	1.027*
	(-0.023)	(-0.595)	(-1.323)	(-2.143)	(1.825)
Constant	-2.018***	-3.065***	-3.361***	-3.758***	-3.099***
	(-6.849)	(-6.432)	(-4.512)	(-4.293)	(-9.727)
Observations	6,213	5,772	6,223	6,226	6,182
Industry FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	16.304	7.955	15.530	14.853	17.318

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel B: 2020					
VARIABLES	(1) FAV_NG	(2) AVOID _LOSS	(3) AVOID_PY _DECREASE	(4) AVOID_PQ _DECREASE	(5) BEAT
PRISK_HEALTH	-0.043***	-0.048***	-0.040***	-0.048***	-0.065***
	(-3.582)	(-2.641)	(-3.106)	(-3.919)	(-4.475)
TRANSITORY_GAIN	-0.663**	-1.140**	0.324	-0.057	-0.503
	(-2.228)	(-2.072)	(1.104)	(-0.195)	(-1.416)
*PRISK_ HEALTH**	0.000	0.056	-0.027	0.022	-0.003
TRANSITORY_GAIN	(0.011)	(0.755)	(-0.665)	(0.561)	(-0.052)
LOSSES	-0.462***	0.538***	-0.038	-0.119	0.075
	(-5.350)	(4.021)	(-0.404)	(-1.352)	(0.726)
SIZE	0.365***	0.194***	0.315***	0.310***	0.334***
	(18.570)	(7.361)	(15.648)	(16.221)	(15.444)
BM	-0.218**	-0.160	-0.096	-0.127	-1.119***
	(-2.222)	(-1.084)	(-0.896)	(-1.246)	(-6.041)
VOLATILITY	-1.799**	-0.982	-2.997***	-1.642*	-3.671***
	(-2.105)	(-0.742)	(-2.987)	(-1.872)	(-2.845)
FUTURE_GROWTH	0.106	-0.350	-2.305***	-1.019**	-0.371
	(0.245)	(-0.502)	(-4.430)	(-2.248)	(-0.688)
Constant	-2.049***	-3.227***	-3.221***	-2.634***	-2.848***
	(-4.267)	(-7.203)	(-5.786)	(-4.292)	(-5.378)
Observations	6,257	5,967	6,263	6,262	6,183
Industry FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	16.692	8.772	16.704	14.256	16.060

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 2.10
Opportunistic Non-GAAP Use Before and During the 2016 Presidential Election

Panel A: Pre-2016 Presidential Election

	(1)	(2)	(3)	(4)	(5)
VARIABLES	FAV_NG	AVOID_LOSS	AVOID_PY_DECREASE	AVOID_PQ_DECREASE	BEAT
ELECTION_MARGIN	0.165**	-0.477***	0.233***	0.110	-0.028
	(2.409)	(-3.556)	(3.283)	(1.550)	(-0.301)
TRANSITORY_GAIN	-0.177	-0.939*	0.266	0.336*	-0.523*
	(-0.825)	(-1.930)	(1.322)	(1.661)	(-1.736)
*ELECTION_MARGIN**	-0.711***	0.135	-0.101	-0.286	-0.226
TRANSITORY_GAIN	(-2.848)	(0.238)	(-0.433)	(-1.215)	(-0.644)
LOSSES	-0.023	0.336***	0.151***	0.184***	0.010
	(-1.010)	(7.382)	(6.350)	(7.893)	(0.317)
SIZE	0.380***	0.184***	0.374***	0.361***	0.345***
	(82.432)	(24.274)	(81.057)	(78.220)	(59.460)
BM	0.035	0.099**	-0.162***	-0.040*	-3.736***
	(1.502)	(2.393)	(-6.594)	(-1.699)	(-24.824)
VOLATILITY	1.013***	1.577***	0.580***	0.925***	-0.058
	(6.650)	(5.751)	(3.599)	(5.961)	(-0.248)
FUTURE_GROWTH	0.556***	-0.641***	0.487***	0.371***	0.567***
	(5.170)	(-2.898)	(4.369)	(3.296)	(3.864)
Constant	-5.048***	-5.169***	-5.109***	-5.383***	-5.273***
	(-18.705)	(-9.577)	(-18.539)	(-16.671)	(-14.836)
Observations	132,862	132,862	132,862	132,862	132,862
Industry FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	16.540	8.470	14.607	14.469	18.742

