

ESSAYS ON ACCOUNTING CONSISTENCY

by

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A thesis submitted to the Graduate Program in Management - School of Business

In conformity with the requirements for the degree of

Doctor of Philosophy

Queen's University

Kingston, Ontario, Canada

(July, 2018)

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Abstract

This study develops a measure of accounting consistency based on the idea that the accounting function is the accounting measurement system that managers use to translate economic events to financial statements. When a firm uses accounting policies and estimates consistently, one can estimate its current-year earnings accurately by applying prior years' accounting function to the current-year economic events. Empirically, I find that my accounting consistency measure is positively associated with analyst following and forecast accuracy, and negatively associated with analyst forecast dispersion. To further test the effect of accounting consistency on analyst behavior, I examine the impact on analyst forecasts of accounting policy changes, which reduce accounting consistency. I find that accounting policy changes decrease analyst forecast accuracy and increase analyst forecast dispersion. These results suggest that accounting consistency benefits financial statement users.

This study also examines the impact of SFAS No. 154, *Accounting Changes and Error Corrections*, on the information processing of financial analysts. SFAS No. 154 is issued to improve accounting consistency between periods when there is a voluntary accounting policy change. Using 969 voluntary accounting policy changes from 1994 to 2015, I find that the impact of voluntary accounting policy changes on analyst forecast accuracy and dispersion is weaker under SFAS No. 154 than under the predecessor standard, APB Opinion No. 20, indicating that SFAS No. 154 improves financial reporting usefulness by enhancing accounting consistency. This finding provides evidence for standard setters and regulators regarding the benefits of SFAS No. 154 adoption.

Acknowledgements

I wish to take this opportunity to express my deepest appreciation to my supervisor, Professor Michael Alan Welker, for his constant support of my doctoral studies. Without his invaluable guidance, this dissertation would not have been possible. Besides my supervisor, I would like to thank the other members of my dissertation committee, Professor Daniel B. Thornton and Yu Hou, for their constant encouragement and constructive comments on my thesis; Professor Gus De Franco (the external reviewer) and Frank Milne for their excellent comments. Also, I am greatly indebted to Ning Zhang, Serena Wu and Steven E. Salterio for their support during my doctoral studies.

I owe special gratitude to my friends and classmates in the PhD program at Smith School of Business of Queen's University for their help and encouragement during the past five years, in particular to Lin Bai, Wei He, Ting Li, Yi Luo, Luke Phelps and Michael Wynes. Finally, I would like to thank my parents for supporting me throughout my life.

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Chapter 1

Introduction

In this study, I develop an output-based measure of accounting consistency and test the construct validity of this measure. Then, I investigate how accounting consistency affects the information processing of financial analysts. Specifically, I examine the association between my accounting consistency measure and analyst forecast characteristics. To further test this issue, I examine how accounting policy changes, which reduce accounting consistency, affect analyst forecast characteristics. In this paper, I also investigate whether Statement of Financial Accounting Standards (SFAS) No. 154 improves the usefulness of financial statements by enhancing accounting consistency when there is a voluntary accounting policy change. Specifically, I examine whether the effect of voluntary accounting policy changes on the information processing of financial analysts is mitigated under SFAS No. 154.

Accounting consistency is defined as the “conformity from period to period with unchanging policies and procedures” (Financial Accounting Standards Board (FASB) 1980). The importance of accounting consistency has been recognized by regulators and standard setters for a long time (Accounting Principles Board (APB) 1971; FASB 1980). For example, APB (1971) states that “*Consistent* use of accounting principles from one accounting period to another enhances the utility of financial statements to users by facilitating analysis and understanding of comparative accounting data” (emphasis added). FASB (1980) states that “*Consistency* in applying accounting methods over a span of time has always been regarded as an important quality that makes accounting numbers more

useful” (emphasis added). Despite the importance of accounting consistency, however, little effort has been devoted to developing a measure of accounting consistency by researchers.

The primary purpose of this study is to develop a measure of accounting consistency and examine how accounting consistency affects the information processing of financial analysts.¹ It is well accepted that the accounting measurement system maps economic events to financial statements. When the accounting system is similar over periods, one can estimate current year’s earnings accurately using the prior years’ accounting function and current year’s economic events. Based on this idea, the stability of the accounting function can be measured as the negative value of the absolute difference between actual earnings and predicted earnings calculated by applying the prior years’ accounting function to the current year’s economic events. The stability of the accounting function stems from stable business operations and consistently applied accounting principles.² As such, after extracting the portion of accounting function stability contributed by stable business operations, the remaining portion of accounting function stability is contributed by accounting consistency. Therefore, I use the remaining portion to measure accounting consistency in this study.

I conduct several tests to validate the new measure of accounting consistency. First, as a voluntary accounting policy change reduces accounting consistency, I expect that my

¹ Accounting consistency in my study includes the consistent use of accounting principles, practices, methods, and estimates.

² For example, if a firm that produces computers sets up a branch to produce mobile phones, the firm’s accounting function will change. This is because the accounting function of the mobile phone branch differs from that of the computer branch.

measure is lower for firms in the year with a voluntary accounting policy change. Second, as a mandatory accounting policy change (i.e., the change induced by an accounting standard adoption) that affects accounting numbers reduces accounting consistency, I expect that my measure is lower for firms in the year when their financial statements are materially affected by mandatory accounting standards adoption. Third, as the change in auditor or CFO influences a firm's accounting policy choices, I expect that my measure of accounting consistency is lower when the firm's auditor or CFO changes. Finally, higher accounting consistency over periods suggests less variation in the measurement of earnings and accruals, resulting in more persistent and more predictable earnings, and smaller abnormal accruals.³ Then, I expect higher earnings persistence and earnings predictability, and lower abnormal accruals when my measure of accounting consistency is high. Consistent with my expectations, I find that my measure of accounting consistency is low for firms in the year with an accounting policy change, an auditor change, or a CFO change. I also find that when my measure of accounting consistency is high, earnings are more persistent and more predictable, and abnormal accruals are smaller. These results suggest that my measure captures the underlying construct of accounting consistency.

Then, I examine how accounting consistency affects the information processing of financial analysts. First, as Bhutan (1989) and Lang and Lundholm (1996) discussed, the number of analysts that follow a firm is associated with their costs and benefits of following

³ For example, Johnson Controls, Inc. (CIK: 0000053669) changed its inventory valuation method from last-in, first-out (LIFO) method to first-in, first-out (FIFO) method for certain inventory in its Power Solutions business in 2013. Net income increased by \$7 million as a result of the accounting method change in the period. As the inventory valuation method change has no impact on the amount of cash generated by normal business operations, the accruals component of net income increased by \$7 million due to the change.

the firm. When a firm consistently applies accounting policies and estimates over time, the effort exerted by analysts to analyze and understand the firm's financial statements is lower than their effort for a similar firm that uses accounting policies and estimates inconsistently. That is, the cost of analyzing a firm with higher accounting consistency is lower. However, when a firm applies accounting policies and estimates consistently, the information-processing cost for investors and other users of financial reports is also lower. As a result, there is a reduced demand for financial analysts' services for the firm. Therefore, the benefit of following a firm with higher accounting consistency is lower. Because there are both potential positive and negative consequences of accounting consistency on analyst following, I test the null hypothesis that accounting consistency has no association with analyst following. Second, a firm's financial statements are a function of its economic events. As such, to provide accurate forecasts, analysts must have a good understanding of both the firm's accounting function and the firm's economic events. High accounting consistency means that the accounting function is stable, and that analysts could estimate the firm's accounting function using historical information accurately. Thus, I predict that accounting consistency leads to improved analyst forecast accuracy. Third, each analyst has his/her own estimation of a firm's accounting function. If the firm applies the same accounting policies and estimates for a long time, analysts could estimate the firm's accounting function more accurately and their estimates converge to the "true" accounting function. That is, there is less dispersion in analysts' estimates of the firm's accounting function. Therefore, I predict that accounting consistency reduces analyst forecast dispersion.

Using a sample of firms for which accounting consistency can be measured from 1994 to 2016, I find that firms with higher accounting consistency are associated with more analyst following, more accurate analyst forecasts, and less dispersed analyst forecasts. I also find that the effects of accounting consistency on analyst following, analyst forecast accuracy, and analyst forecast dispersion are economically significant. In particular, a one standard deviation increase in accounting consistency leads to an increase of about 0.23 analysts, an increase in analyst forecast accuracy of about 41%, and a reduction in analyst forecast dispersion of about 25% for the average firm in the sample. My findings suggest that accounting consistency makes financial reporting information more useful.

Although accounting consistency is desirable, companies change their accounting policies when accounting standards change and when the changes are preferable. To further test the effect of accounting consistency on the information processing of analysts, I examine how accounting policy changes, which reduce accounting consistency, affect analyst behavior. If my hypotheses — accounting consistency increases analyst forecast accuracy and decreases analyst forecast dispersion — hold, accounting policy changes will decrease analyst forecast accuracy and increase analyst forecast dispersion. Prior studies have documented that accounting policy changes reduce earnings forecast accuracy of financial analysts in the year of change (e.g., Brown 1983; Ricks and Hughes 1985; Biddle and Ricks 1988). However, there are some limitations in those studies. First, they use very small and dated samples. Second, they examine the impact of accounting policy changes on analyst earnings forecasts by comparing the forecast characteristics between firms with accounting changes and firms without accounting changes. Another purpose of my study is to re-examine the association between accounting policy changes and analyst forecast

characteristics using a much broader set of data, and applies regression analysis because it is a more powerful research method than single comparisons of forecast characteristics across firms to examine the relationships among variables.

Using a sample of 2,530 mandatory accounting policy changes from 1994 to 2007 and a sample of 969 voluntary accounting policy changes from 1994 to 2015,⁴ I find that both mandatory and voluntary accounting policy changes decrease analyst forecast accuracy and increase analyst forecast dispersion, and that mandatory accounting policy changes reduce future analyst following. These findings indicate that accounting policy changes (i.e., accounting inconsistency) reduce financial reporting usefulness, strengthening my inferences above.

Then, how to mitigate the impact of unavoidable accounting policy changes on accounting consistency? Retrospective application may be a solution. Retrospective application refers to “the application of a different accounting principle to prior accounting periods as if that principle had always been used” (FASB 2005). In 2005, the FASB issued SFAS No. 154 to enhance the consistency of financial information between periods when voluntary changes in accounting policies occur.⁵ SFAS No. 154 requires that companies retrospectively apply the new accounting principle to previous-period financial statements

⁴ The sample of mandatory accounting policy changes ends in 2007 as I identify these changes using non-missing and non-zero values for the cumulative effect (ACCHG) of an accounting change from the merged CRSP/Compustat data. However, firm-years with such data are very rare after 2007 because the frequency of new accounting standards decreases significantly after 2007.

⁵ Before SFAS No. 154, APB Opinion No. 20, *Accounting Changes*, provided the accounting guidance for dealing with accounting changes. Under APB Opinion No. 20, the prior-period effect of a voluntary accounting policy change was recognized as the “cumulative effect of an accounting change” in the current period’s income statement.

and make a corresponding adjustment to the opening balance of retained earnings of the period, unless retrospective application is impracticable. However, SFAS No. 154 does not require companies to use retrospective application for changes required by an accounting pronouncement if it includes specific transition provisions, or for changes of accounting estimates.⁶

The third purpose of my study is to examine whether retrospective application mitigates the effect of accounting policy changes on accounting consistency. Specifically, I examine whether the impact of voluntary accounting policy changes on the information processing of financial analysts is mitigated under SFAS No. 154. I use a sample of voluntary accounting policy changes to test this research question because the FASB normally does not require retrospective application of mandated accounting standard changes. When there is a voluntary accounting policy change, firms should retrospectively apply the new accounting policy to prior periods' financial statements under SFAS No. 154. As such, the restated prior-period financial statements help analysts estimate the firms' new accounting function. Therefore, the impact of voluntary accounting policy changes on analyst forecast accuracy and dispersion is expected to be mitigated under SFAS No. 154. As SFAS No. 154 improves the consistency of financial information when there is a voluntary accounting change, both the cost and benefit of following the firm decrease. Therefore, I predict that SFAS No. 154 mitigates the association between voluntary accounting policy changes and analyst following.

⁶ Each FASB pronouncement includes specific transition method for the accounting policy change. A change in accounting estimate is handled on a prospective basis and affects only current and future periods' financial statements.

I split my sample of 969 voluntary accounting policy changes into two subsamples: 372 voluntary accounting policy changes under APB Opinion No. 20 and 597 voluntary accounting policy changes under SFAS No. 154. Consistent with my prediction, I document that the effect of voluntary accounting policy changes on analyst forecast accuracy and dispersion is weaker under SFAS No. 154 than under APB Opinion No. 20. My findings suggest that SFAS No. 154 improves financial reporting usefulness by enhancing accounting consistency when there is a voluntary accounting policy change.

My study contributes to the literature in the following ways. Most importantly, I develop an output-based measure of accounting consistency, which is an important complement to the input-based consistency measure developed by Peterson, Schmardebeck, and Wilks (2015). My measure differs from Peterson et al.'s (2015) measure in the following ways. First, their measure only captures accounting policy changes, but my measure captures both the changes in accounting policies and estimates.⁷ Second, they include accounting policy changes with no material impact on financial statements. In contrast, those accounting changes do not affect my measure. Finally, instead of extracting financial statement notes, my measure is easier to calculate for a large sample as it only uses widely available earnings and stock return data.

Second, my study provides empirical evidence that accounting consistency facilitates financial analysts' forecasts of future earnings. The ability to forecast future

⁷ For example, in the three months ended April 30, 2011, Diamond Foods (DMND) revised its estimate for expected commodity costs, which resulted in a pre-tax decrease in cost of sales of about 1.5 million and an increase in EPS by up to 0.04 (compared with diluted EPS for the quarter of 0.34). Data source: <http://www.auditanalytics.com/blog/change-in-estimate-accounting-red-flag/>.

earnings is crucial for users of financial statements to make economic decisions. As such, consistent use of accounting policies and estimates over periods benefits financial statement users by providing comparative accounting data. My results confirm the assertion in FASB (1980) that higher accounting consistency makes accounting numbers more useful. This study may be of interest to standard setters and regulators in evaluating the costs and benefits of accounting consistency.

Third, my study updates and expands early studies (e.g., Brown 1983; Ricks and Hughes 1985; Biddle and Ricks 1988) and finds that the negative association between accounting policy changes and analyst forecast accuracy continues in a more recent sample. The update is important because early evidence in this area is based on one or several accounting policy changes for a small sample of firms from the 1970s or 1980s, over 30 years ago. For example, the sample used in Biddle and Ricks (1988) consists of 279 firms that adopted LIFO inventory costing method from 1973 to 1980. In contrast, my evidence is based on a broad set of mandatory and voluntary accounting policy changes for a large sample of firms during the last 20 years.

Finally, my study provides insights for standard setters and regulators regarding the consequences of the adoption of SFAS No. 154. The statement was issued in 2005 to improve accounting consistency between periods when there is a voluntary accounting principle change. However, whether SFAS No. 154 enhances the usefulness of financial reporting is unclear due to the lack of empirical evidence. To fill this gap in the literature, my study examines the effect of SFAS No. 154 on the association between voluntary accounting policy changes and the information processing of financial analysts. To my

knowledge, my study is the first one to investigate the impact of the adoption of SFAS No. 154.

The remainder of the paper is organized as follows. The next chapter describes the accounting consistency principle and the procedure to calculate my measure of accounting consistency. Chapter 3 reviews relevant literature and develops hypotheses. Chapter 4 outlines empirical design. Chapter 5 describes sample selection procedures and reports the main findings, followed by additional tests and robustness checks in Chapter 6. Chapter 7 concludes.

Chapter 2

An Empirical Measure of Accounting Consistency

2.1 The Importance of Accounting Consistency

Accounting consistency refers to the “conformity from period to period with unchanging policies and procedures” (FASB 1980). The concept means that accounting methods once adopted should be applied consistently over a number of time periods, and that the same accounting methods and techniques should be applied for similar situations. It does not mean that companies cannot make any change in accounting policies and procedures. Companies can change their accounting policies for valid reasons, but they must disclose the nature of and the reason for the change, the method of applying the change, and its effects on financial statements, under SFAS No.154 (FASB 2005).

Consistently using accounting methods over time has long been regarded as an important quality of accounting numbers. For example, as early as 1932, the Special Committee on Co-operation with Stock Exchanges recommended that “The more practicable alternative would be to leave every corporation free to choose its own methods of accounting within the very broad limits to which reference has been made, but require disclosure of the methods employed and *consistency* in their application from year to year” (emphasis added).⁸ In 1971, the Accounting Principles Board (APB) stated in Opinion No. 20 that “...there is a presumption that an accounting principle once adopted should not be

⁸ Audits of Corporate Accounts: Correspondence between the Special Committee on Co-operation with Stock Exchanges of the American Institute of Accountants and the Committee on Stock List of the New York Stock Exchange, 1932-1934. 1934. New York: American Institute of Accountants.

changed in accounting for events and transactions of a similar type. *Consistent* use of accounting principles from one accounting period to another enhances the utility of financial statements to users by facilitating analysis and understanding of comparative accounting data” (emphasis added). In 1980, FASB stated in SFAC No. 2 that “*Consistency* in applying accounting methods over a span of time has always been regarded as an important quality that makes accounting numbers more useful” (emphasis added). In 2005, SFAS No. 154 has a statement similar to that in APB Opinion No. 20 to emphasize the presumption that accounting consistency is desirable.

Dichev, Graham, Harvey, and Rajgopal (2013) provide insights about earnings quality with a survey of 169 Chief Financial Officers (CFO) of public firms and a dozen interviews with CFOs and two standard setters. They asked CFOs to rate the importance of features of earnings quality. “High quality earnings reflect consistent reporting choices over time” is the most popular choice. 94% of CFOs agreed that financial reporting consistency is an important feature of high quality earnings. One of the interviewed CFOs said “Well, if the accounting policies and principles are not being consistently applied, that’s a huge red flag, and there better be doggone good reason that something changed” (Dichev et al., 2013, footnote. 13). Dechow, Ge, and Schrand (2010) also notice that accounting consistency is an important issue. This is because earnings quality proxies are affected not only by the firm’s fundamental performance but also by the measurement of performance. As such, they suggest future research to examine the distinct influence of performance and the accounting measurement system on the quality of reported earnings.

2.2 The Relationship with Accounting Comparability

Accounting comparability refers to “the quality of information that enables users to identify similarities in and differences between two sets of economic phenomena” (FASB 1980). Accounting comparability and consistency are two equally important secondary qualities that interact with relevance and reliability to improve the usefulness of accounting information. FASB (1980) states that “Information about a particular enterprise gains greatly in usefulness if it can be compared with similar information about other enterprises and with similar information about the same enterprise for some other period or some other point in time. *Comparability* between enterprises and *consistency* in the application of methods over time increases the informational value of comparisons of relative economic opportunities or performance” (emphasis added).

Researchers have recently started to examine accounting comparability. Bradshaw, Miller, and Serafeim (2009) develop an input-based measure of accounting comparability using the similarity of a firm’s accounting method portfolio to that of its industry peers. They find that the use of atypical accounting methods is related to larger analyst forecast errors and forecast dispersion. De Franco, Kothari, and Verdi (2011) develop an output-based measure of financial statement comparability based on the idea that accounting measurement system maps from economic events to financial statements. If two firms have comparable accounting measurement systems, they will produce similar financial statements given the same economic events. Using this measure, they find that accounting comparability facilitates the information processing of financial analysts.

The availability of accounting comparability measures has stimulated research in this area. One stream of research examines the determinants of accounting comparability. Prior studies find that accounting comparability is influenced by accounting standards harmonization (e.g., Wang 2014) and auditor style of Big 4 audit firms (Francis, Pinnuck, and Watanabe 2013). Another stream of research examines the consequences of accounting comparability. Prior studies find that accounting comparability reduces investors' perceptions of a firm's future crash risk (Kim, Li, Lu, and Yu 2016), helps acquirers make better acquisition-investment decisions (Chen, Collins, Kravet, and Mergenthaler 2016), reduces underpricing at the time of seasoned equity offerings (Shane, Smith, and Zhang 2014) and reduces the cost of bank loans (Fang, Li, Xin, and Zhang 2016).

However, little attention has been paid to accounting consistency by researchers. Inspired by De Franco et al.'s (2011) work, I develop an output-based measure of accounting consistency in this study as follows.

2.3 Measuring Accounting Consistency

In this section, I develop an output-based measure of accounting consistency. Following De Franco et al. (2011), I employ the concept that the accounting system is a mapping from economic events to financial statements. A firm has a consistent accounting system if applying the prior years' accounting function and the current year's accounting function to a given set of economic events produces the same financial statements. Specifically, if the firm's accounting system is consistent, one can estimate its current year's earnings using the prior years' accounting function and the current year's economic events. Accounting function stability stems from stable business operations and consistent

use of accounting policies and estimates. After extracting the portion of accounting function stability contributed by stable business operations, the remaining portion, contributed by consistent use of accounting policies and estimates, is used to measure accounting consistency.

I take four steps to develop my measure. First, I use prior four years' (16 quarters) earnings and economic events (i.e., stock returns) to estimate a firm's prior years' accounting function. Second, I use the estimated accounting function and the current year's economic events to estimate the current year's earnings (4 quarters). Third, accounting function stability is measured as the negative value of the absolute difference between the estimated earnings from step two and the actual earnings. Finally, I separate accounting function stability into two portions: that contributed by stable business operations and that contributed by accounting consistency, and use the second portion to measure accounting consistency.

Step 1: As the accounting measurement system maps from economic events to financial statements, it can be represented as follows:

$$\textit{Financial Statement}_i = f_i(\textit{Economic Events}_i)$$

where $f_i ()$ represents the accounting measurement system of firm i .

Following De Franco et al. (2011), I use stock returns to measure the net effect of economic events occurring during the quarter, and use earnings as a proxy for the financial statement measurement of these events. For each firm in year t , I estimate the following equation using the data from year $t-4$ to $t-1$ (16 quarters prior to year t).

$$Earnings_{i,q} = \alpha_{i,t} + \beta_{i,t} Return_{i,q} + \varepsilon_{i,q} \quad (1)$$

where $Earnings_{i,q}$ is the ratio of quarterly net income before extraordinary items to the beginning-of-period market value of equity; $Return_{i,q}$ is the stock return during the quarter.⁹ $\hat{\alpha}_{i,t}$ and $\hat{\beta}_{i,t}$ are the proxies for the accounting function of firm i during the past 16 quarters (from year $t-4$ to $t-1$).

Step 2: I apply the estimated accounting function from Equation (1) to the economic events for the 4 quarters for firm i in year t .

$$E(Earnings_{i,q}) = \hat{\alpha}_{i,t} + \hat{\beta}_{i,t} Return_{i,q} \quad (2)$$

where $E(Earnings_{i,q})$ is the predicted earnings of firm i using the accounting function for the past 16 quarters ($\hat{\alpha}_{i,t}$ and $\hat{\beta}_{i,t}$) and the stock return ($Return_{i,q}$) for quarter q in year t .

Step 3: The accounting function stability is measured as the negative value of the average absolute difference between the actual earnings of year t (4 quarters) and the predicted earnings from Equation (2):

$$Stability_{i,t} = -1/4 \sum_{q=1}^4 |Actual\ Earnings_{i,q} - E(Earnings_{i,q})|$$

Greater value of *Stability* suggests greater stability of accounting function.

Step 4: Accounting function stability stems from the stable business operations and consistent use of accounting policies and estimates. For example, a firm's accounting

⁹ I repeat my analyses using the accounting consistency measure calculated based on earnings from operations instead of net income before extraordinary items. The results (untabulated) are similar to my main findings.

function changes when it starts a new business, spins off a branch, adopts a new accounting standard and voluntarily changes its accounting policies and estimates. However, I am interested in the consistent use of accounting policies and estimates in this study. Therefore, I use the following regression to separate accounting function stability into two portions: that contributed by stable business operations and that contributed by accounting consistency.

$$\begin{aligned}
 \text{Stability}_{i,t} = & \beta_0 + \beta_1 \text{Assets}_{i,t} + \beta_2 \text{BTM}_{i,t} + \beta_3 \Delta \text{Assets}_{i,t} + \beta_4 \Delta \text{BTM}_{i,t} + \beta_5 \text{Std}(\text{CFO})_{i,t} \\
 & + \beta_6 \text{Segments}_{i,t} + \beta_7 \text{SItems}_{i,t} + \beta_8 \text{Issue}_{i,t} + \beta_9 \text{ChgSIC}_{i,t} + \beta_{10} \text{Merger}_{i,t} \\
 & \beta_{11} \text{ChgCEO}_{i,t-1} + \varepsilon_{i,t}
 \end{aligned} \tag{3}$$

where the dependent variable, *Stability*, is the measure of accounting function stability. The independent variables are proxies for firm *i*'s business operations stability. Following Peterson et al. (2015), I include firm size (*Assets*), growth (*BTM*), changes in assets (ΔAssets), and changes in growth (ΔBTM) in the model as independent variables because larger firms and firms with lower growth have more stable operations; and firms with large changes to assets and to growth may experience changes in the business of the firm. I expect that firms with more volatile operating cash flows are associated with business operations changes. Thus, I include cash flow volatility ($\text{Std}(\text{CFO})$) in the model. As a diversified company is more likely to have business changes, I include the number of operating segments (*Segments*) to capture business operations diversity. Firms with special items (*SItems*), debt or equity issuances (*Issue*), industry changes (*ChgSIC*), and mergers (*Merger*) are going through large structural changes that affect business operations. So, I include these variables to capture business changes. The variable – CEO changes

$(ChgCEO_{i,t-1})$ – is included as an independent variable because CEO turnover also affects firms' business operations (e.g., Weisbach 1995). The definitions of all variables are presented in Appendix C. Then, I measure accounting consistency using the residual from Equation (3), which I label *Consistency*.

2.4 Validity Tests of the Measure

I conduct four tests to validate my measure of accounting consistency. First, I examine whether my measure is influenced by voluntary accounting policy changes. As voluntary accounting policy changes reduce accounting consistency, I expect that my measure is low in firm-years with voluntary accounting policy changes.

Second, I examine whether my measure is influenced by mandatory accounting policy changes that materially affect financial statements. As those accounting changes reduce accounting consistency, I expect that my measure is low in firm-years with mandatory accounting policy changes that have a material impact on financial statements.

Third, I examine whether my measure is influenced by auditor or CFO changes. DeFond and Subramanyam (1998) and Geiger and North (2006) find that auditor and CFO changes have an influence on a firm's accounting choices, which could reduce accounting consistency. Thus, I expect that my measure of accounting consistency is low in firm-years with auditor or CFO changes.

Finally, I examine whether my measure is associated with three measures of earnings quality: earnings persistence, earnings predictability, and abnormal accruals. Consistently applying accounting policies and estimates over periods means less variation

in the measurement of earnings and accruals, resulting in more persistent and more predictable earnings, and smaller abnormal accruals. Thus, I predict that firms with high accounting consistency will also have high earnings persistence, high earnings predictability, and low abnormal accruals.

2.5 Discussion of Accounting Consistency Measures

Early studies measure accounting consistency using changes in particular accounting policies, such as depreciation method changes (e.g., Archibald 1967; Jackson, Liu, and Cecchini 2009), actuarial cost method changes (e.g., Ghicas 1990), and inventory costing method changes (e.g., Healy, Kang, and Palepu 1987). There are mainly two limitations to the early accounting consistency measures. First, those measures only capture one or several types of accounting policy changes for a small sample of firms. Second, those measures ignore accounting estimate changes that could affect accounting numbers materially.

Peterson et al. (2015), in a recent study, extract the accounting policy disclosures in the footnotes to the financial statements of 10-K filings, and measure accounting consistency by comparing the similarity of words used in the disclosures from year to year. This measure also has some limitations. First, as the authors point out, the use of different words to express the same meaning will result in non-matches. Second, the changes in words of the accounting policies section are mainly from the description of new accounting

pronouncements, most of which do not have a significant impact on accounting numbers.¹⁰ As a result, their accounting consistency measure is low in years when the FASB issues more accounting pronouncements, although most of them do not materially affect the accounting measurement system. Third, the measure does not capture the changes in accounting estimates because the accounting policy disclosures do not disclose the accounting estimate changes. Finally, the measure is only available for 34% of firm-years that are covered by CRSP/Compustat Merged data from 1994 to 2012.¹¹ The primary data loss is due to the lack of availability of accounting policies or business descriptions in 10-K filings.

My measure differs from early measures and Peterson et al.'s (2015) measure of accounting consistency in the following ways. First, my measure not only captures mandatory and voluntary accounting policy changes, but also captures accounting estimate changes. Second, not all accounting policy changes have a material impact on financial statements (e.g., the adoption of SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*). My measure is not affected by accounting changes that do not materially affect financial statements. This is desirable because those changes are irrelevant from the investors' point of view. Finally, for practicality, my measure is

¹⁰ As shown in Appendix A, the FASB frequently releases new accounting principles and updates old accounting principles. However, most of these accounting pronouncements have no material impact on the firm's consolidated financial statements.

¹¹ There are 132,650 firm-years that are covered by CRSP/Compustat Merged data from 1994 to 2012. Peterson et al.'s (2015) accounting consistency measure is only available for 44,772 firm-years.

easier to calculate for large samples as it only uses earnings and stock return data, which are widely available in Compustat and CRSP database.¹²

¹² I regress Peterson et al.'s (2015) measure of accounting consistency on the proxies for business operations stability in Equation (3) using a sample of firm-years from 2005 to 2012. I find that the residual and my measure of accounting consistency are positively and significantly correlated (e.g., the Pearson correlation coefficient is 0.025 (P-value<0.001)). The correlation coefficient is low, possibly because (1) their measure only captures accounting policy changes, while my measure captures both accounting policy changes and accounting estimate changes. Accounting estimate changes may be the main component of accounting changes; and (2) the influence of an accounting change on their measure depends on the number of words used to describe the change, while the influence of an accounting change on my measure depends on the earnings effect of the change.

Chapter 3

Literature Review and Hypothesis Development

3.1 Accounting Consistency and Analyst Behavior

3.1.1 Literature Review

Prior studies related to accounting consistency mainly focus on accounting policy changes. The earliest studies investigate the impact of accounting changes on firms' profits or investigate the characteristics of firms with accounting changes. For example, Archibald (1967) examines the effect of accounting policy changes on reported earnings using a sample of 55 firms that changed from the accelerated depreciation method to the straight-line depreciation method from 1956 to 1966 and finds that the median ratio of profit improvement resulting from the change to the reported net income in the year of change is 10.18 percent and that the median ratio of profit improvement to the market value of equity at the end of the change year is 0.60 percent. Gosman (1973), Bremser (1975) and Warren (1977) investigate whether firms with accounting changes differ significantly from firms without accounting changes. Using a sample of 100 companies listed among the 1969 Fortune 500, Gosman (1973) compares firms making accounting changes with firms not making accounting changes and finds that larger firms are significantly more likely to have an accounting change. By comparing 80 companies electing to make accounting changes from 1965 to 1970 with 80 companies not disclosing any accounting changes during the period, Bremser (1975) finds that firms with accounting changes are more likely to exhibit a poorer trend of earnings per share (EPS) and a lower return on investments (ROI). Using

a sample of 1,543 firms that are selected randomly and dichotomized as changers and non-changers, Warren (1977) finds that firm size and the existence of an extraordinary item are positively and significantly associated with the likelihood that a firm will report an accounting change.

Another stream of research examines the determinants of accounting policy changes. For example, Ghicas (1990) investigates the reasons why managers switch from a cost-allocation actuarial cost method to a benefit-allocation actuarial cost method from 1980 to 1983. By comparing switch firms with industry-matched non-switch firms, he finds that financial statement considerations and reduction in pension funding are the main reasons to explain the switch in actuarial cost methods. Using a sample of 125 companies that have bank debt and voluntary accounting method changes, Beatty and Weber (2003) find that borrowers are more likely to make income-increasing rather than income-decreasing accounting method changes when those changes are allowed to affect debt contract calculations. This finding suggests that firms' debt contracts influence their accounting method choices. Moses (1987) investigates whether managers use voluntary accounting method changes as a device to smooth earnings. Among 212 voluntary accounting change events, 137 events (65 percent) are identified as having smoothed earnings, indicating that accounting method changes are implemented to achieve earnings smoothing. Using a sample of firms that switch from temporal method to current-rate method and non-switch firms,¹³ Bartov and Bodnar (1996) document that firms with high

¹³ Both temporal method and current-rate method are used to report the impact of exchange rate changes on the assets and liabilities of foreign operations in consolidated financial statements.

information asymmetry are more likely to switch to the current-rate method that makes financial statements more informative to investors. This suggests that firms' information environment affects their accounting method choices.

The third stream of research examines the consequences of accounting policy changes. For example, Ball (1972) and Harrison (1977) examine the market reaction to income changes that are related to changes in accounting methods. Using a sample of 197 firms that experienced accounting method changes from 1947 to 1960, Ball (1972) generally does not find significant stock price reactions. Using 280 companies with accounting policy changes from 1968 to 1972, Harrison (1977) finds that the stock market responds to accounting changes that increase net income, but does not respond to accounting changes that decrease net income. Healy, Kang, and Palepu (1987) investigate the impact of accounting policy changes on cash salary and bonus compensation paid to CEOs. Using 52 firms that changed inventory policies and 38 firms that changed depreciation methods, they find that after the accounting changes, cash salary and bonus compensation are paid based on the earnings under the new accounting method, rather than the earnings under the original accounting method. Jackson, Liu, and Cecchini (2009) identify 507 firms that changed from the accelerated depreciation method to the straight-line depreciation method and find that firms with such changes make smaller capital investment in the period after the change than in the period before the change. This finding

indicates that a choice made for external financial reporting purposes affects managers' investment decisions.¹⁴

A recent study in the area of accounting consistency, Peterson et al. (2015), finds that accounting consistency is negatively and significantly associated with information asymmetry, as measured by bid-ask spread and illiquidity. This finding suggests that accounting consistency reduces information asymmetry arising from accounting changes.

3.1.2 Hypothesis Development

To forecast a firm's future earnings, analysts not only need to know the firm's economic events, but also need to know its accounting function. When the firm consistently applies accounting policies and estimates over time, it is easier for analysts to estimate the firm's accounting function using historical information. That is, the effort exerted by analysts to estimate the firm's accounting function is lower than their effort for a similar firm with changes in accounting policies or estimates. As the cost of analyzing a firm with higher accounting consistency is lower, I expect analyst following to be larger for the firm. However, higher accounting consistency also reduces the cost of analyzing a firm for investors and other users of financial information. When the information-processing costs of the firm are less than the cost of obtaining analyst reports, investors will choose to process the financial information by themselves. As such, the demand for analyst services decreases for the firm with higher accounting consistency. If analysts react to the decreased demand for their services, I expect analyst following to be smaller for the firm. Because

¹⁴ Accounting policy changes also affect the information processing of financial analysts. I will review the literature in this area in Section 3.2.1.

there are both potential positive and negative consequences of accounting consistency for analyst following, I test the null hypothesis that accounting consistency has no association with analyst following.

As suggested by Ashton (1976), Dyckman, Hoskin, and Swieringa (1982) and Elliott and Philbrick (1990), analysts fail to adjust significantly their information processing in response to an accounting policy change, resulting in larger errors in forecast earnings in the year of an accounting change. When there are no changes in accounting policies or accounting estimates, analysts do not need to change their way of mapping from economic events to accounting numbers. Analysts can estimate current year's earnings accurately by applying prior years' accounting function to the current year's economic events. Therefore, I predict that accounting consistency leads to improved analyst forecast accuracy.

Each analyst has his/her own estimation of a firm's accounting function. When the firm's accounting function is stable for a long time, each analyst could estimate the firm's accounting function accurately. As such, all analysts' estimates converge to the "true" accounting function. That is, there is less dispersion in analysts' estimation of the firm's accounting function. As accounting function estimation dispersion induces analyst earnings forecast dispersion, I predict that accounting consistency reduces analyst forecast dispersion. Based on the above arguments, I make the following hypotheses:

H1a: *Accounting consistency is not associated with analyst following.*

H1b: *Accounting consistency is positively associated with analyst forecast accuracy.*

H1c: *Accounting consistency is negatively associated with analyst forecast dispersion.*

3.2 Accounting Policy Changes and Analyst Forecast Characteristics

3.2.1 Literature Review

Prior empirical studies have documented that accounting policy changes affect the information processing of financial analysts. For example, using 200 firms that reported accounting policy changes from 1974 to 1979, Brown (1983) provides evidence that the adoption of SFAS No. 34, *Capitalization of Interest Cost*, reduces forecast accuracy of financial analysts in the year of the change, and that both LIFO method adoption and actuarial changes for pensions reduce analyst forecast accuracy in the year of the voluntary accounting change. Ricks and Hughes (1985) examine the impact of the adoption of APB Opinion No. 18, *The Equity Method of Accounting for Investment in Common Stock*. They find systematic errors in analyst earnings forecasts for the firms that were affected by the accounting standard change. They also find that the forecast errors are positively related to the effect of the change on current year earnings. Similarly, Hughes and Ricks (1986) investigate the impact of the adoption of SFAS No. 34 on analyst forecast errors. They find a significant positive association between analyst forecast errors and the earnings effect of the adoption. Using all NYSE and AMEX firms that adopted LIFO over the period of 1973-1980, Biddle and Ricks (1988) find that analysts systematically overestimate the earnings of firms adopting LIFO voluntarily and that the analyst forecast errors are positively associated with the effect of the change on current year earnings. Using a sample of 612 accounting policy changes over the period of 1976-1984, Elliott and Philbrick (1990) find

that compared with a non-change year, the absolute forecast errors and the dispersion of analyst forecasts are larger in the year of a voluntary accounting change. They also find that the forecast dispersion among analysts is positively associated with the absolute value of the earnings effect of the voluntary change. Also, they obtain similar results when there is a mandatory accounting change.

In addition to empirical studies, using an experiment participated in by 106 MBA students, Ashton (1976) find that a substantial number of the subjects in the experiment failed to adjust significantly their information processing in response to an accounting change. This finding indicates that functional fixation exists in the context of an accounting policy change.¹⁵ Similarly, using an experiment with 74 graduate students in a cost accounting course, Dyckman, Hoskin, and Swieringa (1982) find that a large proportion of the subjects appear not to have changed their information processing in response to an accounting change and additional information about the change.

3.2.2 Hypothesis Development

As accounting policy changes reduce accounting consistency between periods, it becomes difficult for analysts to estimate the firm's accounting function in the year of the change. As a result, the cost to analysts of following a firm with an accounting policy change increases. However, the demand for analyst services also increases as the cost of processing the firm's information for other users of financial reports increases. Since an accounting policy change potentially has both negative and positive effects on analyst

¹⁵ Duncker (1945) defines functional fixation as "...a mental block against using an object in a new way that is required to solve a problem" (p. 87).

following and the net effect is unclear, there is no prediction on the directional association between accounting policy changes and analyst following. When there is an accounting policy change and accounting consistency is low, the accounting functions estimated by analysts are expected to be less accurate and more dispersed. Therefore, I predict that analyst earnings forecasts are less accurate and more dispersed when an accounting policy change occurs. Based on the above arguments, I make the following hypotheses:

H2a: *Accounting policy changes have no impact on analyst following.*

H2b: *Accounting policy changes reduce analyst forecast accuracy.*

H2c: *Accounting policy changes increase analyst forecast dispersion.*

3.3 The Mitigating Effect of SFAS No. 154

3.3.1 Institutional Background

From 2002 to 2015, the FASB and the International Accounting Standards Board (IASB) (collectively, the Boards) worked together on a project to eliminate a variety of differences between International Financial Reporting Standards (IFRS) and US GAAP. One of the areas identified by the Boards is to remove the differences between APB Opinion No. 20 and International Accounting Standards (IAS) 8, *Accounting Policies, Changes in Accounting Estimates and Errors*. In May 2005, FASB issued SFAS No. 154, *Accounting Changes and Error Corrections*, which replaces APB No. 20, *Accounting Changes*, and SFAS No. 3, *Reporting Accounting Changes in Interim Financial Statements*. The new statement is converged with IAS 8 and effective for fiscal years beginning after December 15, 2005. SFAS No. 154 modifies the requirements of the accounting for and

reporting of accounting principle changes and error corrections, and applies to all voluntary accounting principle changes and mandatory accounting principle changes required by an accounting pronouncement without specific transition provisions. If specific transition provisions of a pronouncement are provided, those provisions should be followed.

Appendix B presents the differences in the requirements of the accounting for and reporting of accounting changes and error corrections between APB Opinion No. 20 and SFAS No. 154. Under APB Opinion No. 20, most voluntary accounting principle changes are required to be recognized by adding the cumulative effect of the accounting principle change (i.e., the effect of changing an accounting principle on prior period earnings) into the net income of the period. While, under SFAS No. 154, firms should retrospectively apply the changes in accounting principle to prior periods' financial statements and make a corresponding adjustment to the opening balance of retained earnings of the period, unless the period-specific effects or the cumulative effect of the change cannot be determined practicably. When retrospective application is impracticable, firms should apply the new accounting principle prospectively. In addition, SFAS No. 154 requires that retrospective application of an accounting principle change be confined to its direct effects. A direct effect occurs when, for example, a change in inventory valuation method from FIFO to LIFO induces an adjustment to the inventory balance. Firms should recognize the indirect effects of an accounting principle change in the period of the change. An indirect effect occurs when, for example, a change in inventory valuation method induces a change in nondiscretionary profit-sharing payments.

Under APB Opinion No. 20, a change in depreciation, amortization or depletion method for long-lived, non-financial assets is viewed as a change in accounting principle.

Firms should include the cumulative effect of those changes in net income of the period. While, SFAS No. 154 views a change in depreciation, amortization or depletion method as a change in accounting estimate. Companies should account for those changes prospectively, along with disclosure requirements. SFAS No. 154 does not change the requirements in APB Opinion No. 20 of accounting for and reporting of a change in accounting estimate, which shall be accounted for prospectively.

The Accounting Principles Board (APB) was concerned with the retrospective application as the restatement of previous-period financial statements might destroy investors' confidence in financial reporting. APB (1971) states that "Restating financial statements of prior periods may dilute public confidence in financial statements and may confuse those who use them." However, the FASB seems to more care about the consistency of financial statements over periods for a company and the comparability of financial statements across companies. In SFAS No. 154, the FASB states that "This statement improves financial reporting because its requirement to report voluntary changes in accounting principles via retrospective application, unless impracticable, enhances the consistency of financial information between periods. That improved **consistency** enhances the usefulness of the financial information, especially by facilitating analysis and understanding of comparative accounting data" (emphasis added).

However, many may be worried that fewer companies would change their accounting principles voluntarily as the costs of changing an accounting principle increase as a result of SFAS No. 154 (Hall and Aldridge, 2007, *Journal of Accountancy*). This is because retrospective application of an accounting change requires firms to calculate more complex information, not just the cumulative effect. As a result, changing an accounting

principle requires more effort and increases audit fees, and the costs of a change in principle might be greater than the benefits. For example, a chief accounting officer of one Fortune 500 company worried that any improvements from an accounting principle change would not compensate for the effort.¹⁶

Although no study has examined the impact of the adoption of SFAS No. 154, one paper that examines the impact of the presentation of a mandated accounting change is related to my study. Fort (1997) compares the cumulative effect method and retroactive restatement method when adopting SFAS No. 96, *Accounting for Income Taxes*.¹⁷ He finds that analysts gain no forecast accuracy advantage in the year of the change from using the retroactive restatement method, which provides more detailed information by showing the effect of the change over several prior fiscal years. The finding of Fort (1997) suggests that voluntarily applying retroactive restatement method did not improve analyst forecast accuracy. However, the impact of SFAS No. 154 cannot be inferred from Fort (1997). This is because firms have a choice on whether to use the retrospective method to adopt SFAS No. 96 and this choice could be influenced by managers' incentives. While, under SFAS No. 154, managers have no choice about the presentation method used when adopting a new accounting principle. All companies should use retrospective application method. As such, managers' incentives do not affect the use of retrospective application under SFAS No. 154.