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel B: Post-2016 Presidential Election					
VARIABLES	(1) FAV_NG	(2) AVOID_LOSS	(3) AVOID_PY_DECREASE	(4) AVOID_PQ_DECREASE	(5) BEAT
ELECTION_MARGIN	-0.392**	-0.527*	-0.372**	-0.411**	-0.594***
	(-2.299)	(-1.787)	(-2.140)	(-2.365)	(-2.958)
TRANSITORY_GAIN	0.923*	2.494**	0.182	0.145	0.694
	(1.736)	(2.278)	(0.381)	(0.301)	(1.105)
ELECTION_MARGIN TRANSITORY_GAIN*	-1.926***	-3.877***	-0.162	-0.097	-1.598**
	(-3.043)	(-2.884)	(-0.287)	(-0.171)	(-2.117)
LOSSES	-0.245***	0.403***	-0.139***	-0.011	0.011
	(-5.416)	(5.243)	(-3.001)	(-0.230)	(0.197)
SIZE	0.408***	0.178***	0.443***	0.402***	0.390***
	(41.309)	(12.624)	(44.023)	(40.631)	(35.057)
BM	-0.256***	-0.011	-0.382***	-0.239***	-2.325***
	(-3.828)	(-0.103)	(-5.358)	(-3.501)	(-12.441)
VOLATILITY	-2.250***	-3.254***	-3.076***	-2.832***	-3.999***
	(-5.751)	(-4.304)	(-7.038)	(-6.562)	(-6.419)
FUTURE_GROWTH	1.244***	-0.043	0.974***	0.714***	1.338***
	(4.832)	(-0.094)	(3.676)	(2.692)	(4.364)
Constant	-2.622***	-3.765***	-3.400***	-2.557***	-3.627***
	(-5.942)	(-10.214)	(-7.460)	(-5.398)	(-7.422)
Observations	25,540	25,512	25,540	25,540	25,540
Industry FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
Pseudo R-squared (%)	18.846	11.365	19.799	17.320	18.908

Robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

TABLE 2.11
Additional Analysis: Non-GAAP Earnings Persistence

	(1)	(2)	(3)
	Full Sample	Opportunistic	Informative
VARIABLES	*future_operating_income*	*future_operating_income*	*future_operating_income*
ng_earnings	1.692***	1.739***	1.352***
	(35.345)	(34.751)	(8.132)
PRISK	-0.001***	-0.001***	-0.001*
	(-5.337)	(-5.035)	(-1.650)
*PRISK *ng_earnings*	0.033***	0.033***	0.033
	(5.052)	(4.808)	(1.274)
sales_growth	0.097***	0.079***	0.184***
	(8.560)	(6.644)	(5.087)
log_total_assets	0.008***	0.008***	0.012***
	(23.732)	(21.988)	(10.269)
earnings_volatility	-0.301***	-0.258***	-0.441***
	(-13.976)	(-11.280)	(-7.191)
loss	-0.038***	-0.039***	-0.046***
	(-27.323)	(-26.369)	(-9.438)
book_to_market	-0.074***	-0.073***	-0.084***
	(-28.796)	(-26.801)	(-10.595)
log_age	0.011***	0.011***	0.009***
	(15.539)	(14.974)	(3.772)
Constant	0.057***	0.057***	0.041
	(4.187)	(4.026)	(0.809)
Observations	71,392	64,752	6,640
R-squared	0.562	0.574	0.475
Industry FE	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes
SE Clustering	Firm & Year-Quarter	Firm & Year-Quarter	Firm & Year-Quarter
R-squared (%)	56.119	57.297	46.451

Robust t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1
Variable Definitions following main analysis:
PRISK = The share of companies' quarterly conference calls devoted to politics. As measured by Hassan et al. (2019). The measure is decile ranked to enable interpretation.
ng_earnings = non-GAAP earnings per share provided by Bentley et al. (2018).
Variable Definitions following Kolev et al. (2008):
Future Operating Income = Operating Income q summed over four quarters starting with quarter *t + 1.*
sales_growth = quarter-over-quarter increase in sales, on a per share basis.
log_total_assets = log of the total assets in millions and corresponds to quarter q.
earnings_volatility = standard deviation of return on assets over at least six of the preceding eight quarters.
loss = an indicator variable equal to 1 if earnings before extraordinary items for the quarter (#25) is less than 0, and 0 otherwise.
book_to_market = book value of equity divided by the book value of debt plus market value of equity.
log_age = log of the number of years since the company first appeared in Compustat.