¹⁶ Source:<https://www.journalofaccountancy.com/issues/2007/feb/changesinaccountingforchanges.html>.

¹⁷ SFAS No. 96 allows firms to use both presentation methods. In addition, there are no accounting standard changes in which retrospective application is mandated before SFAS No. 154 and even after SFAS No. 154.

3.3.2 Hypothesis development

SFAS No. 154 requires firms to restate the financial statements in previous periods when they change an accounting policy voluntarily. It improves accounting consistency between periods and the improved accounting consistency helps analysts estimate the new accounting function more easily, more accurately and with less dispersion. More specifically, an accounting policy change induces the firm's accounting function change. As a result, analysts need to adjust their estimated accounting function for the firm in response to the policy change. Under APB Opinion No. 20, the only information available to analysts is the cumulative earnings effect of the change. However, under SFAS No. 154, both the cumulative earnings effect and restated financial statements in prior periods are available to analysts. Thus, analysts have more information to ascertain the effect of the accounting policy change on future earnings. Therefore, I predict that the impact of accounting changes on analyst forecast characteristics is mitigated under SFAS No. 154. Based on the above arguments, I make the following hypotheses:

H3a: *The impact of accounting policy changes on analyst following is mitigated under SFAS No. 154.*

H3b: *The impact of accounting policy changes on analyst forecast accuracy is mitigated under SFAS No. 154.*

H3c: *The impact of accounting policy changes on analyst forecast dispersion is mitigated under SFAS No. 154.*

Chapter 4

Research Design

4.1 Validity Tests of the Accounting Consistency Measure

To examine whether my measure of accounting consistency is low in firm-years with a mandatory accounting policy change, a voluntary accounting policy change, an auditor change or a CFO change, I run the following regression:

$$Consistency_{i,t} = \beta_0 + \beta_1 Post_{i,t} + \varepsilon_{i,t} \quad (4)$$

where *Consistency* is the measure of accounting consistency. *Post* acts as a placeholder for *Post_ChgAM*, *Post_ChgAV*, *Post_ChgAU*, and *Post_ChgCFO*. *Post_ChgAM* (*Post_ChgAV*) is an indicator variable that takes a value of one for firms in the year with a mandatory (voluntary) accounting policy change, and zero in the year before a mandatory (voluntary) accounting policy change. *Post_ChgAU* is an indicator variable that takes a value of one for firms in the year with an auditor change, and zero in the year before an auditor change. *Post_ChgCFO* is an indicator variable that takes a value of one for firms in the year after a CFO change, and zero in the year with a CFO change.¹⁸ As accounting policy, auditor or CFO changes reduce accounting consistency, I predict significantly negative coefficients on *Post_ChgAM*, *Post_ChgAV*, *Post_ChgAU*, and *Post_ChgCFO*, if my measure captures the underlying construct of accounting consistency.

¹⁸ I define *Post_ChgCFO* this way since the influence of a new CFO on accounting choices starts from the year following the appointment year (Geiger and North 2006).

To test whether my measure of accounting consistency is associated with three earnings quality measures: earnings persistence (*Persistence*), earnings predictability (*Predictability*) and abnormal accruals (*AbAcc*), I run the following regression:

$$\begin{aligned}
 \text{Earnings Quality Measure}_{i,t} = & \beta_0 + \beta_1 \text{Consistency}_{i,t} + \beta_2 \text{Assets}_{i,t} + \beta_3 \text{BTM}_{i,t} \\
 & + \beta_4 \text{Std}(\text{CFO})_{i,t} + \beta_5 \text{Std}(\text{Sales})_{i,t} + \beta_6 \text{Std}(\text{Earn})_{i,t} + \beta_7 \text{Growth}_{i,t} \\
 & + \beta_8 \text{Leverage}_{i,t} + \beta_9 \text{ROA}_{i,t} + \beta_{10} \text{Loss}_{i,t} + \beta_{11} \text{Age}_{i,t} + \beta_{12} \text{Big4}_{i,t} \\
 & + \beta_{13} \text{Issue}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
 \end{aligned} \tag{5}$$

where *Earnings Quality Measure* refers to *Persistence*, *Predictability* or *AbAcc*. Consistent with Francis, LaFond, Olsson, and Schipper (2004) and Peterson et al. (2015), *Persistence* is the coefficient estimate of a firm-specific regression of earnings per share on lagged earnings per share. *Predictability* is the R² from the same regression. *AbAcc* is the absolute value of the discretionary accruals estimated by the modified Jones model, as described in Dechow, Sloan, and Sweeney (1995). The independent variable of interest is the measure of accounting consistency (*Consistency*). As accounting consistency leads to more persistent and more predictable earnings, and smaller abnormal accruals, I will find a significantly positive (negative) coefficient on *Consistency* when the dependent variable is *Persistence* or *Predictability* (*AbAcc*), if *Consistency* is a valid measure of accounting consistency.

I control for other determinants of earnings quality in Equation (5) that were identified in prior literature. Following prior literature (e.g. Dechow and Dechow 2002; Wang 2006; Prawitt, Smith, and Wood 2009; Kim, Park, and Wier 2012), I include firm size (*Assets*), growth opportunities (*BTM* and *Growth*), profitability (*ROA*), risk for

bankruptcy (*Leverage* and *Loss*), cash flow volatility (*Std(CFO)*), sales volatility (*Std(Sales)*), earnings volatility (*Std(Earn)*), firm age (*Age*) and auditor (*Big4*). In addition, as external financing incentives reduce earnings quality (e.g., Cohen and Zarowin 2010), I control for debt or equity issuances (*Issue*). The definitions of all variables are presented in Appendix C. To control for any sample-wide systematic differences across industries and years, I include industry and year fixed effects. In addition, to account for over-time correlation within the same firm, I cluster all standard errors at the firm level.

4.2 Accounting Consistency and Analyst Forecast Characteristics

4.2.1 Measures of Analyst Forecast Variables

All analyst data are obtained from the I/B/E/S Summary Tape. As last year's annual report information has a significant impact on analyst forecasts for the current year, I keep only the analyst data for each month after the release of last year's annual report and before the end of the current fiscal year (i.e., months 4-12 following the last fiscal year end). Following Lang and Lundholm (1996), analyst forecast variables for each I/B/E/S statistical period are calculated as follows. Number of analysts is the natural logarithm of one plus the number of analysts providing an annual earnings forecast. Forecast accuracy is calculated as the negative value of the absolute difference between actual earnings per share and the median analyst forecast of earnings per share, scaled by the stock price at the beginning of the fiscal year. Forecast dispersion is calculated as the inter-analyst standard deviation of earnings forecasts, scaled by the stock price at the beginning of the fiscal year.

The analyst forecast variables used in this study — the number of analysts (*Analyst Following*), the analyst forecast accuracy (*Forecast Accuracy*) and analyst forecast dispersion (*Forecast Dispersion*) — are calculated as the simple average of the measure for each I/B/E/S statistical period across the nine-month period on the I/B/E/S Summary Tape within the firm’s fiscal year. I calculate the analyst forecast variables this way because the effect of accounting consistency on analyst behavior is expected to be present throughout this nine-month period.¹⁹

4.2.2 Regression Models

H1a predicts that accounting consistency is unrelated with the number of analysts following a firm. To test the hypothesis, I use the following regression:²⁰

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{Consistency}_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} + \beta_4 \text{Volume}_{i,t+1} \\
 & + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned} \tag{6}$$

¹⁹ If I use only the analyst data for the last month before the end of the current fiscal year to calculate these variables, my inferences are unchanged (untabulated).

²⁰ Following prior studies that examine the determinants or consequences of the abnormal components of various accounting variables (e.g., Dechow et al. 1995; Roychowdhury 2006), I test hypotheses H1a, H1b and H1c using a two-step procedure. First, I estimate my accounting consistency measure as the residual from an OLS regression (i.e., Equation (3)). Then, I use the residual as the independent variable in OLS regressions (i.e., Equation (6) and Equation (7)) designed to test the hypotheses. According to Chen, Hribar, and Melessa (2017), when the residual is used as the independent variable in the second-step regression, the coefficient on the residual is the same as would be obtained if the first-step dependent variable and all independent variables were included as independent variables in the second-step regression.

where $Analyst\ Following_{i,t+1}$ refers to the natural logarithm of one plus the number of analysts following firm i in year $t+1$.²¹⁻²² The independent variable of interest is the measure of accounting consistency (*Consistency*). If accounting consistency has no impact on analyst following, I expect that the coefficient on *Consistency* does not differ from zero.

I control for other determinants of analyst following as previously documented in the literature. Following prior literature (e.g., Bhushan 1989; Lang and Lundholm 1996; Barth, Kasznik, and McNichols 2001; Tan, Wang, and Welker 2011; De Franco et al. 2011), I control for firm size (*Assets*), book value to market value of equity (*BTM*), trading volume (*Volume*), intangible assets (*Intan*), industry-adjusted research and development expense (*R&D*), industry-adjusted depreciation expense (*Depreciation*), debt or equity issuances (*Issue*), earnings predictability (*Predictability*), earnings volatility (*Std(Earn)*), stock return volatility (*Std(Ret)*), and stock return (*Return*). The definitions of all variables are presented in Appendix C. To control for any sample-wide systematic differences across industries and years, I include industry and year fixed effects. In addition, to account for over-time correlation within the same firm, I cluster all standard errors at the firm level.

²¹ It is possible that analyst following and accounting consistency are simultaneously determined. As such, it would be hard to explain the regression results of Equation (6) if both variables are measured in year t . Thus, I use the lead-lag regression approach and measure analyst following (i.e., the dependent variable) in year $t+1$. The control variables also are measured in year $t+1$ as they affect analyst following in the same year. As the aforementioned problem does not seem to exist in Equation (7), I measure all variables in the equation in year t .

²² Alternatively, $Analyst\ Following_{i,t+1}$ can be measured as the number of analysts following firm i in year $t+1$. My results are robust to using the alternative measure of analyst following (untabulated).

H1b and H1c predict that accounting consistency is positively associated with analyst forecast accuracy, and negatively associated with analyst forecast dispersion. To test these hypotheses, I run the following regression:

$$\begin{aligned}
\text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{Consistency}_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\
& + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\
& + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std}(\text{Earn})_{i,t} + \beta_{11} \text{Std}(\text{Ret})_{i,t} + \beta_{12} \text{Return}_{i,t} \\
& + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
\end{aligned} \tag{7}$$

where *Forecast Accuracy*_{*i,t*} refers to analyst forecast accuracy for firm *i* in year *t*. *Forecast Dispersion*_{*i,t*} refers to analyst forecast dispersion for firm *i* in year *t*. The independent variable of interest is the measure of accounting consistency (*Consistency*). If accounting consistency increases analyst forecast accuracy, the coefficient on *Consistency* is expected to be significantly positive when the dependent variable is *Forecast Accuracy*_{*i,t*}. If accounting consistency decreases analyst forecast dispersion, the coefficient on *Consistency* is expected to be significantly negative when the dependent variable is *Forecast Dispersion*_{*i,t*}.

In Equation (7), I control for earnings surprise (ΔEarn), declining earnings (*NegUE*), negative earnings (*Loss*), negative special items (*NegSI*), forecast horizon (*Days*), firm size (*Assets*), intangible assets (*Intan*), earnings predictability (*Predictability*), earnings volatility (*Std(Earn)*), stock return volatility (*Std(Ret)*), stock return (*Return*) and analyst following (*Analyst Following*), as prior studies find that these variables are systematically associated with analyst earnings forecast accuracy (e.g., Lang and Lundholm 1996; Heflin, Subramanyam, and Zhang 2003; Tan, Wang, and Welker 2011;

De Franco et al. 2011). The definitions of all variables are presented in Appendix C. To control for any sample-wide systematic differences across industries and years, I include industry and year fixed effects. In addition, to account for over-time correlation within the same firm, I cluster all standard errors at the firm level.

4.3 Accounting Policy Changes and Analyst Forecast Characteristics

H2a predicts that accounting policy changes have no impact on the number of analysts following a firm. To test this hypothesis, I use the following regression:

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 CUMU_M_{i,t}(CUMU_V_{i,t}) + \beta_2 Assets_{i,t+1} + \beta_3 BTM_{i,t+1} \\
 & + \beta_4 Volume_{i,t+1} + \beta_5 Intan_{i,t+1} + \beta_6 R\&D_{i,t+1} + \beta_7 Depreciation_{i,t+1} + \beta_8 Issue_{i,t+1} \\
 & + \beta_9 Predictability_{i,t+1} + \beta_{10} Std(Earn)_{i,t+1} + \beta_{11} Std(Ret)_{i,t+1} + \beta_{12} Return_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned} \tag{8}$$

where *Analyst Following*_{*i,t+1*} refers to the natural logarithm of one plus the number of analysts following firm *i* in year *t+1*. The independent variable of interest is *CUMU_M*_{*i,t*} (*CUMU_V*_{*i,t*}), which is the absolute value of cumulative effect of a mandatory (voluntary) accounting policy change as reported in the income statement in year *t*, divided by beginning-of-period market value. As data on the magnitude of the impact of an accounting policy change on current year's earnings are not available, I use the absolute value of cumulative effect on prior years' earnings as a proxy. It should be noted that the measurement error in the proxy may attenuate my results. If the prediction of H2a is correct, I expect that the coefficient on *CUMU_M*_{*i,t*} (*CUMU_V*_{*i,t*}) does not differ from zero significantly. The control variables in Equation (8) are the same as Equation (6). The definitions of all variables are presented in Appendix C.

H2b and H2c predict that accounting policy changes reduce analyst forecast accuracy and increase analyst forecast dispersion. To test these hypotheses, I run the following regression:

$$\begin{aligned}
\text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{CUMU_}M_{i,t}(\text{CUMU_}V_{i,t}) \\
& + \beta_2 \Delta \text{Earn}_{i,t} + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} \\
& + \beta_8 \text{Intan}_{i,t} + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std}(\text{Earn})_{i,t} + \beta_{11} \text{Std}(\text{Ret})_{i,t} \\
& + \beta_{12} \text{Return}_{i,t} + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
\end{aligned} \tag{9}$$

where *Forecast Accuracy*_{*i,t*} refers to analyst forecast accuracy for firm *i* in year *t*. *Forecast Dispersion*_{*i,t*} refers to analyst forecast dispersion for firm *i* in year *t*. The independent variable of interest is *CUMU*_{*M*}_{*i,t*}(*CUMU*_{*V*}_{*i,t*}), which is the absolute value of cumulative effect of a mandatory (voluntary) accounting policy change as reported in the income statement in year *t*, divided by beginning-of-period market value. If the prediction of H2b is correct, the coefficient on *CUMU*_{*M*}_{*i,t*}(*CUMU*_{*V*}_{*i,t*}) is expected to be significantly negative when the dependent variable is *Forecast Accuracy*_{*i,t*}. If the prediction of H2c is correct, the coefficient on *CUMU*_{*M*}_{*i,t*}(*CUMU*_{*V*}_{*i,t*}) is expected to be significantly positive when the dependent variable is *Forecast Dispersion*_{*i,t*}. The control variables in Equation (9) are the same as Equation (7). The definitions of all variables are presented in Appendix C.

4.4 The Mitigating Effect of SFAS No. 154

H3a predicts that the impact of accounting policy changes on the number of analysts following a firm is mitigated under SFAS No. 154. To test the hypothesis, I run the

following regression for voluntary accounting policy changes under APB Opinion No. 20 and under SFAS No. 154, respectively:²³

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{CUMU_}V_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} \\
 & + \beta_4 \text{Volume}_{i,t+1} + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned} \tag{10}$$

where *Analyst Following*_{*i,t+1*} refers to the natural logarithm of one plus the number of analysts following firm *i* in year *t+1*. The independent variable of interest is *CUMU_V*_{*i,t*}, which is the absolute value of cumulative effect of a voluntary accounting policy change as reported in the income statement in year *t*, divided by beginning-of-period market value. If the prediction of H3a is correct, I expect that the coefficient on *CUMU_V*_{*i,t*} is significantly smaller for the accounting changes under SFAS No. 154 than for the accounting changes under APB Opinion No. 20. The control variables in Equation (10) are the same as Equation (6). The definitions of all variables are presented in Appendix C.

H3b and H3c predict that the impact of accounting policy changes on analyst forecast accuracy and dispersion is mitigated under SFAS No. 154. To test these

²³ There are two approaches to test H3a: (1) estimating Equation (10) for accounting policy changes under APB Opinion No. 20 and under SFAS No. 154, and then comparing the coefficients on *CUMU_V*_{*i,t*} for these two regressions; and (2) adding a dummy variable that takes a value of one if an accounting policy change is reported under SFAS No. 154 and an interaction term of this dummy variable and *CUMU_V*_{*i,t*}. I choose the first approach as all the coefficients on independent variables are allowed to differ between the two subsamples. Nevertheless, my inferences are unchanged if I use the second approach (untabulated).

hypotheses, I run the following regression for voluntary accounting policy changes under APB Opinion No. 20 and under SFAS No. 154, respectively:

$$\begin{aligned}
\text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{CUMU_}V_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\
& + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\
& + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std(Earn)}_{i,t} + \beta_{11} \text{Std(Ret)}_{i,t} + \beta_{12} \text{Return}_{i,t} \\
& + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
\end{aligned} \tag{11}$$

where *Forecast Accuracy*_{*i,t*} refers to analyst forecast accuracy for firm *i* in year *t*. *Forecast Dispersion*_{*i,t*} refers to analyst forecast dispersion for firm *i* in year *t*. The independent variable of interest is *CUMU_**V*_{*i,t*}, which is the absolute value of cumulative effect of a voluntary accounting policy change as reported in the income statement in year *t*, divided by beginning-of-period market value. If the prediction of H3b is correct, the coefficient on *CUMU_**V*_{*i,t*} is expected to be significantly less negative for the accounting changes under SFAS No. 154 than for the accounting changes under APB Opinion No. 20, when the dependent variable is *Forecast Accuracy*_{*i,t*}. If the prediction of H3c is correct, the coefficient on *CUMU_**V*_{*i,t*} is expected to be significantly less positive for the accounting changes under SFAS No. 154 than for the accounting changes under APB Opinion No. 20, when the dependent variable is *Forecast Dispersion*_{*i,t*}. The control variables in Equation (11) are the same as Equation (7). The definitions of all variables are presented in Appendix C.

Chapter 5

Sample Selection and Empirical Results

5.1 The Sample of Firms with Accounting Consistency Measure

My initial sample consists of 154,098 firm-year observations over the period 1994-2016 that are covered by CRSP/Compustat merged data. To estimate a firm's accounting function in the current year, I require that the earnings and stock return data are available for at least 12 quarters for the four years before the current year. As a result, 58,961 firm-year observations are excluded. To calculate the measure of accounting function stability, I require that the earnings data are available for at least three quarters for the current year. As a result, 862 firm-year observations are excluded. To be included in the sample, a firm-year observation must have all required data to calculate the independent variables that capture a firm's business operations stability. 5,109 firm-year observations are dropped because of missing values for any of these variables.

The final sample consists of 89,166 firm-year observations from 1994 to 2016. Panel A of Table 1 presents the sample selection procedure. Panel B of Table 1 presents the sample distribution by fiscal year. It shows that the sample is evenly distributed over the 1994-2016 sample period. The sample size in the later analysis varies depending on the availability of earnings quality measures and the availability of analyst earnings forecasts from I/B/E/S.

5.2 Calculating and Validating My Accounting Consistency Measure

5.2.1 Descriptive Statistics of My Accounting Consistency Measure

In this section, I provide descriptive statistics for my accounting consistency measure (*Consistency*). I start with the results from estimating Equation (1), which regresses earnings on stock return using 16 quarters' data prior to the current year. Panel A of Table 2 presents the descriptive statistics of the intercept, the coefficient on return, and the R^2 from the estimation of Equation (1). The sample consists of 95,137 firm-years with available data from 1994 to 2016. The mean (median) estimated $\alpha_{i,t}$ equals -0.007 (0.010) and the mean (median) estimated $\beta_{i,t}$ equals 0.021 (0.010). The mean (median) R^2 of the regression is 0.127 (0.072). These statistics are well aligned with De Franco et al. (2011).

Panel B of Table 2 provides the descriptive statistics of the measure of accounting function stability. Accounting function stability (*Stability*) is calculated as the negative value of the average absolute difference between the actual quarterly earnings of the current year and the predicted quarterly earnings from Equation (2). To predict quarterly earnings, Equation (2) applies the estimated $\alpha_{i,t}$ and $\beta_{i,t}$ from Equation (1) to the quarterly stock returns of the current year. As the earnings data are required for at least three quarters for the current year, the sample is reduced to 94,275 firm-years. The mean (median) *Stability* is -0.039 (-0.013), indicating that the average absolute difference between the actual quarterly earnings and the predicted quarterly earnings, on average, is 3.9% of beginning-of-period market value of equity.

To obtain my accounting consistency measure, I separate the measure of accounting function stability into two portions using Equation (3), which regresses *Stability* on measures of firms' business operations stability. All continuous variables are winsorized

at the 1st and 99th percentiles to mitigate the effect of outliers.²⁴ Panel A of Table 3 presents the results of estimating Equation (3). As a firm-year observation is required to have data to calculate all independent variables, the sample is reduced to 89,166 firm-years. Consistent with Peterson et al. (2015), I find that larger firms (*Assets*) tend to have more stable earnings. Also, I find that firms with large changes in assets ($\Delta Assets$), large changes in growth (ΔBTM), more diversified firms (*Segments*), firms with special items (*SItems*), debt or equity issuances (*Issue*), mergers (*Merger*), and CEO changes ($ChgCEO_{i,t-1}$) tend to have less stable earnings. In addition, as I predicted, firms with more volatile operating cash flows ($Std(CFO)$) and firms with industry changes ($ChgSIC$) have less stable earnings. I use the residual of Equation (3) to measure accounting consistency. Panel B of Table 3 provides the descriptive statistics of the measure of accounting consistency (*Consistency*). The mean (median) *Consistency* is 0.000 (0.009).

Panel C of Table 3 presents the correlation among the measure of accounting function stability (*Stability*), the measure of accounting consistency (*Consistency*) and earnings volatility ($Std(Earn)$). I note that accounting function stability (*Stability*) and accounting consistency (*Consistency*) are highly correlated. The Pearson and Spearman correlations between these two variables are 0.773 ($p < 0.0001$) and 0.436 ($p < 0.0001$). Accounting consistency (*Consistency*) and earnings volatility ($Std(Earn)$) are negatively and significantly correlated. The Pearson and Spearman correlations between these two

²⁴ In this study, unless otherwise specified, all continuous variables in regressions are winsorized at 1 percent and 99 percent. If I truncate all continuous variables at 1 percent and 99 percent, my main findings do not change (untabulated).

variables are -0.190 ($p < 0.0001$) and -0.091 ($p < 0.0001$).²⁵ The small value of the correlation coefficient indicates that accounting consistency (*Consistency*) and earnings volatility (*Std(Earn)*) are different but correlated variables. Accounting consistency (*Consistency*) captures the consistent use of accounting policies and estimates. Earnings volatility (*Std(Earn)*) captures the instability of firms' earnings performance. The significantly negative correlation between these two variables indicates that consistently applying accounting policies and estimates reduces firms' earnings volatility.

5.2.2 Validating My Accounting Consistency Measure

Since my measure of accounting consistency (*Consistency*) is new, I conduct a few tests to validate the measure. As changes in accounting policies, auditors, and CFOs reduce accounting consistency, I predict that *Consistency* is low for firms in the year when these events occur. Panel A of Table 4 presents the mean value of *Consistency* around mandatory accounting policy changes, voluntary accounting policy changes, auditor changes and CFO changes, respectively.²⁶ Year 0 is the year when these events occur. For mandatory accounting changes, voluntary accounting changes and auditor changes, I find that the mean *Consistency* is lower in the year when the changes occur (year 0), compared with the

²⁵ The Pearson (Spearman) correlation is a measure of the linear (monotonic) relationship between two variables. For a linear relationship between two variables, the Pearson and Spearman correlation coefficients are equal. In Panel C of Table 3, the Pearson correlation coefficients differ from the Spearman correlation coefficients, indicating that the variables are not linearly correlated.

²⁶ In Panels A and B of Table 4, I keep only the observations in which the absolute value of cumulative effect of an accounting change is greater than 1% of beginning-of-period market value of equity.

mean *Consistency* in the year before the changes (year -1).²⁷ For example, the mean *Consistency* is -0.003 in the year before mandatory accounting changes and it decreases to -0.007 in the year when these changes occur. I also notice that the mean *Consistency* is low in the two years following the changes (year 1 and year 2). This is because some “old” data from years preceding the changes are used to estimate the accounting function for these years. From the third year after the changes (year 3), the mean *Consistency* starts to increase as less “old” data are used to estimate the accounting function.²⁸ For CFO changes, I find that the mean *Consistency* declines from the year following the CFO changes (year 1). A possible reason is that the new CFO’s influence on accounting policies starts from the year after the appointment year (Geiger and North 2006). The mean *Consistency* is low in year 2 and year 3 compared with year -1, and starts to increase in year 4. The variation of the mean *Consistency* around these changes is shown more clearly in Figure 1.

To further examine the statistical significance of the change in my accounting consistency measure around accounting policy changes, auditor changes and CFO changes, regression analysis is employed. Panel B of Table 4 presents the regression results of Equation (4). The dependent variable is my measure of accounting consistency

²⁷ For voluntary accounting policy changes under SFAS No. 154, if I use the adjusted prior years’ quarterly financial information to calculate the prior years’ accounting function, I would not expect to find the decrease in *Consistency* in year 0. Unfortunately, the adjusted prior-period quarterly financial information based on the new accounting policy are not available as most firms only revise the prior-period annual financial information.

²⁸ Auditors are required to evaluate the consistency of financial statements in their reports since 2008. Thus, I can identify firm-years with accounting inconsistency since 2008 by selecting the auditor reports in which the auditor recognizes a change in accounting principle or an adjustment to correct a misstatement in previously issued financial statements. I find that the mean *Consistency* is lower in the year when accounting inconsistency is recognized in the firm by its auditor. This finding provides additional validation for my measure.

(*Consistency*). The independent variables of interest are *Post_ChgAM*, *Post_ChgAV*, *Post_ChgAU*, and *Post_ChgCFO*. The coefficients on *Post_ChgAM*, *Post_ChgAV*, *Post_ChgAU*, and *Post_ChgCFO* are -0.00447 (t -statistic = -2.33), -0.00585 (t -statistic = -2.32), -0.00243 (t -statistic = -4.20) and -0.00311 (t -statistic = -5.06), respectively. These coefficients are negative and statistically significant at the 5% level or better. These findings suggest that my measure of accounting consistency (*Consistency*) decreases significantly in the year when there is an accounting policy change or an auditor change, and in the year after there is a CFO change. To sum up, the empirical results in Panel A and Panel B of Table 4 indicate that *Consistency* is an appropriate measure of accounting consistency.

For additional validation, I test the impact of my accounting consistency measure on earnings persistence, earnings predictability and abnormal accruals. As accounting consistency leads to more persistent and more predictable earnings and smaller abnormal accruals, I predict a positive association between *Consistency* and the measure of earnings persistence (earnings predictability) and a negative association between *Consistency* and the measure of abnormal accruals. Panel C of Table 4 reports the regression results of Equation (5). The dependent variables are the measure of earnings persistence (*Persistence*) in column (1), the measure of earnings predictability (*Predictability*) in column (2) and the measure of abnormal accruals (*AbAcc*) in column (3), respectively. The independent variable of interest is my measure of accounting consistency (*Consistency*). In columns (1) and (2), as I remove observations with missing values for the dependent variables or for any control variables, the sample size is reduced to 75,430 firm-years. The coefficient on *Consistency* is 0.308 (t -statistic = 6.64) when the dependent variable is

earnings persistence (*Persistence*) and the coefficient on *Consistency* is 0.241 (t -statistic = 7.78) when the dependent variable is earnings predictability (*Predictability*). These coefficients are positive and statistically significant at the 1% level, suggesting that firms with higher accounting consistency have higher earnings persistence and earnings predictability. In column (3), the coefficient on *Consistency* is negative and statistically significant at the 1% level ($\beta = -0.0435$, t -statistic = -4.20), indicating that firms with higher accounting consistency have lower abnormal accruals. To sum up, the results in Panel C of Table 4 provide evidence that *Consistency* is a valid measure of accounting consistency.

For the regressions in Panel C of Table 4, the control variables generally have the expected effect on earnings quality. Consistent with Dechow and Dechow (2002), I find that earnings quality is positively associated with firm size (*Assets*) and negatively associated with sales volatility (*Std(Sales)*) and earnings volatility (*Std(Earn)*). Consistent with Wang (2006), Prawitt et al. (2009) and Cohen and Zarowin (2010), I find that younger firms (*Age*) and firms with higher risk for bankruptcy (*Leverage*), with lower profitability (*ROA*), with debt or equity issuances (*Issue*), and with non-Big 4 auditors (*Big4*) have lower earnings quality. However, the effect of *BTM*, *Std(CFO)*, *Growth*, and *Loss* on earnings quality is inconsistent across different measures of earnings quality.

5.3 Accounting Consistency and Analyst Forecast Characteristics

5.3.1 Descriptive Statistics

Panel A of Table 5 presents the summary statistics of the dependent variables (*Analyst Following_{i,t+1}*, *Forecast Accuracy_{i,t}*, and *Forecast Dispersion_{i,t}*) and the

independent variable of interest (*Consistency*) for Equations (6) and (7). The natural logarithm of one plus the number of analysts following a firm, on average, is 1.426, which is well in line with prior studies (e.g., He and Tian 2013). The mean (median) analyst forecast accuracy is 7.6% (0.7%) of stock price and the mean (median) analyst forecast dispersion is 1.9 % (0.3%) of stock price. Both numbers are slightly higher than those in De Franco et al. (2011). The mean (median) value of *Consistency* is 0.002 (0.009), which is slightly higher than that for the sample in Panel B of Table 3.

In Panel B of Table 5, I report the Pearson/Spearman correlation coefficients for all variables in Equation (6). It shows that accounting consistency (*Consistency*) is positively and significantly correlated with future analyst following (*Analyst Following_{i,t+1}*) (e.g., the Pearson correlation coefficient is 0.08 ($p < 0.0001$)). It also shows that all control variables in Equation (6) are significantly correlated with the dependent variable (*Analyst Following_{i,t+1}*). In Panel C of Table 5, I report the Pearson/Spearman correlation coefficients for all variables in Equation (7). As expected, accounting consistency (*Consistency*) is positively and significantly correlated with analyst forecast accuracy (*Forecast Accuracy_{i,t}*) (e.g., the Pearson correlation coefficient is 0.19 ($p < 0.0001$)) but negatively and significantly correlated with analyst forecast dispersion (*Forecast Dispersion_{i,t}*) (e.g., the Pearson correlation coefficient is -0.17 ($p < 0.0001$)). In addition, all control variables in Equation (7) are significantly correlated with the dependent variables (*Forecast Accuracy_{i,t}* and *Forecast Dispersion_{i,t}*). In sum, Panel B and Panel C of Table 5 provide preliminary evidence for my first hypothesis that firms with higher accounting consistency have greater analyst following, higher analyst forecast accuracy and lower forecast dispersion.

5.3.2 Main Results

Table 6 presents the regression results of Equation (6), which regresses future analyst following ($Analyst\ Following_{i,t+1}$) on accounting consistency ($Consistency$). Since I remove firm-year observations with missing values for the dependent variable or for any control variables, the sample is reduced to 69,729 firm-years. Most importantly, the coefficient on $Consistency$ ($\beta = 0.852$, t -statistic = 10.70) is positive and statistically significant at the 1% level. This result suggests that higher accounting consistency is associated with a greater number of analysts following a firm. The effect of accounting consistency on analyst following is also economically significant. Since the dependent variable is the log of the number of analysts following a firm, a one standard deviation increase in accounting consistency (0.045) is associated with an increase in analyst following of about 3.83% ($= 0.045 \times 0.852$). Given that the mean number of analysts covering a firm in my sample is 5.88 (untabulated), a 3.83% increase from the mean number of analysts covering a firm is equivalent to about 0.23 analysts ($= 5.88 \times 3.83\%$). Therefore, I conclude that the positive effect of accounting consistency on analyst following is not only statistically significant, but also economically significant. This is consistent with the notion that the reduced costs to analysts of covering a firm with higher accounting consistency encourage analyst following.

The coefficients on the control variables are generally consistent with prior studies. Larger firms ($Assets$) and firms with higher growth (BTM) have greater analyst following. Consistent with Barth et al. (2001), I find that trading volume ($Volume$), industry-adjusted research and development expense ($R\&D$), and industry-adjusted depreciation expense

(*Depreciation*) are positively related to analyst following. Consistent with De Franco et al. (2011), I find that analyst following is positively associated with earnings predictability (*Predictability*) and negatively associated with earnings volatility (*Std(Earn)*) and stock return volatility (*Std(Ret)*). Similar to Tan et al. (2011), I document that analyst following is greater for firms with more intangible assets (*Intan*) and with lower stock return (*Return*). Contrary to De Franco et al. (2011) and Tan et al. (2011), I find that firms with debt or equity issuances (*Issue*) have smaller analyst following. Overall, the regression results of Table 6 show that accounting consistency increases future analyst following. This conclusion rejects hypothesis H1a, which predicts that accounting consistency is unrelated to analyst following.

Table 7 presents the regression results of Equation (7). The dependent variables of Equation (7) are analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in column (1) and analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in column (2). The independent variable of interest is the measure of accounting consistency (*Consistency*). In column (1), the coefficient on *Consistency* ($\beta = 0.685$, t -statistic = 6.27) is positive and statistically significant at the 1% level, indicating that accounting consistency is positively related to analyst forecast accuracy. In terms of economic significance, a one standard deviation increase in accounting consistency (0.045) is associated with an increase in analyst forecast accuracy of about 3.08% ($= 0.045 \times 0.685$) of stock price. Given that the mean analyst forecast accuracy is 7.6% of stock price, it represents an improvement in analyst forecast accuracy of about 41% ($= 3.08\% \div 7.6\%$) for the average firm in the sample. Therefore, the above results show that the positive effect of accounting consistency on analyst forecast accuracy is statistically and economically significant.

The effect of control variables on analyst forecast accuracy is consistent with prior literature. Consistent with Lang and Lundholm (1996), I find that firms with earnings surprise ($\Delta Earn$) and firms with more volatile earnings ($Std(Earn)$) have less accurate analyst earnings forecasts. Analyst forecast accuracy is negatively associated with negative earnings ($Loss$), negative special items ($NegSI$) and forecast horizon ($Days$), consistent with the findings in Heflin et al. (2003). Similar to De Franco et al. (2011), I document that analyst earnings forecasts are less accurate for firms with higher stock return volatility ($Std(Ret)$). Consistent with Tan et al. (2011), firms with greater analyst following ($Analyst Following$) and higher stock return ($Return$) have more accurate analyst earnings forecasts. The coefficients on declining earnings ($NegUE$), intangible assets ($Intan$) and earnings predictability ($Predictability$) are not statistically significant. Inconsistent with De Franco et al. (2011), I find that firm size ($Assets$) is negatively associated with analyst forecast accuracy. In short, the results presented in column (1) of Table 7 suggest that accounting consistency enhances analyst forecast accuracy, supporting hypothesis H1b.

Column (2) of Table 7 reports the regression results of analyst forecast dispersion on accounting consistency. The coefficient on *Consistency* ($\beta = -0.105$, t -statistic = -3.90) is negative and statistically significant at the 1% level, suggesting a negative association between accounting consistency and analyst forecast dispersion. A one standard deviation increase in accounting consistency (0.045) leads to a decrease in analyst forecast dispersion of about 0.47% ($= 0.045 \times -0.105$) of stock price. Given that the mean analyst forecast dispersion is 1.9% of stock price, it suggests a reduction of analyst forecast dispersion of about 25% ($= 0.47\% \div 1.9\%$) for the average firm in the sample. Therefore, the above

results show that accounting consistency has a statistically and economically significant negative impact on analyst forecast dispersion.

The coefficients on the control variables are generally consistent with prior literature, with three exceptions. That is, firms with declining earnings (*NegUE*), with negative special items (*NegSI*), and with smaller size (*Assets*) have less dispersed analyst forecasts. For other control variables, I find that analyst forecasts is more dispersed for firms with earnings surprise ($\Delta Earn$), with negative earnings (*Loss*), with longer forecast horizon (*Days*), with more volatile earnings (*Std(Earn)*), with more volatile stock return (*Std(Ret)*), with lower stock return (*Return*), and with smaller analyst following (*Analyst Following*). Intangible assets (*Intan*) and earnings predictability (*Predictability*) show less explanatory power. In short, the results in column (2) of Table 7 show that accounting consistency reduces analyst forecast dispersion, supporting hypothesis H1c.

5.4 The Sample of Accounting Policy Changes

5.4.1 The Sample of Firms with Mandatory Accounting Policy Changes

I begin sample construction by identifying firm-years that are covered by CRSP/Compustat merged data with non-missing and non-zero values for the cumulative effect of an accounting change (ACCHG) from 1994 to 2007.²⁹ 200 firm-years are excluded as a voluntary accounting policy change takes place in the same year. I delete

²⁹ Following Shroff (2017), I do not include firm-years with zero cumulative effect. This is because firms have zero cumulative effect when they are not affected by accounting standard changes or when they choose an adoption method that does not require firms to report a cumulative effect. So I cannot tell whether firms with zero cumulative effect experience accounting standard changes or not.

observations with missing values for the dependent variable or for any control variables for the analyst following test. Thus, 886 observations are removed from the sample.

My final sample consists of 2,530 firm-year observations. Panel A of Table 8 summarizes the sample selection procedure. Panel B of Table 8 presents the number of observations and the accounting standards adopted each year over the sample period 1994-2007, as well as the scaled mean absolute value of the cumulative effect. It shows that the number of observations for each year ranges from 5 in 2007 to 580 in 2002 and that the number of observations between 2001 and 2003 accounts for 53% of my sample.³⁰ The mean CUMU_M is 6.8% of beginning-of-period market value of equity, indicating that accounting standard changes have a significant impact on firms' earnings.

5.4.2 The Sample of Firms with Voluntary Accounting Policy Changes

My initial sample of voluntary accounting policy changes consists of 1,884 observations from 1994 to 2015. Audit Analytics provides a dataset of voluntary accounting policy changes from 1999 to 2015 and I hand collect data on voluntary accounting policy changes from 1994 to 1998.³¹ I use GVKEY to link the accounting change data with CRSP/Compustat merged data. I delete 573 observations with missing

³⁰ As most mandatory accounting policy changes occur during the Dotcom Crash period, there is concern that the Dotcom Crash causes accounting standard changes and a poor performance of analysts. To address this concern, I re-run Equations (8) and (9) using mandatory accounting policy changes before 2000 and after 2003. The inferences are unchanged (untabulated).

³¹ I search 10-K filings with a preferability letter and then read the financial reports to identify the cumulative effect of an accounting policy change. Public firms are generally required to obtain a preferability letter from their auditors when they make a voluntary change in accounting policies. In the letter, the auditor concurs with management that the new accounting policy is preferable to the old one.

GVKEY for the accounting change data. Further, I exclude 342 observations with missing values for the dependent variable or for any control variables for the analyst following test.

My final sample consists of 969 firm-year observations. Panel C of Table 8 reports the sample selection procedure. Panel D of Table 8 reports the number of observations and the scaled mean absolute value of the cumulative effect for each year over the sample period 1994-2015. It shows that the number of observations for each year ranges from 4 in 1995 to 74 in 2015 and that the number of observations for each year, on average, is 44. The mean CUMU_V is 2.0% of beginning-of-period market value of equity, suggesting that voluntary accounting policy changes also have a significant impact on firms' earnings.

To examine the mitigating effect of SFAS No. 154, I identify whether a voluntary accounting policy change is reported under SFAS No. 154 or not. Specifically, accounting policy changes made in fiscal years beginning after December 15, 2005 (i.e., the effective date of SFAS No. 154) are identified as accounting changes under SFAS No. 154 and the remaining observations are identified as accounting changes under APB Opinion No. 20. As a result, there are 597 voluntary accounting policy changes under SFAS No. 154 and 372 voluntary accounting policy changes under APB Opinion No. 20.

5.5 Accounting Policy Changes and Analyst Forecast Characteristics

5.5.1 Descriptive Statistics

Panel A of Table 9 reports the descriptive statistics for the dependent variables (*Analyst Following_{i,t+1}*, *Forecast Accuracy_{i,t}* and *Forecast Dispersion_{i,t}*) and the independent variable of interest (*CUMU_M*) in Equation (8) and Equation (9) for the

mandatory accounting policy change sample. The natural logarithm of one plus the number of analysts following a firm, on average, is 1.633. The mean (median) analyst forecast accuracy is 4.8% (0.7%) of stock price and the mean (median) analyst forecast dispersion is 1.0 % (0.2%) of stock price. The mean (median) value of *CUMU_M* is 6.8% (0.5%) of beginning-of-period market value of equity, indicating that the variable has large positive outliers.

For the mandatory accounting policy change sample, the Pearson/Spearman correlation coefficients for all variables in Equation (8) are reported in Panel B of Table 9. It shows that the absolute value of cumulative effect (*CUMU_M*) is negatively and significantly correlated with future analyst following (*Analyst Following_{i,t+1}*) (e.g., the Pearson correlation coefficient is -0.19 (p<0.0001)). It also shows that almost all control variables have significant correlations with the dependent variable (*Analyst Following_{i,t+1}*). The Pearson/Spearman correlation coefficients for all variables in Equation (9) are reported in Panel C of Table 9. As predicted, the absolute value of cumulative effect (*CUMU_M*) is negatively and significantly correlated with analyst forecast accuracy (*Forecast Accuracy_{i,t}*) (e.g., the Pearson correlation coefficient is -0.21 (p<0.0001)) and positively and significantly correlated with analyst forecast dispersion (*Forecast Dispersion_{i,t}*) (e.g., the Pearson correlation coefficient is 0.20 (p<0.0001)). I also notice that almost all control variables are significantly correlated with the dependent variables (*Forecast Accuracy_{i,t}* and *Forecast Dispersion_{i,t}*).

Panel D of Table 9 reports the descriptive statistics for the dependent variables (*Analyst Following_{i,t+1}*, *Forecast Accuracy_{i,t}* and *Forecast Dispersion_{i,t}*) and the independent variable of interest (*CUMU_V*) in Equation (8) and Equation (9) for the

voluntary accounting policy change sample. The natural logarithm of one plus the number of analysts following a firm, on average, is 1.875, which is slightly higher than that for the mandatory accounting policy change sample. The mean (median) analyst forecast accuracy is 1.6% (0.5%) of stock price and the mean (median) analyst forecast dispersion is 0.5% (0.2%) of stock price. These two numbers are slightly lower than those for the mandatory accounting policy change sample. The mean value of *CUMU_V* is 2.0% of beginning-of-period market value of equity. The median value of *CUMU_V* is 0 because I include voluntary accounting policy changes with zero cumulative effect in my sample.³²

For the voluntary accounting policy change sample, the Pearson/Spearman correlation coefficients for all variables in Equation (8) are presented in Panel E of Table 9. I find that the absolute value of cumulative effect (*CUMU_V*) is negatively and significantly correlated with future analyst following (*Analyst Following_{i,t+1}*) (e.g., the Pearson correlation coefficient is -0.13 ($p < 0.0001$)). I also find that most control variables are significantly correlated with the dependent variable (*Analyst Following_{i,t+1}*). The Pearson/Spearman correlation coefficients for all variables in Equation (9) are presented in Panel F of Table 9. It shows that the absolute value of cumulative effect (*CUMU_V*) is negatively and significantly correlated with analyst forecast accuracy (*Forecast Accuracy_{i,t}*) (e.g., the Pearson correlation coefficient is -0.21 ($p < 0.0001$)) and is positively and significantly correlated with analyst forecast dispersion (*Forecast Dispersion_{i,t}*) (e.g.,

³² The cumulative effect is normally zero when firms change, for example, goodwill & intangible impairment testing date or balance sheet classification of assets. As Audit Analytics has identified that the cumulative effect of those accounting policy changes is zero, I include them in my sample (473 observations). Nevertheless, my inferences do not change if I drop the observations with zero cumulative effect.

the Pearson correlation coefficient is 0.16 ($p < 0.0001$). It also shows that all control variables are significantly correlated with the dependent variables (*Forecast Accuracy_{i,t}* and *Forecast Dispersion_{i,t}*).

Table 10 presents the mean analyst following (*Analyst Following_{i,t+1}*) in Panel A, the mean analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in Panel B and the mean analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in Panel C around mandatory accounting policy changes and voluntary accounting policy changes, respectively. Year 0 is the year when the changes occur. Panel A shows that the mean *Analyst Following_{i,t+1}* is lower in the year when mandatory accounting changes occur (year 0) and two years after it, compared with the mean *Analyst Following_{i,t+1}* in years before the changes. It also shows that the decrease in the mean *Analyst Following_{i,t+1}* from year -1 to year 0 is statistically insignificant (t -statistic = -1.40). However, I do not find similar results for voluntary accounting changes. Panel B shows that the mean *Forecast Accuracy_{i,t}* decreases in the year when mandatory accounting changes occur (year 0) and increases after it, and that the decrease in the mean *Forecast Accuracy_{i,t}* from year -1 to year 0 is statistically significant (t -statistic = -4.47). I find similar results for voluntary accounting changes. Panel C shows that the mean *Forecast Dispersion_{i,t}* increases in the year when mandatory accounting changes occur (year 0) and decreases after it, and that the increase in the mean *Forecast Dispersion_{i,t}* from year -1 to year 0 is statistically significant (t -statistic = 3.61). Similar results are found for voluntary accounting changes. The variation of the mean *Analyst Following_{i,t+1}*, the mean *Forecast Accuracy_{i,t}* and the mean *Forecast Dispersion_{i,t}* around mandatory accounting policy changes and voluntary accounting policy changes is shown in Figure 2 more clearly. I will test hypotheses H2a, H2b and H2c using regression analyses.

5.5.2 Main Results

Table 11 presents the regression results of Equation (8). The dependent variable is future analyst following (*Analyst Following_{i,t+1}*). The independent variables of interest are the absolute value of cumulative effect of a mandatory accounting policy change (*CUMU_M*) in column (1) and the absolute value of cumulative effect of a voluntary accounting policy change (*CUMU_V*) in column (2).³³ In column (1), the coefficient on *CUMU_M* ($\beta = -0.163$, t -statistic = -2.73) is negative and statistically significant at the 1% level, indicating that the earnings effect of a mandatory accounting policy change is negatively associated with future analyst following. This finding is consistent with the notion that the increased costs to analysts following a firm with a mandatory accounting policy change decrease the supply of analyst service. In column (2), the coefficient on *CUMU_V* ($\beta = -0.255$, t -statistic = -1.05) is negative but statistically insignificant at conventional levels, indicating that the earnings effect of a voluntary accounting policy change generally does not affect future analyst following.

With regard to the control variables, I find that firm size, growth, trading volume, intangible assets, industry-adjusted research and development expense, industry-adjusted depreciation expense and earnings predictability are significantly and positively related to analyst following, while debt or equity issuances, earnings volatility, stock return volatility

³³ For regressions related to voluntary accounting policy changes, all continuous variables are winsorized at 5 percent and 95 percent because of some extremely high values. If all continuous variables in those regressions are winsorized at 1 percent and 99 percent, the regression results of Equation (9) show that voluntary accounting policy changes have no impact on analyst forecast accuracy and dispersion (untabulated). This finding is not consistent with prior studies (e.g., Brown 1983; Biddle and Ricks 1988).

and stock return are all significantly and negatively related to analyst following. To sum up, the results in column (1) for mandatory accounting policy changes reject hypothesis H2a, which predicts that accounting policy changes have no impact on analyst following. However, the results in column (2) for voluntary accounting policy changes cannot reject hypothesis H2a.

Table 12 presents the regression results of Equation (9). The dependent variables are analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in columns (1) and (2), and analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in columns (3) and (4). The independent variables of interest are the absolute value of cumulative effect of a mandatory accounting policy change (*CUMU_M*) in columns (1) and (3), and the absolute value of cumulative effect of a voluntary accounting policy change (*CUMU_V*) in columns (2) and (4). In column (1), the coefficient on *CUMU_M* ($\beta = -0.114$, t -statistic = -1.97) is negative and statistically significant at the 5% level, indicating that the earnings effect of a mandatory accounting policy change is negatively associated with analyst forecast accuracy. In terms of economic significance, a one percent increase in the absolute value of cumulative effect (*CUMU_M*) leads to a decrease in analyst forecast accuracy of about 0.11% ($= 0.01 \times -0.114$) of stock price. Given that the mean analyst forecast accuracy is 4.8% of stock price, it represents a reduction of analyst forecast accuracy of about 2.3% ($= 0.11\% \div 4.8\%$) for the average firm in the sample. In column (2), the coefficient on *CUMU_V* ($\beta = -0.123$, t -statistic = -2.95) is negative and statistically significant at the 1% level, indicating that the earnings effect of a voluntary accounting policy change is negatively associated with analyst forecast accuracy. In terms of economic significance, a one percent increase in the absolute value of cumulative effect (*CUMU_V*) leads to a reduction of analyst forecast

accuracy of about 7.7% ($= 0.01 \times -0.123 \times 100\% \div 1.6\%$) for the average firm in the sample.

With regard to the control variables, I find that earnings surprise, negative earnings, forecast horizon and stock return volatility are significantly and negatively related to analyst forecast accuracy, while analyst following is significantly and positively related to analyst forecast accuracy. Other control variables exhibit less explanatory power. To sum up, the results in columns (1) and (2) of Table 12 show that both mandatory and voluntary accounting policy changes have a statistically and economically significant negative effect on analyst forecast accuracy. The finding supports hypothesis H2b, which predicts that accounting policy changes reduce analyst forecast accuracy.

In column (3) of Table 12, the coefficient on *CUMU_M* ($\beta = 0.0172$, t -statistic = 1.98) is positive and statistically significant at the 5% level, indicating that the earnings effect of a mandatory accounting policy change is positively associated with analyst forecast dispersion. In terms of economic significance, a one percent increase in the absolute value of cumulative effect (*CUMU_M*) leads to an increase in analyst forecast dispersion of about 0.02% ($= 0.01 \times 0.0172$) of stock price. Given that the mean analyst forecast dispersion is 1.0% of stock price, it represents an increase in analyst forecast dispersion of about 2.0% ($= 0.02\% \div 1.0\%$) for the average firm in the sample. In column (4), the coefficient on *CUMU_V* ($\beta = 0.0186$, t -statistic = 1.83) is positive and statistically significant at the 10% level, indicating that the earnings effect of a voluntary accounting policy change is positively associated with analyst forecast dispersion. In terms of economic significance, a one percent increase in the absolute value of cumulative effect

(*CUMU_V*) leads to an increase in analyst forecast dispersion of about 3.7% ($= 0.01 \times 0.0186 \times 100\% \div 0.5\%$) for the average firm in the sample.

As to the control variables, I find that earnings surprise, negative earnings, earnings volatility and stock return volatility are significantly and positively associated with analyst forecast dispersion, while analyst following is significantly and negatively associated with analyst forecast dispersion. Other control variables exhibit less explanatory power. To sum up, the results in columns (3) and (4) of Table 12 show that both mandatory and voluntary accounting policy changes have a statistically and economically significant positive impact on analyst forecast dispersion. The finding supports hypothesis H2c, which predicts that accounting policy changes increase analyst forecast dispersion.

5.6 The Mitigating Effect of SFAS No. 154

5.6.1 Descriptive Statistics

Table 13 presents the mean analyst following (*Analyst Following_{i,t+1}*) in Panel A, the mean analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in Panel B and the mean analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in Panel C around voluntary accounting policy changes under APB Opinion No. 20 (hereafter, the “APB20 sample”) and under SFAS No. 154 (hereafter, the “SFAS154 sample”), respectively. Year 0 is the year when the changes occur. In Panel A, I find that the mean *Analyst Following_{i,t+1}* for the APB20 sample is lower in year 0 and two years after it, compared with the mean *Analyst Following_{i,t+1}* in years before the changes. I also find that the decrease in the mean *Analyst Following_{i,t+1}* from year -1 to year 0 is statistically insignificant (*t*-statistic = -1.09). However, the results are

opposite for the SFAS154 sample and there is a significant increase in the mean *Analyst Following*_{*i,t+1*} from year -1 to year 0 (*t*-statistic = 4.69). Panel B shows that compared with the mean *Forecast Accuracy*_{*i,t*} in the year before the changes (year -1), the mean *Forecast Accuracy*_{*i,t*} decreases in year 0 by 0.5% (= -0.020 – (-0.015)) of stock price for the APB20 sample, and by 0.2% (= -0.013 – (-0.011)) of stock price for the SFAS154 sample. It also shows that the decrease in the mean *Forecast Accuracy*_{*i,t*} from year -1 to year 0 is statistically significant for the APB20 sample (*t*-statistic = -2.63) and for the SFAS154 sample (*t*-statistic = -1.96), respectively. Panel C shows that compared with the mean *Forecast Dispersion*_{*i,t*} in the year before the changes (year -1), the mean *Forecast Dispersion*_{*i,t*} increases in year 0 by 0.1% (= 0.006 – 0.005) of stock price for the APB20 sample, and by 0.1% (= 0.005 – 0.004) of stock price for the SFAS154 sample. It also shows that the increase in the mean *Forecast Dispersion*_{*i,t*} from year -1 to year 0 is statistically significant only for the APB20 sample (*t*-statistic = 2.84). The variation of the mean *Analyst Following*_{*i,t+1*}, the mean *Forecast Accuracy*_{*i,t*} and the mean *Forecast Dispersion*_{*i,t*} around voluntary accounting policy changes under APB Opinion No. 20 and under SFAS No. 154 is shown in Figure 3 more clearly. I will test hypotheses H3a, H3b and H3c using regression analyses.

5.6.2 Main Results

Table 14 presents the regression results of Equation (10). The dependent variable is future analyst following (*Analyst Following*_{*i,t+1*}). The independent variable of interest is the absolute value of cumulative effect of a voluntary accounting policy change (*CUMU_V*) for the APB20 sample in column (1) and for the SFAS154 sample in column

(2). I find that the coefficients on *CUMU_V* in column (1) ($\beta = -0.172$, t -statistic = -0.57) and in column (2) ($\beta = -0.197$, t -statistic = -0.42) are negative but statistically insignificant at conventional levels. The results in both columns indicate that the earnings effect of a voluntary accounting policy change under APB Opinion No. 20 (under SFAS No. 154) generally has no impact on future analyst following. In addition, the t -test of coefficient differences reveals that the coefficient on *CUMU_V* in column (1) does not significantly differ from the coefficient on *CUMU_V* in column (2) (p -value = 0.48). This suggests that SFAS No. 154 does not influence the effect of voluntary accounting policy changes on analyst following. As to the control variables, the signs and levels of statistical significance of the coefficients on control variables in Table 14 are similar to those in column (2) of Table 11. In short, the results presented in Table 14 reject H3a, which predicts that the impact of accounting policy changes on analyst following is mitigated under SFAS No. 154.

Table 15 presents the regression results of Equation (11). The dependent variables are analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in columns (1) and (2), and analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in columns (3) and (4). The independent variable of interest is the absolute value of cumulative effect of a voluntary accounting policy change (*CUMU_V*) for the APB20 sample in columns (1) and (3) and for the SFAS154 sample in columns (2) and (4). In column (1), the coefficient on *CUMU_V* ($\beta = -0.196$, t -statistic = -2.25) is negative and statistically significant at the 5% level. In column (2), the coefficient on *CUMU_V* ($\beta = -0.0647$, t -statistic = -1.26) is negative but statistically insignificant at conventional levels. The results in both columns suggest that only the earnings effect of a voluntary accounting policy change under APB Opinion No. 20 is

significantly and negatively associated with analyst forecast accuracy. In addition, the *t*-test of coefficient differences reveals that the coefficient on *CUMU_V* in column (2) is significantly less negative than the coefficient on *CUMU_V* in column (1) (*p*-value = 0.07), suggesting that the effect of voluntary accounting policy changes on analyst forecast accuracy is weaker for the SFAS154 sample than that for the APB20 sample. As to the control variables, the signs and levels of statistical significance of the coefficients on control variables in these two columns are similar to those in Column (2) of Table 12. To sum up, the results in columns (1) and (2) of Table 15 support hypothesis H3b, which predicts that the impact of accounting policy changes on analyst forecast accuracy is mitigated under SFAS No. 154.

In column (3) of Table 15, the coefficient on *CUMU_V* ($\beta = 0.0364$, *t*-statistic = 1.84) is positive and statistically significant at the 10% level. However, in column (4), the coefficient on *CUMU_V* ($\beta = 0.00604$, *t*-statistic = 0.50) is positive but statistically insignificant at conventional levels. The results in both columns suggest that only the earnings effect of a voluntary accounting policy change under APB Opinion No. 20 is significantly and positively associated with analyst forecast dispersion. In addition, the *t*-test of coefficient differences reveals that the coefficient on *CUMU_V* in column (4) is significantly less positive than the coefficient on *CUMU_V* in column (3) (*p*-value = 0.03), suggesting that the effect of accounting policy changes on analyst forecast dispersion is weaker for the SFAS154 sample than that for the APB20 sample. As to the control variables, the signs and levels of statistical significance of the coefficients on control variables in these two columns are similar to those in column (4) of Table 12. To sum up, the results in columns (3) and (4) of Table 15 support H3c, which predicts that the impact

of accounting policy changes on analyst forecast dispersion is mitigated under SFAS No. 154.

Chapter 6

Additional Tests

6.1 An Alternative Measure of Accounting Consistency—Prices Lead Earnings

Prior studies find that stock prices incorporate firms' economic events before they are incorporated in accounting earnings (e.g., Collins, Kothari, Shanken, and Sloan 1994; Beaver and Ryan 2000; Gelb and Zarowin 2002). That is, an economic event is incorporated in a firm's stock price in the current quarter, but may be incorporated in the firm's earnings in future quarters. As a result, the current quarter's earnings reflect the economic events occurring during the quarter and those occurring during prior quarters. In consideration of the lead-lag relation between return and earnings, I revise Equation (1) by adding one-period lagged stock return as follows:

$$Earnings_{i,q} = \alpha_{i,t} + \beta_{1,i,t} Return_{i,q} + \beta_{2,i,t} Return_{i,q-1} + \varepsilon_{i,q} \quad (12)$$

where $Earnings_{i,q}$ is the ratio of quarterly net income before extraordinary items to the beginning-of-period market value of equity; $Return_{i,q}$ is the stock return during the quarter. $Return_{i,q-1}$ is the stock return during the prior quarter. $\hat{\alpha}_{i,t}$, $\hat{\beta}_{1,i,t}$ and $\hat{\beta}_{2,i,t}$ are the proxies for the accounting function of firm i during the past 16 quarters (from year $t-4$ to $t-1$). Then, I follow my previous algorithm to create a revised measure of accounting consistency, which is labeled as *Consistency_PLE*.

I replicate the regression results in Tables 6 and 7 using the alternative measure of accounting consistency (*Consistency_PLE*) instead of *Consistency*. Panel A of Table 16 replicates the results in Table 6. Similar to Table 6, the coefficient on *Consistency_PLE* is

positive and statistically significant at the 1% level. Furthermore, the magnitude of the coefficient on *Consistency_PLE* ($\beta = 0.780$) is similar to the coefficient on *Consistency* in Table 6 ($\beta = 0.852$). Panel B of Table 16 replicates the results in Table 7. When the dependent variable is analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in column (1), the coefficient on *Consistency_PLE* is positive and statistically significant at the 1% level. When the dependent variable is analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in column (2), the coefficient on *Consistency_PLE* is negative and statistically significant at the 1% level. The results are consistent with the findings in Table 7. Also, I note that the magnitude of the coefficient on *Consistency_PLE* in column (1) ($\beta = 0.610$) is similar to the coefficient on *Consistency* in column (1) of Table 7 ($\beta = 0.685$) and that the magnitude of the coefficient on *Consistency_PLE* in column (2) ($\beta = -0.104$) is almost the same with the coefficient on *Consistency* in column (2) of Table 7 ($\beta = -0.105$). In addition, the signs and magnitudes of the coefficients on control variables in Panel A (Panel B) of Table 16 are similar to those in Table 6 (Table 7).

To sum up, the results presented in Table 16 are consistent with the findings in Tables 6 and 7 and indicate that accounting consistency increases future analyst following and analyst forecast accuracy, but reduces analyst forecast dispersion.³⁴⁻³⁵

³⁴ Accounting function may vary across quarters. To control for this effect, I revise Equation (1) by adding three indicator variables that take a value of one if the observation is in quarter 1 (2 or 3) and 0 otherwise. Then, following the same calculation procedure with *Consistency*, I create another alternative measure of accounting consistency. I replicate Tables 6 and 7 using this measure and find similar results (untabulated).

³⁵ Prior studies document that earnings reflect bad news more quickly than good news (e.g., Basu 1997). To control for the asymmetric timeliness of earnings, I revise Equation (1) by adding a dummy variable that takes a value of one if stock return is negative and an interaction term of this dummy variable and stock return. Then, following the same calculation procedure with *Consistency*,

6.2 An Alternative Measure of Accounting Consistency—Measuring Accounting Function Stability Directly

In section 2.3, I measure the accounting function stability (*Stability*) indirectly by comparing the actual earnings and predicted earnings calculated by applying the prior years' accounting function to the current year's economic events. I measure *Stability* in this way to avoid introducing the measurement error of estimating the current year's accounting function. I can also measure accounting function stability directly using the following three steps. First, I estimate Equation (1) using the quarterly earnings and return data from year t-4 to t-1 to obtain the last year's accounting function $\hat{\alpha}_{i,t-1}$ and $\hat{\beta}_{i,t-1}$. Second, I estimate Equation (1) using data from year t-3 to t to obtain the current year's accounting function $\hat{\alpha}_{i,t}$ and $\hat{\beta}_{i,t}$. Finally, I calculate the accounting function stability (*Stability_Direct*) as the negative value of the average absolute difference between the current year's accounting function and the last year's accounting function as follows.

$$Stability_Direct_{i,t} = -\frac{\left| \hat{\alpha}_{i,t} - \hat{\alpha}_{i,t-1} \right| + \left| \hat{\beta}_{i,t} - \hat{\beta}_{i,t-1} \right|}{2}$$

Greater value of *Stability_Direct* indicates greater stability of accounting function. Then, I separate *Stability_Direct* using Equation (3) to create a revised measure of accounting consistency, which is labeled as *Consistency_Direct*.

I create another alternative measure of accounting consistency. I replicate Tables 6 and 7 using this measure and find similar results (untabulated).

I replicate Tables 6 and 7 using this revised measure of accounting consistency (*Consistency_Direct*). Panel A of Table 17 replicates the results in Table 6. I find that the coefficient on *Consistency_Direct* is positive and statistically significant at the 1% level ($\beta = 1.154$, t -statistic = 10.56). This finding is consistent with that in Table 6. Panel B of Table 17 replicates the results in Table 7. When the dependent variable is analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in column (1), I find that the coefficient on *Consistency_Direct* is positive and statistically significant at the 1% level ($\beta = 0.611$, t -statistic = 4.68). When the dependent variable is analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in column (2), I find that the coefficient on *Consistency_Direct* is negative and statistically significant at the 1% level ($\beta = -0.0852$, t -statistic = -2.78). The results in Panel B are consistent with the findings in Table 7. In addition, the signs and magnitudes of the coefficients on control variables in Panel A (Panel B) of Table 17 are similar to those in Table 6 (Table 7).

In sum, the results reported in Table 17 are consistent with the findings in Tables 6 and 7, suggesting that the findings in Tables 6 and 7 are robust to using a direct method to calculate accounting function stability.

6.3 A Ranked Measure of Accounting Consistency

My main tests use a continuous version of *Consistency* to measure accounting consistency. As *Consistency* is measured using the residual from a regression (i.e., Equation (3)), measurement error in the measure is unavoidable. Following prior studies (e.g., Lara, Osma, and Penalva 2016), I re-estimate the tests using a ranked version of *Consistency* to mitigate the measurement error in the estimates and reduce concerns about

nonlinearities. That is, I rank the residual from Equation (3), across years, into deciles, with higher ranks associated with higher accounting consistency. This measure is designated as *Consistency_Rank*.

I re-estimate Equation (6) and Equation (7) using the decile-ranked measure of accounting consistency (*Consistency_Rank*) instead of the continuous measure. Panel A of Table 18 reports the regression results of Equation (6) where the dependent variable is future analyst following (*Analyst Following_{i,t+1}*). Consistent with Table 6, I find that the coefficient on *Consistency_Rank* is positive and statistically significant at the 1% level. Panel B of Table 18 reports the regression results of Equation (7). When the dependent variable is analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in column (1), I find that the coefficient on *Consistency_Rank* is significantly positive. When the dependent variable is analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in column (2), I find that the coefficient on *Consistency_Rank* is significantly negative. The results in Panel B are consistent with the findings in Table 7. In addition, the signs and magnitudes of coefficients on control variables in Panel A (Panel B) of Table 18 are similar to those in Table 6 (Table 7).

To sum up, Table 18 provides robust evidence that accounting consistency is positively associated with future analyst following and analyst forecast accuracy and negatively associated with analyst forecast dispersion.

6.4 Changes Analysis

In Equations (6) and (7), inter-firm heterogeneity may not be taken into account sufficiently by the control variables. To address this concern, I estimate Equations (13) and

(14) below with all variables in Equations (6) and (7) measured in changes rather than in levels.

$$\begin{aligned}
\Delta \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \Delta \text{Consistency}_{i,t} + \beta_2 \Delta \text{Assets}_{i,t+1} + \beta_3 \Delta \text{BTM}_{i,t+1} \\
& + \beta_4 \Delta \text{Volume}_{i,t+1} + \beta_5 \Delta \text{Intan}_{i,t+1} + \beta_6 \Delta \text{R\&D}_{i,t+1} + \beta_7 \Delta \text{Depreciation}_{i,t+1} \\
& + \beta_8 \Delta \text{Issue}_{i,t+1} + \beta_9 \Delta \text{Std}(\text{Earn})_{i,t+1} + \beta_{10} \Delta \text{Std}(\text{Ret})_{i,t+1} + \beta_{11} \Delta \text{Return}_{i,t+1} \\
& + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
\end{aligned} \tag{13}$$

$$\begin{aligned}
\Delta \text{Forecast Accuracy}_{i,t} \text{ or } \Delta \text{Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \Delta \text{Consistency}_{i,t} \\
& + \beta_2 \Delta(\Delta \text{Earn})_{i,t} + \beta_3 \Delta \text{NegUE}_{i,t} + \beta_4 \Delta \text{Loss}_{i,t} + \beta_5 \Delta \text{NegSI}_{i,t} + \beta_6 \Delta \text{Days}_{i,t} \\
& + \beta_7 \Delta \text{Assets}_{i,t} + \beta_8 \Delta \text{Intan}_{i,t} + \beta_9 \Delta \text{Std}(\text{Earn})_{i,t} + \beta_{10} \Delta \text{Std}(\text{Ret})_{i,t} \\
& + \beta_{11} \Delta \text{Return}_{i,t} + \beta_{12} \Delta \text{Analyst Following}_{i,t} \\
& + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
\end{aligned} \tag{14}$$

where $\Delta \text{Analyst Following}_{i,t+1}$ refers to changes in the natural logarithm of one plus the number of analysts following firm i from year t to year $t+1$. $\Delta \text{Forecast Accuracy}_{i,t}$ ($\Delta \text{Forecast Dispersion}_{i,t}$) refers to changes in analyst forecast accuracy (dispersion) for firm i from year $t-1$ to year t . The independent variable of interest is changes in the measure of accounting consistency ($\Delta \text{Consistency}_{i,t}$) from year $t-1$ to year t . All control variables in Equation (13) are measured as changes in firm-level value from year t to year $t+1$. All control variables in Equation (14) are measured as changes in firm-level value from year $t-1$ to year t .

Panel A of Table 19 presents the regression results of Equation (13). The coefficient on $\Delta \text{Consistency}$ ($\beta = 0.138$, t -statistic = 4.68) is positive and statistically significant at the

1% level, indicating that changes in accounting consistency are positively associated with changes in the number of analysts following a firm. Panel B of Table 19 presents the regression results of Equation (14). When the dependent variable is changes in analyst forecast accuracy ($\Delta Forecast Accuracy_{i,t}$) in column (1), the coefficient on $\Delta Consistency$ ($\beta = 0.516, t\text{-statistic} = 11.96$) is positive and statistically significant at the 1% level. When the dependent variable is changes in analyst forecast dispersion ($\Delta Forecast Dispersion_{i,t}$) in column (2), the coefficient on $\Delta Consistency$ ($\beta = -0.0835, t\text{-statistic} = -8.63$) is negative and statistically significant at the 1% level. The results in Panel B suggest that changes in accounting consistency are positively associated with changes in analyst forecast accuracy, but negatively associated with changes in analyst forecast dispersion. In addition, the signs and levels of statistical significance of the coefficients on most control variables measured in changes in Panel A (Panel B) of Table 19 are similar to those on control variables measured in levels in Table 6 (Table 7).

On the whole, consistent with the findings in Tables 6 and 7, the results presented in Table 19 show that accounting consistency increases analyst following and forecast accuracy, but decreases analyst forecast dispersion. The consistent results using both levels and changes specifications provide assurance that my results are not likely driven by unobserved firm-level heterogeneity that are constant over time.

6.5 SFAS No. 133 and SFAS No. 142

My results so far suggest that accounting policy changes decrease analyst forecast accuracy and increase analyst forecast dispersion. This finding may be subject to the concern that some omitted variables (e.g., managerial incentives) cause accounting policy

changes and a poor information environment. A number of prior studies find that contracting and market motivations affect managers' accounting choices, including the choice of LIFO vs. FIFO and choices in the timing and method of adoption of new accounting standards (Fields, Lys, and Vincent 2001).

In order to address the concern, I examine the effect of adopting SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities* and SFAS No. 142, *Goodwill and Other Intangible Assets* on analyst forecast characteristics. The reasons of focusing on these two accounting standard changes are two-fold. First, they influence the greatest number of observations in my original sample. Second, the cumulative effect method is the only available adoption method for these two standards. In addition, I exclude firms that are early adopters of SFAS No. 133 or SFAS No. 142. As a result, my final sample consists of firms that adopt SFAS No. 133 or SFAS No. 142 after the effective date. Using this sample, I can isolate the effect of accounting policy changes on analyst forecast characteristics as these changes are not related to managerial incentives.

I identify the firms that adopt SFAS No. 133 after the effective date using the following procedure. First, I select firm-years with non-missing and non-zero values for the cumulative effect over the period 1998-2002 during which SFAS No. 133 is adopted.³⁶ Second, following Campbell (2015), I restrict the sample to firm-years with non-missing and non-zero values for the unrealized gain/loss on derivative transactions or cash flow hedges (AOCIDERGL). Finally, I restrict the sample to firm-years whose fiscal year begins

³⁶ As shown in Table 2 of Shoff (2017), the adoption period of SFAS No. 133 is from 1998 to 2002 and the adoption period of SFAS No. 142 is from 2002 to 2003.

after June 15, 1999. The final sample consists of 390 firm-year observations (hereafter, the “SFAS133 sample”). Similarly, I identify the firms that adopt SFAS No. 142 after the effective date. First, I select firm-years with non-missing and non-zero values for the cumulative effect from 2002 to 2003 during which SFAS No. 142 is adopted. Second, following Beatty and Weber (2006), I restrict the sample to firm-years with non-missing and non-zero values for goodwill (GDWL). Finally, I only keep firm-years whose fiscal year begins after December 15, 2001. The final sample includes 447 firm-year observations (hereafter, the “SFAS142 sample”).

I re-estimate Equations (8) and (9) for the SFAS133 sample and for the SFAS142 sample, respectively. Panel A of Table 20 reports the regression results of Equation (8). The dependent variable is future analyst following (*Analyst Following_{i,t+1}*). The independent variable of interest is the absolute value of cumulative effect of a mandatory accounting policy change (*CUMU_M*) for the SFAS133 sample in column (1) and for the SFAS142 sample in column (2). In column (1), the coefficient on *CUMU_M* is negative and statistically significant at the 1% level. In column (2), the coefficient on *CUMU_M* is negative and statistically significant at the 10% level. Panel B of Table 20 reports the regression results of Equation (9). When the dependent variable is analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in columns (1) and (2), I find that the coefficient on *CUMU_M* is significantly negative at the 1% level for the SFAS133 sample and for the SFAS142 sample. When the dependent variable is analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in columns (3) and (4), I find that the coefficient on *CUMU_M* is significantly positive at the 5% level or better for the SFAS133 sample and for the SFAS142 sample. In addition, the signs and levels of statistical significance of the coefficients on control variables in

Panel A (Panel B) of Table 20 are similar to those in Table 11 (Table 12) for the mandatory accounting policy change sample.

On the whole, the results in Table 20 suggest that the adoption of SFAS No. 133 and SFAS No. 142 decreases analyst following and forecast accuracy and increases analyst forecast dispersion. This finding supports a causal interpretation of the effect of accounting policy changes on analyst forecast characteristics, alleviating the concern that an omitted variable explains both accounting changes and analysts' information environment.

6.6 Inventory Costing Method Changes

The types of voluntary accounting policy changes are different under APB Opinion No. 20 and under SFAS No. 154. For example, goodwill & intangible impairment testing date changes account for 5.6% of all changes under APB Opinion No. 20, but account for 39.4% of all changes under SFAS No. 154 (untabulated). As financial analysts may be more capable to adjust their information processing method when certain types of voluntary accounting policy changes occur, it is possible that the difference in the types of accounting changes under APB Opinion No. 20 and under SFAS No. 154 drives the results presented in Table 15. To address this possibility, I replicate Tables 14 and 15 only using one type of voluntary accounting policy changes — inventory costing method changes. I focus on this type of accounting changes for two reasons. First, this type of accounting changes is the second largest type in my sample. Second, there is a similar number of the

changes under APB Opinion No. 20 (108 observations) and under SFAS No. 154 (107 observations).³⁷

Panel A of Table 21 replicates the results in Table 14. The dependent variable is future analyst following (*Analyst Following_{i,t+1}*). The independent variable of interest is the absolute value of cumulative effect of an inventory costing method change (*CUMU_V*) for the APB20 sample in column (1) and for the SFAS154 sample in column (2). The coefficient on *CUMU_V* does not differ from zero significantly both for the APB20 sample ($\beta = -0.374$, t -statistic = -0.13) and for the SFAS154 sample ($\beta = 1.150$, t -statistic = 0.46). In addition, the t -test of coefficient differences indicates that the coefficient on *CUMU_V* in column (2) does not significantly differ from that in column (1) (p -value = 0.30). This finding is consistent with that in Table 14, suggesting that SFAS No. 154 does not influence the impact of voluntary accounting policy changes on analyst following in the future. As to the control variables, the signs and levels of statistical significance of the coefficients on most control variables in Panel A of Table 21 are similar to those in Table 14.

Panel B of Table 21 replicates the results in Table 15. When the dependent variable is analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in columns (1) and (2), I find that the coefficient on *CUMU_V* is significantly negative for the APB20 sample ($\beta = -0.254$, t -statistic = -1.95), but insignificantly negative for the SFAS154 sample ($\beta = -0.0774$, t -statistic = -0.89). I also find that the coefficient on *CUMU_V* in column (2) is less negative than the coefficient on *CUMU_V* in column (1) and that the difference in the coefficients

³⁷ I do not choose goodwill & intangible impairment testing date changes (i.e., the largest type) because most of the changes in this type have no impact on financial statements and the number of the changes in this type under APB Opinion No. 20 is too small (21 observations).

is significant (p -value = 0.05). When the dependent variable is analyst forecast dispersion ($Forecast\ Dispersion_{i,t}$) in columns (3) and (4), I find that the coefficient on $CUMU_V$ is significantly positive for the APB20 sample ($\beta = 0.104$, t -statistic = 3.40), but insignificantly positive for the SFAS154 sample ($\beta = 0.0250$, t -statistic = 0.96). I also find that the coefficient on $CUMU_V$ in column (4) is significantly less positive than the coefficient on $CUMU_V$ in column (3) (p -value = 0.00). These results are consistent with the results found in Table 15, suggesting that SFAS No. 154 mitigates the impact of voluntary accounting policy changes on analyst forecast accuracy and dispersion. As to the control variables, the signs and levels of statistical significance of the coefficients on most control variables in Panel B of Table 21 are similar to those in Table 15.

6.7 Pseudo-Change Year Test

My evidence so far shows that the impact of voluntary accounting policy changes on analyst forecast accuracy and dispersion is mitigated under SFAS No. 154. This finding may be subject to the concern that analyst forecasts become more accurate and less dispersed over time. To address this possibility, I assign each voluntary accounting policy change a pseudo-change year. Specifically, for the APB20 sample, I randomly select a year that is between 1994 and 2005 and different from the real event year for each accounting change. Similarly, for the SFAS154 sample, I randomly select a year that is between 2006 and 2015 and different from the real event year for each accounting change. Then, I examine the effect of voluntary accounting policy changes on analyst forecast characteristics in the pseudo-change year.

I re-estimate Equations (10) and (11) for the APB20 sample and for the SFAS154 sample, respectively. Panel A of Table 22 presents the regression results of Equation (10). The dependent variable is future analyst following (*Analyst Following_{i,t+1}*). The independent variable of interest is the absolute value of cumulative effect of a voluntary accounting policy change in the pseudo-change year (*CUMU_V*) for the APB20 sample in column (1) and for the SFAS154 sample in column (2). I find that the coefficient on *CUMU_V* does not differ from zero significantly for the APB20 sample and for the SFAS154 sample. In addition, the t-test of coefficient differences suggests that the coefficient on *CUMU_V* in column (1) does not significantly differ from that in column (2) (p -value = 0.41). Panel B of Table 22 presents the regression results of Equation (11). When the dependent variable is analyst forecast accuracy (*Forecast Accuracy_{i,t}*) in columns (1) and (2), I find that the coefficient on *CUMU_V* is insignificantly different from zero for the APB20 sample and for the SFAS154 sample and that the coefficient on *CUMU_V* in column (1) does not significantly differ from that in column (2) (p -value = 0.49). When the dependent variable is analyst forecast dispersion (*Forecast Dispersion_{i,t}*) in columns (3) and (4), I find that the coefficient on *CUMU_V* is insignificantly different from zero for the APB20 sample and for the SFAS154 sample and that the coefficient on *CUMU_V* in column (3) does not differ from that in column (4) significantly (p -value = 0.45).

In sum, the results in Table 22 indicate that voluntary accounting policy changes have no impact on analyst forecast characteristics in the pseudo-change year and that the impact is not significantly different between the APB20 sample and the SFAS154 sample. This finding suggests that the weaker impact of voluntary accounting policy changes on

analyst forecast accuracy and dispersion under SFAS No. 154 cannot be attributed to the general time trends for the analyst forecast characteristics.

Chapter 7

Conclusion

My main objective in this study is to develop a firm-specific and output-based measure of accounting consistency. The basic idea is that, for firms that use accounting policies and estimates consistently, one can estimate the current year's earnings accurately by applying the prior years' accounting function to the current year's economic events. First, I provide validity tests for the measure. I find that my measure of accounting consistency is lower in firm-years with changes in accounting policies, auditors or CFOs. Also, I find that firms with greater values of my accounting consistency measure have more persistent and more predictable earnings, and smaller abnormal accruals. These findings indicate that my measure captures the underlying construct of accounting consistency. Then, I investigate the effect of accounting consistency on the information processing of financial analysts. Consistent with my hypotheses, I document that accounting consistency is positively associated with analyst forecast accuracy and negatively associated with analyst forecast dispersion. In addition, I find that accounting consistency is positively associated with future analyst following, consistent with the notion that the reduced costs to analysts of following a firm with higher accounting consistency increase the supply of analyst services. These findings indicate that accounting consistency improves financial reporting usefulness.

Next, I test whether accounting policy changes affect the information processing of financial analysts. As accounting policy changes reduce accounting consistency, I hypothesize that accounting policy changes reduce analyst forecast accuracy and increase

analyst forecast dispersion. Consistent with my hypotheses, I find that both mandatory and voluntary accounting policy changes are negatively associated with analyst forecast accuracy and positively associated with analyst forecast dispersion. In terms of the effect of accounting policy changes on analyst following, I document that mandatory accounting policy changes decrease the number of analysts following a firm. The finding supports the notion that the increased costs to analysts following a firm with an accounting policy change decrease the supply of analyst service. These results suggest that accounting policy changes (i.e., accounting inconsistency) reduce financial reporting usefulness, strengthening my inferences above.

Finally, I examine whether SFAS No. 154 mitigates the effect of voluntary accounting policy changes on the information processing of financial analysts. Under SFAS No. 154, firms are required to retrospectively apply the new accounting policy to prior period's financial statements. As such, SFAS No. 154 improves accounting consistency when there is a voluntary accounting policy change. I hypothesize and find that the effect of voluntary accounting policy changes on analyst forecast accuracy (dispersion) is weaker under SFAS No. 154 than under APB Opinion No. 20. However, I do not find that SFAS No. 154 influences the effect of voluntary accounting policy changes on the number of analysts following a firm. These results generally support my hypotheses that the impact of voluntary accounting policy changes on analyst forecast characteristics is mitigated under SFAS No. 154. This finding provides evidence for standard setters and regulators that SFAS No. 154 enhances the utility of financial statements to users by improving accounting consistency.

My study is subject to several caveats. First, to estimate the accounting function, I use stock returns to measure the net effect of economic events occurring during the period. However, stock returns may not reflect all economic events that are incorporated in earnings and may not fully reflect all economic events available to the stock market. In addition, I use earnings as a proxy for the financial statement measurement of these events. Although earnings are the most important measure of firms' performance, not all economic events are incorporated in earnings. For example, as the unrealized gains and losses of available-for-sale securities are excluded from earnings but reported in a component of shareholders' equity, earnings do not incorporate the economic events related to the unrealized gains or losses of this type of security. Therefore, stock returns and earnings are not perfect proxies. Second, as I use previous four years' data to estimate the prior years' accounting function for the current year, my measure of accounting consistency cannot reverse to the normal level immediately after a year with an accounting change. Third, my study only investigates the effect of accounting consistency on analyst forecast characteristics. I do not study other potential consequences of accounting consistency. For example, lenders may prefer borrowers to use accounting policies and estimates consistently. As such, firms with higher accounting consistency may enjoy a lower cost of bank loans. I leave these research questions to future studies.

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Appendix A

The following table shows mandatory and voluntary accounting method changes for Johnson Controls, Inc. (CIK: 0000053669) each year from 1994 to 2016, and the cumulative effect of these accounting method changes in net income or opening retained earnings.

Fiscal Year	Accounting Method Change	Cumulative Effect (in millions)
1994		0
1995		0
1996		0
1997		0
1998	SFAS No. 128	0
1999	SFAS No. 131	0
2000		0
2001		0
2002		0
2003		0
2004		0
2005	SFAS No. 123, SFAS No. 148, SFAS No. 123R	0
2006	FIN No. 47	(7)
2007	SFAS No. 158	0
2008	FIN No. 48	0
2009	SFAS No. 168, ASC 855, ASC 815, ASC, 825, ASC 820, ASC 718, ASC 740	0
2010	ASC 810, ASC 805	0
2011	ASU No. 2009-13, ASU No. 2009-17	0
2012		0
2013	ASU No. 2013-02, ASU No. 2011-08, ASU No. 2011-05, Changing the method of inventory costing from LIFO to FIFO	(70)
2014	ASU No. 2013-05, ASU No. 2013-02, ASU No. 2011-11	0
2015	ASU No. 2015-16, ASU No. 2015-11, ASU No. 2013-11	0
2016	ASU No. 2015-17, ASU No. 2014-08	0

Appendix B

Bloom and Fuglister (2006) prepare a table to compare the old standard (APB Opinion No. 20) and new standard (SFAS No. 154) for accounting changes and error corrections as follows (p. 46).

Issue	APB Opinion No. 20	SFAS No. 154
Change in accounting principle from one GAAP to an existing GAAP (no longer includes depreciation, amortization, and depletion methods)	Cumulative effect in net income of the period	Retrospective application to extent possible, corresponding adjustment to opening retained earnings. If retrospective application is impracticable, then apply prospectively.
Change in depreciation, amortization, and depletion method reflecting a change in estimate	Cumulative effect in net income of the period	Prospective: now viewed as a change in accounting estimate, along with disclosure requirements
Change in accounting estimate (excludes change in depreciation, depletion, or amortization method reflecting a change in estimate)	Prospective	Prospective. If significant, disclosure on current income from continuing operations, net income, and EPS figures is required.
Change in accounting standard when cumulative effect cannot be determined (e.g., from FIFO to LIFO)	Prospective	Prospective from earliest date practicable
Correction of errors	Retroactive restatement and adjustment to opening retained earnings	Restatement and adjustment to opening retained earnings
Adoption of a new accounting principle, with the exception of SFAS No. 154	NA	Provisions prescribed by specific standards. If none, then retrospective application, if retrospective application is impracticable, then apply prospectively.
Change in reporting entity	Retroactive restatement	Retroactive restatement
Changes in accounting principles in interim periods	Retroactive restatement. Not allowed if effects on prior periods of the same year are indistinguishable from cumulative effects on prior years (SFAS No. 3).	Retrospective application to prior interim periods of the year of the change. Not allowed if it is impracticable to distinguish effects on prior interim periods of the year of change from prior year.
Adoption of SFAS No. 154	NA	Prospective

Appendix C

Variable	Description
<i>ΔAssets</i>	The absolute value of change in assets relative to the prior fiscal year.
<i>ΔBTM</i>	The absolute value of change in book-to-market ratio relative to the prior fiscal year.
<i>ΔEarn</i>	The absolute value of the firm's earnings per share in the current year minus the earnings per share in the last year, scaled by the stock price at the beginning of last year.
<i>AbAcc</i>	The absolute value of the residual from the modified Jones model (Dechow et al. 1995). I estimate the following regression for each year and each industry: $TA_{i,t} = b_0 + b_1(\Delta Rev_{i,t} - \Delta AR_{i,t}) + b_2PPE_{i,t} + e_{i,t}$, where TA is total accruals, Rev is sales, AR is the accounts receivable, and PPE is the value of net property, plant and equipment, all scaled by lagged total assets.
<i>Accuracy</i>	The average negative value of the absolute difference between actual earnings per share and the median analyst forecast of earnings per share, scaled by the stock price at the beginning of the fiscal year, from month 4 to month 12 following the last fiscal year end.
<i>Age</i>	The firm age.
<i>Analyst Following</i>	The average of natural logarithm of one plus the number of analysts providing annual earnings forecasts, from month 4 to month 12 following the last fiscal year end.
<i>Assets</i>	The nature logarithm of total assets.
<i>Big4</i>	An indicator variable that takes a value of one if a firm is audited by a Big 4 auditor, and zero otherwise.
<i>BTM</i>	The book-to-market ratio, calculated as the book value of equity divided by the market value of equity at the end of fiscal year.
<i>ChgCEO</i>	An indicator variable that takes a value of one if there is a change in CEO and zero otherwise.
<i>ChgSIC</i>	An indicator variable that takes a value of one if the firm's four-digit SIC differs from that in prior year, and zero otherwise.
<i>Consistency</i>	The measure of accounting consistency.
<i>Consistency_Direct</i>	An alternative measure of accounting consistency where accounting function stability is calculated as the negative value of the average absolute difference between the current year's accounting function and the last year's accounting function.
<i>Consistency_PLE</i>	An alternative measure of accounting consistency that adjusts for the lead-lag relation between stock return and earnings.
<i>Consistency_Rank</i>	The decile ranking of the accounting consistency measure.
<i>Days</i>	The mean natural logarithm of the number of days from the forecast date to the earnings announcement date.

<i>Depreciation</i>	Firm's depreciation expense scaled by lagged total assets, less the respective two-digit SIC industry mean value of depreciation expense scaled by lagged total assets.
<i>Dispersion</i>	The average inter-analyst standard deviation of earnings forecasts, scaled by the stock price at the beginning of the fiscal year, from month 4 to month 12 following the last fiscal year end.
<i>Growth</i>	The change in sales relative to the prior fiscal year.
<i>Intan</i>	The ratio of intangible assets to total assets.
<i>Issue</i>	An indicator variable that takes a value of one if the firm issues debt or equity securities during the year and the amount is greater than 500 million, and zero otherwise.
<i>Leverage</i>	The total liabilities divided by total assets.
<i>Loss</i>	An indicator variable that takes a value of one if the firm's net income is negative and zero otherwise.
<i>Merger</i>	An indicator variable that equals to one if the firm's cash outflow for acquisition scaled by beginning-of-period market value of equity is greater than 0.5 in the current year or previous two years, and zero otherwise.
<i>NegSI</i>	The absolute value of special items scaled by total assets if negative, and zero otherwise.
<i>NegUE</i>	An indicator variable that takes a value of one if the firm's earnings is less than the reported earnings in last year and zero otherwise.
<i>Persistence</i>	The coefficient estimate of a firm-specific regression of earnings per share on lagged earnings per share.
<i>Post_ChgAM</i>	An indicator variable that takes a value of one for firms in the year with a mandatory accounting policy change, and zero in the year before a mandatory accounting policy change.
<i>Post_ChgAU</i>	An indicator variable that takes a value of one for firms in the year with an auditor change, and zero in the year before an auditor change.
<i>Post_ChgAV</i>	An indicator variable that takes a value of one for firms in the year with a voluntary accounting policy change, and zero in the year before a voluntary accounting policy change.
<i>Post_ChgCFO</i>	An indicator variable that takes a value of one for firms in the year after a CFO change, and zero in the year with a CFO change
<i>Predictability</i>	The R^2 of a regression of annual earnings per share on prior-year annual earnings per share for the same firm.
<i>R&D</i>	Firm's research and development expense scaled by lagged total assets, less the respective two-digit SIC industry mean value of research and development expense scaled by lagged total assets.
<i>Return</i>	The total stock return during the fiscal year.
<i>ROA</i>	The return on assets, measured as net income divided by average total assets.
<i>Segments</i>	The number of reported business segments.
<i>SItems</i>	The absolute value of special items divided by total assets.

<i>Stability</i>	The measure of accounting function stability.
<i>Std(CFO)</i>	The standard deviation of cash flow from operations divided by total assets over the five-year rolling window.
<i>Std(Earn)</i>	The standard deviation of net income divided by total assets over the five-year rolling window.
<i>Std(Ret)</i>	The standard deviation of stock returns over the 60 months rolling window.
<i>Std(Sales)</i>	The standard deviation of sales divided by total assets over the five-year rolling window.
<i>Volume</i>	The nature logarithm of trading volume in millions of shares during the year.

Figure 1: The Value of Accounting Consistency Measure around the Changes in Accounting Policies, Auditors and CFOs

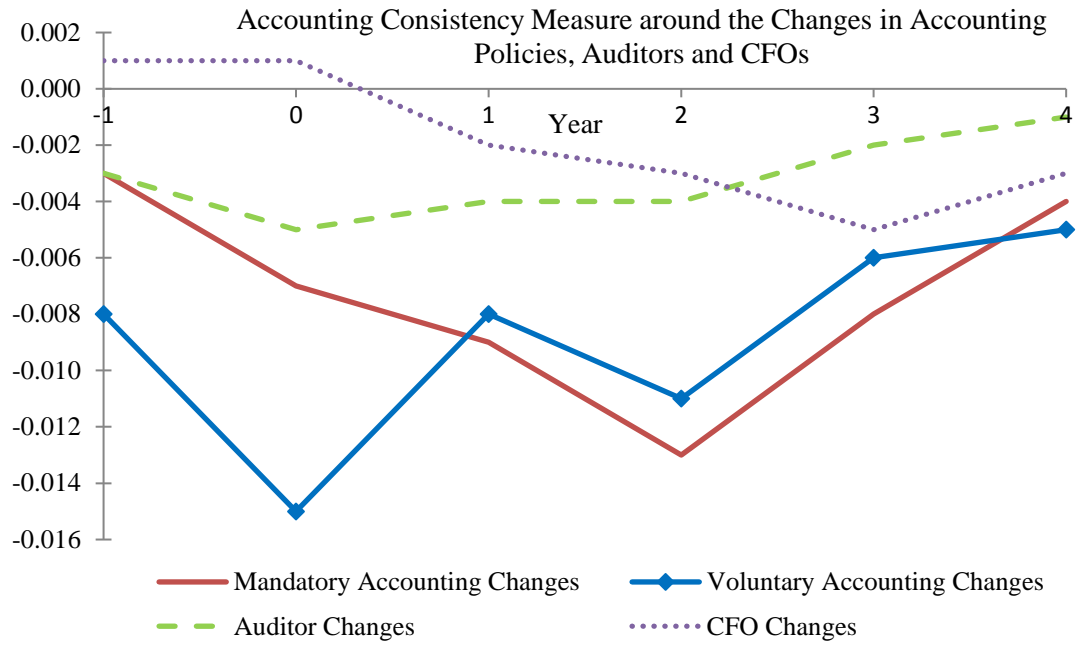


Figure 2: Analyst Forecast Characteristics around Accounting Changes

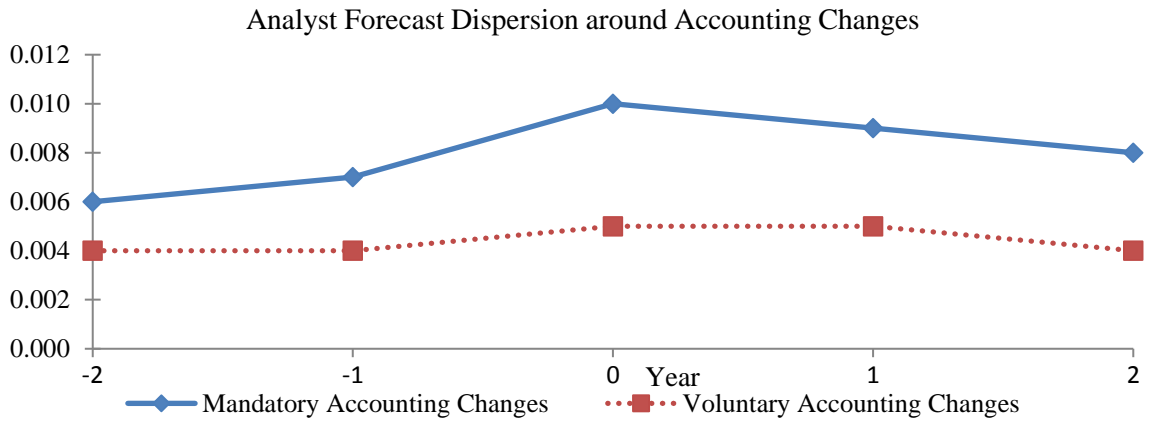
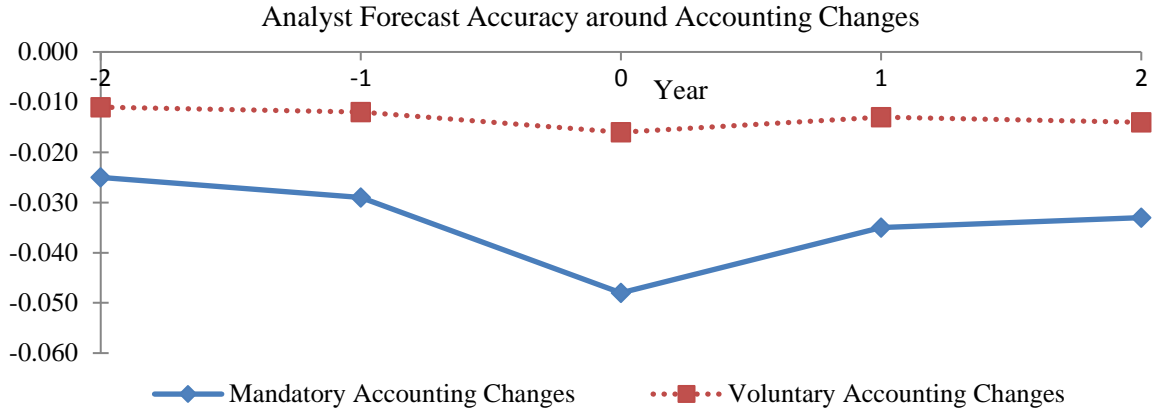
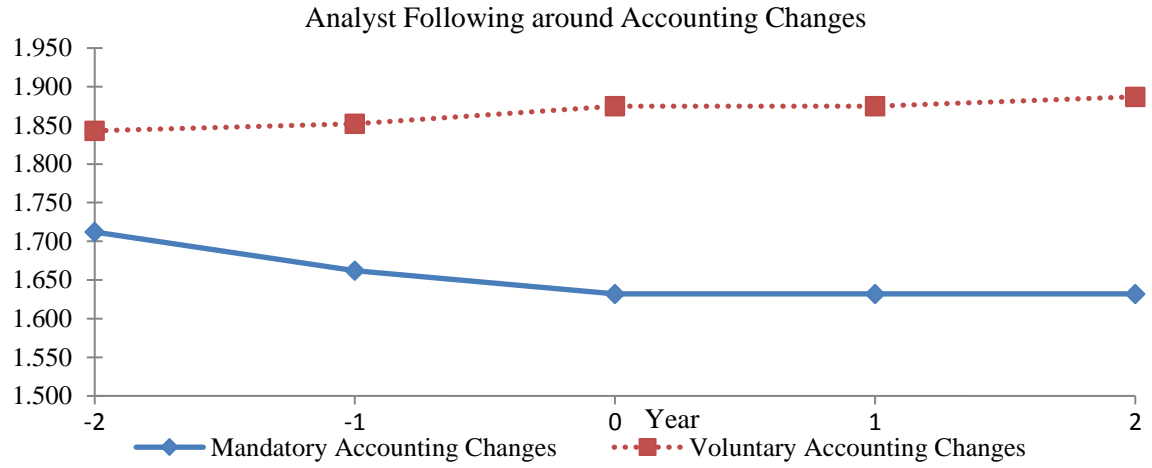


Figure 3: Analyst Forecast Characteristics around Voluntary Accounting Changes

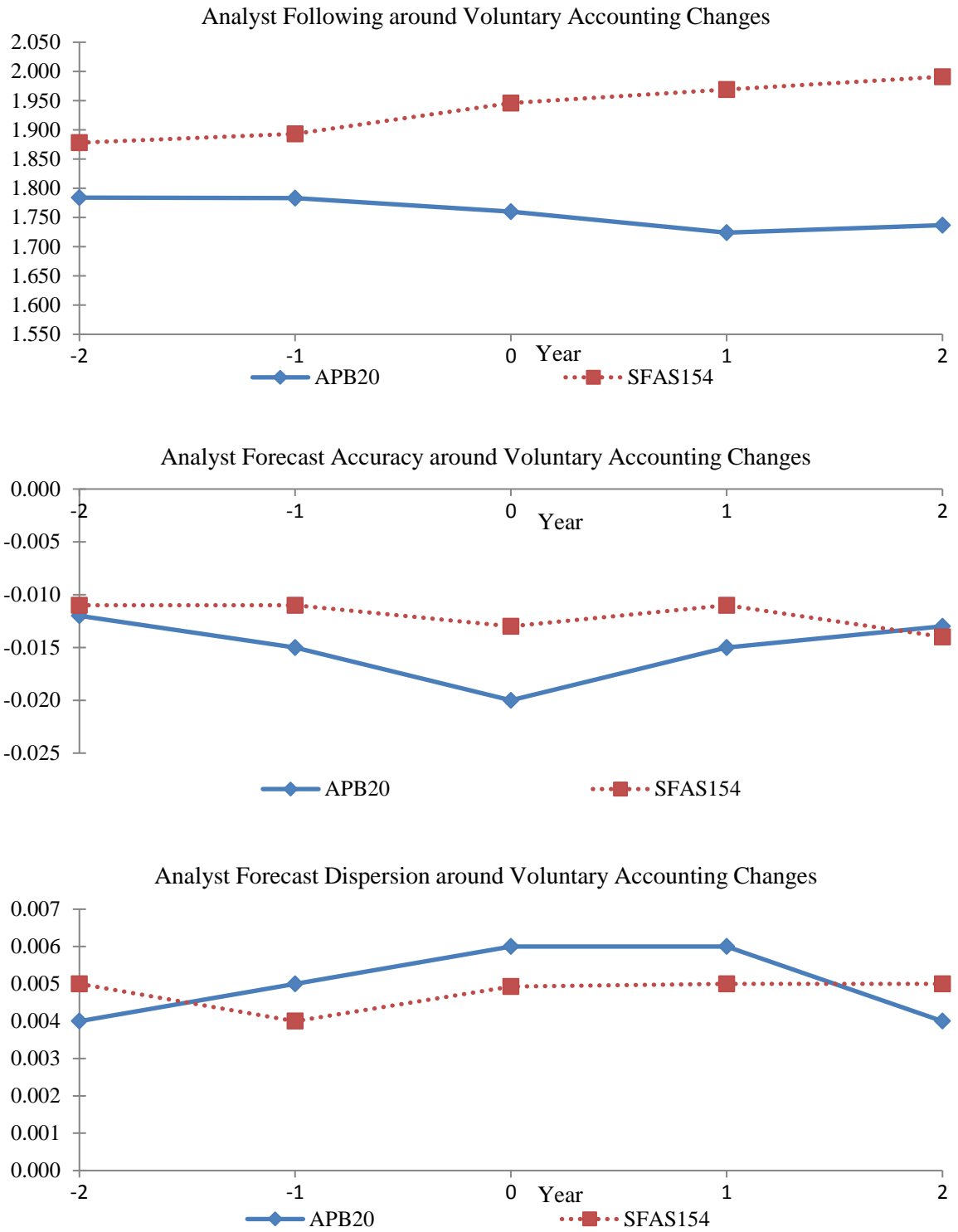


Table 1: Sample Selection and Distribution

Panel A: Sample Selection

This panel presents the sample selection procedure. The final sample includes 89,116 firm-year observations in the period of 1994-2016.

	# of Obs.
Compustat firms from 1994 to 2016	154,098
Less:	
Firm-years without at least 12 quarters' data in the last four years to estimate prior years' accounting function	58,961
Firm-years without at least 3 quarters' data in the current year to calculate the stability measure	862
Firm-years with missing data to calculate all the independent variables in Equation (3)	5,109
Final sample	89,166

Panel B: Sample Distribution by Fiscal year

This panel presents the sample distribution by fiscal year.

Year	# of Obs.	% of Obs.
1994	3,667	4.11
1995	3,750	4.21
1996	3,951	4.43
1997	4,128	4.63
1998	4,117	4.62
1999	4,024	4.51
2000	4,069	4.56
2001	3,985	4.47
2002	3,914	4.39
2003	3,922	4.40
2004	4,027	4.52
2005	3,881	4.35
2006	4,136	4.64
2007	3,919	4.40
2008	3,875	4.35
2009	3,872	4.34
2010	3,892	4.36
2011	3,937	4.42
2012	3,827	4.29
2013	3,720	4.17
2014	3,724	4.18
2015	3,647	4.09
2016	3,182	3.57
Total	89,166	100.00

Table 2: Descriptive Statistics

Panel A: Descriptive Statistics from Estimation of Equation (1)

This panel reports the descriptive statistics of the intercept, the coefficient of return, and the R^2 from the following regression:

$$Earnings_{i,q} = \alpha_{i,t} + \beta_{i,t} Return_{i,q} + \varepsilon$$

where $Earnings_{i,q}$ is the ratio of quarterly net income before extraordinary items to the beginning-of-period market value of equity; $Return_{i,q}$ is the stock return during the quarter. For firm i in year t , I estimate the above equation using the earnings and stock return data of 16 quarters from year $t-4$ to $t-1$ prior to year t .

Variable	No. of Obs.	Mean	P25	Median	P75	STD
$\alpha_{i,t}$	95,137	-0.007	-0.007	0.010	0.017	0.243
$\beta_{i,t}$	95,137	0.021	-0.004	0.010	0.029	0.690
R^2	95,137	0.127	0.017	0.072	0.188	0.146

Panel B: Descriptive Statistics of Accounting Function Stability

This panel reports the descriptive statistics of the measure of accounting function stability.

$$Stability_{i,t} = -1/4 \sum_{q=1}^4 |Actual\ Earnings_{i,q} - E(Earnings_{i,q})|$$

The accounting function stability is measured as the negative value of the average absolute difference between the actual earnings of year t (4 quarters) and the predicted earnings from equation (2) as follows:

$$E(Earnings_{i,q}) = \hat{\alpha}_{i,t} + \hat{\beta}_{i,t} Return_{i,q}$$

where $E(Earnings_{i,q})$ is the predicted earnings of firm i using the accounting function for the past 16 quarters ($\hat{\alpha}_{i,t}$ and $\hat{\beta}_{i,t}$) and the stock returns ($Return_{i,q}$) for quarter q in year t .

Variable	No. of Obs.	Mean	P25	Median	P75	STD
Stability	94,275	-0.039	-0.038	-0.013	-0.006	0.067

Table 3: The Measure of Accounting Consistency

Panel A: Separating Accounting Function Stability

This panel presents the OLS regression that separates accounting function stability.

$$\begin{aligned}
Stability_{i,t} = & \beta_0 + \beta_1 Assets_{i,t} + \beta_2 BTM_{i,t} + \beta_3 \Delta Assets_{i,t} + \beta_4 \Delta BTM_{i,t} + \beta_5 Std(CFO)_{i,t} \\
& + \beta_6 Segments_{i,t} + \beta_7 SItems_{i,t} + \beta_8 Issue_{i,t} + \beta_9 ChgSIC_{i,t} + \beta_{10} Merger_{i,t} \\
& \beta_{11} ChgCEO_{i,t-1} + \varepsilon
\end{aligned}$$

where $Stability_{i,t}$ is the measure of accounting function stability. The independent variables are measures of firms' business operations stability. Definitions of all variables are reported in Appendix C. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	Prediction	Stability
Assets	+	0.00182*** (10.54)
BTM	+	-0.000786 (-0.98)
Δ Assets	-	-0.0157*** (-12.38)
Δ BTM	-	-0.0597*** (-58.71)
Std(CFO)	-	-0.0747*** (-13.42)
Segments	-	-0.000246 (-1.28)
SItems	-	-0.302*** (-50.98)
Issue	-	-0.00219*** (-2.97)
ChgSIC	-	-0.00229* (-1.91)
Merger	-	-0.00798*** (-5.30)
ChgCEO	-	-0.00225*** (-2.86)
Intercept		-0.0172*** (-12.18)
N		89,166
Adj. R-sq		0.402

Panel B: Descriptive Statistics of Accounting Consistency Measure

This panel presents the descriptive statistics of the measure of accounting consistency. *Consistency* is the residual from the regression in Panel A.

Variable	No. of Obs.	Mean	P25	Median	P75	STD
Consistency	89,166	0.000	-0.003	0.009	0.019	0.053

Panel C: Correlation Matrix

This panel presents the correlation among the measure of accounting function stability, the measure of accounting consistency and earnings volatility. Pearson's (Spearman's) correlation coefficients are presented in the lower (upper) triangle. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively (two-tailed).

	Stability	Consistency	Std(Earn)
Stability		0.436***	-0.595***
Consistency	0.773***		-0.091***
Std(Earn)	-0.424***	-0.190***	

Table 4: Validity Tests

Panel A: Time-series Analysis

This panel presents the mean value of accounting consistency measure around mandatory accounting policy changes, voluntary accounting policy changes, auditor changes and CFO changes. Year 0 is the year that these events occur.

Year	N	-1	0	1	2	3	4
Mandatory Accounting Changes	1,008	-0.003	-0.007	-0.009	-0.013	-0.008	-0.004
Voluntary Accounting Changes	249	-0.008	-0.015	-0.008	-0.011	-0.006	-0.005
Auditor Changes	6,850	-0.003	-0.005	-0.004	-0.004	-0.002	-0.001
CFO Changes	2,440	0.001	0.001	-0.002	-0.003	-0.005	-0.003

Panel B: Regression Analysis

This panel presents the regression results that test the statistical significance of the change in accounting consistency measure around mandatory accounting policy changes, voluntary accounting policy changes, auditor changes and CFO changes.

$$Consistency_{i,t} = \beta_0 + \beta_1 Post_{i,t} + \varepsilon$$

where $Consistency_{i,t}$ is the measure of accounting consistency. $Post_{i,t}$ acts as a placeholder for $Post_ChgAM$, $Post_ChgAV$, $Post_ChgAU$, and $Post_ChgCFO$. $Post_ChgAM$ ($Post_ChgAV$) is an indicator variable that takes a value of one for firms in the year with a mandatory (voluntary) accounting policy change, and zero in the year before a mandatory (voluntary) accounting policy change. $Post_ChgAU$ is an indicator variable that takes a value of one for firms in the year with an auditor change, and zero in the year before an auditor change. $Post_ChgCFO$ is an indicator variable that takes a value of one for firms in the year after a CFO change, and zero in the year with a CFO change. Definitions of all variables are reported in Appendix C. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)
	Consistency			
Post_ChgAM	-0.00447** (-2.33)			
Post_ChgAV		-0.00585** (-2.32)		
Post_ChgAU			-0.00243*** (-4.20)	
Post_ChgCFO				-0.00311*** (-5.06)
Intercept	-0.00143 (-0.83)	-0.00371 (-1.56)	-0.000654 (-1.17)	0.00331*** (6.38)
N	1,824	481	12,800	4,530
Adj. R-sq	0.002	0.006	0.001	0.003

Panel C: Earnings Quality and Accounting Consistency Measure

This panel presents the regressions of earnings quality measures on accounting consistency.

$$\begin{aligned}
 \text{Earnings Quality Measure}_{i,t} = & \beta_0 + \beta_1 \text{Consistency}_{i,t} + \beta_2 \text{Assets}_{i,t} + \beta_3 \text{BTM}_{i,t} \\
 & + \beta_4 \text{Std(CFO)}_{i,t} + \beta_5 \text{Std(Sales)}_{i,t} + \beta_6 \text{Std(Earn)}_{i,t} + \beta_7 \text{Growth}_{i,t} \\
 & + \beta_8 \text{Leverage}_{i,t} + \beta_9 \text{ROA}_{i,t} + \beta_{10} \text{Loss}_{i,t} + \beta_{11} \text{Age}_{i,t} + \beta_{12} \text{Big4}_{i,t} \\
 & + \beta_{13} \text{Issue}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
 \end{aligned}$$

where *Earnings Quality Measure*_{*i,t*} refers to earnings persistence (*Persistence*_{*i,t*}), earnings predictability (*Predictability*_{*i,t*}), or abnormal accruals (*AbAcc*_{*i,t*}). The independent variable of interest is the accounting consistency measure (*Consistency*_{*i,t*}). Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)	(3)
	Persistence	Predictability	AbAcc
Consistency	0.308*** (6.64)	0.241*** (7.78)	-0.0435*** (-4.20)
Assets	0.00363 (1.27)	0.00255 (1.21)	-0.00517*** (-15.70)
BTM	-0.0406*** (-7.69)	-0.0385*** (-10.71)	-0.00312*** (-5.07)
Std(CFO)	0.119** (2.17)	0.104*** (2.87)	0.118*** (8.64)
Std(Sales)	-0.0713*** (-3.29)	-0.0597*** (-3.87)	0.0423*** (12.31)
Std(Earn)	-0.263*** (-8.56)	-0.181*** (-8.97)	0.132*** (16.90)
Growth	0.00804* (1.88)	0.000630 (0.23)	0.0225*** (14.94)
Leverage	-0.0937*** (-4.82)	-0.0736*** (-5.42)	0.0124*** (4.80)
ROA	0.0755*** (3.45)	0.0561*** (3.42)	-0.0844*** (-13.98)
Loss	-0.0176*** (-2.79)	-0.0203*** (-4.60)	-0.00854*** (-6.71)
Issue	-0.00224 (-0.25)	-0.00154 (-0.23)	0.00941*** (8.71)
Age	0.00215*** (5.17)	0.000794** (2.55)	-0.0000107 (-0.33)
Big4	-0.00000342 (-0.00)	-0.00251 (-0.42)	-0.00441*** (-4.38)
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
N	75,430	75,430	83,099
Adj. R-sq	0.075	0.082	0.262

Table 5: Descriptive Statistics and Correlations for Accounting Consistency and Analyst Forecast Variables

Panel A: Descriptive Statistics

This panel presents descriptive statistics for the accounting consistency measure and analyst forecast variables in Equations (6) and (7).

Variable	No. of Obs.	Mean	P25	Median	P75	STD
Analyst Following _{i,t+1}	69,729	1.426	0.693	1.446	2.267	1.032
Accuracy	54,956	-0.076	-0.021	-0.007	-0.002	0.355
Dispersion	48,626	0.019	0.001	0.003	0.007	0.083
Consistency	69,729	0.002	-0.001	0.009	0.019	0.045

Panel B: Correlation Matrix for Variables in Equation (6)

Pearson's (Spearman's) correlation coefficients are presented in the lower (upper) triangle. **Bold** indicates significance at the 10% level or better.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Analyst Following _{i,t+1}		0.02	0.67	-0.26	0.76	0.25	0.06	0.04	0.34	0.08	-0.21	-0.26	0.05
(2) Consistency	0.08		-0.17	0.02	-0.08	0.04	-0.04	-0.04	-0.11	0.07	-0.04	0.05	-0.01
(3) Assets	0.66	-0.02		-0.02	0.65	0.19	0.01	0.04	0.53	0.09	-0.53	-0.51	0.08
(4) BTM	-0.24	0.03	-0.04		-0.30	-0.14	-0.03	-0.04	-0.06	-0.09	-0.17	-0.02	-0.29
(5) Volume	0.75	-0.01	0.63	-0.26		0.23	0.08	0.02	0.40	0.02	0.00	-0.05	0.01
(6) Intan	0.20	0.03	0.14	-0.13	0.20		-0.17	0.05	0.11	-0.03	-0.02	-0.06	0.01
(7) R&D	-0.02	-0.01	-0.13	-0.07	0.05	-0.12		0.10	-0.02	0.00	0.04	0.06	-0.02
(8) Depreciation	0.01	-0.03	-0.02	-0.06	0.02	0.01	0.06		0.02	0.02	-0.01	-0.01	0.02
(9) Issue	0.34	-0.02	0.55	-0.06	0.39	0.10	-0.05	0.01		0.03	-0.23	-0.25	0.03
(10) Predictability	0.10	0.09	0.10	-0.07	0.03	-0.02	-0.03	0.00	0.03		-0.22	-0.17	0.05
(11) Std(Earn)	-0.19	-0.18	-0.42	-0.14	0.03	-0.03	0.30	0.06	-0.16	-0.15		0.65	-0.12
(12) Std(Ret)	-0.27	-0.18	-0.48	0.00	-0.02	-0.05	0.19	0.04	-0.21	-0.17	0.53		-0.08
(13) Return	-0.02	-0.02	-0.01	-0.26	0.01	-0.02	0.01	0.03	-0.01	0.02	-0.02	0.09	

Panel C: Correlation Matrix for Variables in Equation (7)

Pearson's (Spearman's) correlation coefficients are presented in the lower (upper) triangle. **Bold** indicates significance at the 10% level or better.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Accuracy		-0.80	0.09	-0.50	-0.23	-0.48	-0.11	-0.30	0.30	0.14	0.17	-0.41	-0.46	0.14	0.42
(2) Dispersion	-0.82		-0.14	0.45	0.20	0.47	0.09	0.29	-0.20	-0.17	-0.17	0.41	0.43	-0.11	-0.32
(3) Consistency	0.19	-0.17		-0.17	0.06	-0.04	0.08	0.03	-0.24	0.05	0.05	-0.03	0.07	-0.07	-0.05
(4) ΔEarn	-0.27	0.26	-0.40		0.06	0.38	0.15	0.16	-0.18	-0.07	-0.21	0.47	0.41	-0.02	-0.22
(5) NegUE	-0.07	0.05	0.03	0.01		0.32	0.27	0.09	-0.03	0.00	-0.06	0.11	0.06	-0.32	-0.05
(6) Loss	-0.27	0.27	-0.13	0.24	0.32		0.29	0.22	-0.29	-0.06	-0.13	0.48	0.43	-0.26	-0.20
(7) NegSI	-0.12	0.07	0.03	0.19	0.26	0.39		0.05	0.05	0.26	-0.10	0.21	0.12	-0.13	0.10
(8) Days	-0.14	0.15	-0.03	0.08	0.08	0.19	0.07		-0.32	0.04	-0.08	0.23	0.23	-0.11	-0.30
(9) Assets	0.15	-0.15	-0.08	-0.11	-0.03	-0.29	-0.11	-0.24		0.13	0.06	-0.51	-0.52	0.06	0.61
(10) Intan	0.04	-0.06	0.05	-0.04	0.00	-0.03	0.10	0.04	0.09		-0.05	0.00	-0.06	0.01	0.16
(11) Predictability	0.08	-0.08	0.08	-0.15	-0.07	-0.14	-0.11	-0.06	0.08	-0.04		-0.21	-0.15	0.05	0.07
(12) Std(Earn)	-0.24	0.27	-0.20	0.33	0.07	0.40	0.27	0.14	-0.42	-0.04	-0.14		0.65	-0.10	-0.17
(13) Std(Ret)	-0.25	0.27	-0.17	0.32	0.05	0.42	0.17	0.15	-0.47	-0.06	-0.15	0.53		-0.07	-0.25
(14) Return	0.04	-0.03	-0.02	0.05	-0.27	-0.17	-0.12	-0.11	-0.03	-0.02	0.02	0.00	0.10		0.03
(15) Analyst Following	0.16	-0.15	0.04	-0.16	-0.05	-0.20	-0.02	-0.20	0.61	0.14	0.09	-0.18	-0.25	-0.03	

Table 6: Accounting Consistency and Analyst Coverage

This table presents the regression of analyst coverage on accounting consistency.

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{Consistency}_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} + \beta_4 \text{Volume}_{i,t+1} \\
 & + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned}$$

where $\text{Analyst Following}_{i,t+1}$ is the natural logarithm of one plus the number of analysts following firm i in year $t+1$. $\text{Consistency}_{i,t}$ is the measure of accounting consistency. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	Analyst Following _{i, t+1}
Consistency	0.852*** (10.70)
Assets	0.123*** (17.27)
BTM	-0.122*** (-14.25)
Volume	0.283*** (46.70)
Intan	0.305*** (8.45)
R&D	0.469*** (7.04)
Depreciation	0.550*** (2.83)
Issue	-0.159*** (-11.11)
Predictability	0.114*** (4.37)
Std(Earn)	-0.456*** (-9.61)
Std(Ret)	-1.858*** (-22.43)
Return	-0.0767*** (-19.15)
Industry fixed effects	Yes
Year fixed effects	Yes
N	69,729
Adj. R-sq	0.710

Table 7: Accounting Consistency and Analyst Forecast Accuracy and Dispersion

This table presents the regressions of analyst forecast accuracy (dispersion) on accounting consistency.

$$\begin{aligned}
 \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{Consistency}_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\
 & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\
 & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std}(\text{Earn})_{i,t} + \beta_{11} \text{Std}(\text{Ret})_{i,t} + \beta_{12} \text{Return}_{i,t} \\
 & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
 \end{aligned}$$

where *Forecast Accuracy*_{*i,t*} is analyst forecast accuracy. *Forecast Dispersion*_{*i,t*} is analyst forecast dispersion. *Consistency*_{*i,t*} is the measure of accounting consistency. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	Accuracy	Dispersion
Consistency	0.685*** (6.27)	-0.105*** (-3.90)
ΔEarn	-0.240*** (-9.57)	0.0565*** (8.52)
NegUE	0.00435 (1.39)	-0.00398*** (-4.81)
Loss	-0.0981*** (-13.24)	0.0270*** (13.67)
NegSI	-0.0663 (-0.75)	-0.0857*** (-4.02)
Days	-0.198*** (-10.41)	0.0423*** (6.42)
Assets	-0.00454* (-1.75)	0.00133* (1.83)
Intan	-0.00683 (-0.38)	-0.00302 (-0.64)
Predictability	0.0107 (1.05)	-0.00204 (-0.75)
Std(Earn)	-0.198*** (-3.81)	0.0763*** (4.96)
Std(Ret)	-0.537*** (-7.24)	0.143*** (7.56)
Return	0.0240*** (5.87)	-0.00600*** (-5.73)
Analyst Following	0.0308*** (6.80)	-0.00754*** (-5.58)
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	54,956	48,626
Adj. R-sq	0.156	0.171

Table 8: Accounting Policy Changes

Panel A: Sample Selection for the Mandatory Accounting Policy Changes

This panel shows the selection procedure for the mandatory accounting policy change sample.

	# of Obs.
Total observations with non-missing and non-zero values for cumulative effect (ACCHG) from 1994 to 2007	3,616
Less:	
Observations with voluntary accounting changes	200
Observations without required data in regression analysis (Equation (8))	886
Final sample	2,530

Panel B: Sample Distribution by Fiscal Year

This panel shows the fiscal year distribution of the mandatory accounting policy change sample. *CUMU_M* is calculated as the absolute value of cumulative effect of a mandatory accounting change as reported in the income statement in year *t*, divided by beginning-of-period market value. *Accounting standards* are the details of the major accounting standard changes from 1994 to 2007 (Data source: Shroff (2017)).

Year	# of Obs.	CUMU_M	% of Obs.	Accounting standards
1994	187	0.031	7.39	EITF 93.5; SOP 93.6; SFAS 106, 109, 112, 115
1995	36	0.050	1.42	EITF 95.1; Practice Bulletin 13; SFAS 109, 112, 115, 121
1996	12	0.026	0.47	SFAS 121
1997	45	0.011	1.78	EITF 97.13; SFAS 121; SOP 98.5
1998	91	0.027	3.60	EITF 97.13; SFAS 121, 128, 133; SOP 97.3, 98.5
1999	163	0.012	6.44	SAB 101; SFAS 133; SOP 98.5
2000	269	0.027	10.63	EITF 0.27,98.5,99.5; FIN 44; SAB 101; SFAS 133; SOP 0.2, 97.3, 98.5
2001	363	0.024	14.35	EITF 0.19; SAB 101; SFAS 133; SOP 0.2
2002	580	0.180	22.92	EITF 0.19, 1.09, 1.9, 2.16; SFAS 133, 141, 142, 143; SOP 0.2
2003	399	0.034	15.77	EITF 0.21, 2.16, 3.4; FIN 46; SFAS 142, 143, 150
2004	71	0.022	2.81	EITF 0.21, d108; FIN 46; SFAS 123r, 143, 150
2005	137	0.004	5.42	EITF 4.6, d108; FIN 46, 47; SFAS 123r
2006	172	0.001	6.80	EITF 0.192, 4.6, d108; FIN 47; SFAS 123r, 152; SOP 4.2
2007	5	0.003	0.20	EITF 6.2; SFAS 123r, 159
Total	2,530	0.068	100.00	

Panel C: Sample Selection for the Voluntary Accounting Policy Changes

This panel shows the selection procedure for the voluntary accounting policy change sample.

	# of Obs.
Firm-years with voluntary accounting policy changes from 1994 to 2015	1,884
Less:	
Observations with missing GVKEY	573
Observations without required data in regression analysis (Equation (8))	342
Final sample	969

Panel D: Sample Distribution by Fiscal Year

This panel shows the fiscal year distribution of the voluntary accounting policy change sample. *CUMU_V* is calculated as the absolute value of cumulative effect of a voluntary accounting change as reported in the income statement in year *t*, divided by beginning-of-period market value.

Year	# of Obs.	CUMU_V	% of Obs.
1994	7	0.014	0.72
1995	4	0.032	0.41
1996	5	0.003	0.52
1997	12	0.006	1.24
1998	21	0.002	2.17
1999	13	0.024	1.34
2000	62	0.060	6.40
2001	37	0.033	3.82
2002	42	0.014	4.33
2003	50	0.035	5.16
2004	48	0.031	4.95
2005	59	0.020	6.09
2006	59	0.003	6.09
2007	37	0.018	3.82
2008	63	0.005	6.50
2009	60	0.015	6.19
2010	53	0.014	5.47
2011	72	0.023	7.43
2012	58	0.012	5.99
2013	60	0.014	6.19
2014	73	0.018	7.53
2015	74	0.014	7.64
Total	969	0.020	100.00

Table 9: Descriptive Statistics and Correlations for Accounting Policy Changes and Analyst Forecast Variables

Panel A: Descriptive Statistics

This panel presents the descriptive statistics for the mandatory accounting policy changes and analyst forecast variables.

Variable	No. of Obs.	Mean	P25	Median	P75	STD
Analyst Following _{i,t+1}	2,530	1.633	0.693	1.748	2.510	1.027
Accuracy	2,018	-0.048	-0.021	-0.007	-0.002	0.165
Dispersion	1,830	0.010	0.001	0.002	0.006	0.025
CUMU_M	2,530	0.068	0.001	0.005	0.024	0.254

Panel B: Correlation Matrix for Variables in Equation (8) for the Sample of Mandatory Accounting Policy Changes

Pearson's (Spearman's) correlation coefficients are presented in the lower (upper) triangle. **Bold** indicates significance at the 10% level or better.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Analyst Following _{i,t+1}		-0.36	0.70	-0.23	0.78	0.17	0.09	-0.02	0.37	0.07	-0.25	-0.32	-0.04
(2) CUMU_M	-0.19		-0.37	0.15	-0.34	0.01	-0.05	-0.02	-0.20	-0.10	0.23	0.39	0.21
(3) Assets	0.69	-0.15		-0.06	0.71	0.13	0.06	-0.04	0.57	0.04	-0.50	-0.53	-0.01
(4) BTM	-0.07	-0.08	-0.03		-0.30	-0.12	0.02	-0.05	-0.06	-0.06	-0.18	-0.02	-0.21
(5) Volume	0.76	-0.11	0.69	-0.12		0.20	0.11	-0.01	0.45	0.03	-0.07	-0.13	-0.04
(6) Intan	0.13	0.08	0.07	-0.08	0.15		-0.17	0.00	0.05	0.01	0.02	0.01	0.02
(7) R&D	-0.03	-0.02	-0.10	-0.02	0.03	-0.10		0.16	0.02	0.03	-0.01	0.02	-0.02
(8) Depreciation	-0.06	0.00	-0.10	0.00	-0.05	-0.07	0.09		0.00	0.02	0.04	0.01	0.05
(9) Issue	0.36	-0.06	0.57	-0.03	0.42	0.03	-0.01	-0.01		0.00	-0.26	-0.27	-0.05
(10) Predictability	0.08	-0.06	0.04	-0.04	0.03	-0.02	-0.02	0.02	0.00		-0.12	-0.11	0.02
(11) Std(Earn)	-0.18	0.09	-0.33	-0.09	0.00	0.00	0.21	0.09	-0.15	-0.07		0.65	-0.06
(12) Std(Ret)	-0.30	0.25	-0.47	-0.05	-0.07	0.02	0.20	0.10	-0.22	-0.11	0.48		-0.01
(13) Return	-0.12	0.15	-0.11	-0.04	-0.04	0.01	-0.01	0.06	-0.07	-0.02	0.04	0.19	

Panel C: Correlation Matrix for Variables in Equation (9) for the Sample of Mandatory Accounting Policy Changes

Pearson's (Spearman's) correlation coefficients are presented in the lower (upper) triangle. **Bold** indicates significance at the 10% level or better.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Accuracy		-0.78	-0.28	-0.45	-0.20	-0.45	-0.15	-0.28	0.30	0.10	0.09	-0.36	-0.42	0.13	0.45
(2) Dispersion	-0.71		0.25	0.45	0.14	0.43	0.14	0.23	-0.18	-0.09	-0.10	0.37	0.41	-0.06	-0.32
(3) CUMU_M	-0.21	0.20		0.32	0.02	0.24	0.11	0.12	-0.30	0.03	-0.08	0.20	0.35	-0.14	-0.32
(4) ΔEarn	-0.32	0.39	0.29		0.02	0.33	0.16	0.15	-0.16	-0.04	-0.17	0.43	0.38	-0.05	-0.26
(5) NegUE	-0.03	0.04	-0.02	-0.04		0.37	0.31	0.10	-0.05	0.01	-0.04	0.08	0.06	-0.31	-0.05
(6) Loss	-0.29	0.31	0.18	0.24	0.37		0.42	0.18	-0.22	0.01	-0.07	0.45	0.45	-0.29	-0.17
(7) NegSI	-0.16	0.18	0.14	0.19	0.32	0.47		0.02	0.03	0.20	-0.07	0.26	0.20	-0.19	0.07
(8) Days	-0.18	0.14	0.06	0.09	0.10	0.18	0.08		-0.31	0.03	-0.06	0.16	0.20	-0.08	-0.31
(9) Assets	0.22	-0.19	-0.16	-0.14	-0.04	-0.23	-0.10	-0.23		0.13	0.01	-0.47	-0.48	0.11	0.65
(10) Intan	0.04	-0.03	0.13	-0.04	0.03	0.03	0.09	0.03	0.07		0.00	0.00	0.00	-0.05	0.12
(11) Predictability	0.06	-0.08	-0.07	-0.13	-0.04	-0.08	-0.08	-0.05	0.01	-0.02		-0.11	-0.11	0.05	0.03
(12) Std(Earn)	-0.30	0.37	0.15	0.38	0.06	0.40	0.40	0.12	-0.39	-0.05	-0.09		0.64	-0.17	-0.21
(13) Std(Ret)	-0.34	0.39	0.29	0.40	0.05	0.47	0.30	0.14	-0.46	0.00	-0.10	0.60		-0.18	-0.27
(14) Return	0.04	0.04	-0.06	0.07	-0.28	-0.21	-0.19	-0.09	0.04	-0.06	0.06	-0.10	-0.06		0.02
(15) Analyst Following	0.26	-0.23	-0.22	-0.25	-0.05	-0.17	0.01	-0.19	0.64	0.08	0.04	-0.18	-0.28	-0.03	

Panel D: Descriptive Statistics

This panel presents the descriptive statistics for the voluntary accounting policy changes and analyst forecast variables.

Variable	No. of Obs.	Mean	P25	Median	P75	STD
Analyst Following _{i,t+1}	969	1.875	1.226	1.989	2.653	0.956
Accuracy	747	-0.016	-0.015	-0.005	-0.002	0.025
Dispersion	747	0.005	0.001	0.002	0.006	0.007
CUMU_V	969	0.020	0.000	0.000	0.007	0.071

Panel E: Correlation Matrix for Variables in Equation (8) for the Sample of Voluntary Accounting Policy Changes

Pearson's (Spearman's) correlation coefficients are presented in the lower (upper) triangle. **Bold** indicates significance at the 10% level or better.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Analyst Following _{i,t+1}		-0.10	0.67	-0.30	0.77	0.21	0.08	-0.02	0.39	0.04	-0.21	-0.39	0.06
(2) CUMU_V	-0.13		-0.10	-0.03	-0.06	-0.18	0.00	0.02	-0.09	-0.05	0.12	0.17	0.00
(3) Assets	0.63	-0.12		-0.10	0.74	0.15	0.09	-0.09	0.62	0.02	-0.44	-0.54	0.06
(4) BTM	-0.24	-0.05	-0.07		-0.29	-0.14	0.02	-0.05	-0.11	-0.07	-0.05	0.12	-0.25
(5) Volume	0.76	-0.11	0.71	-0.25		0.17	0.12	-0.01	0.47	0.00	-0.08	-0.24	0.01
(6) Intan	0.21	-0.09	0.14	-0.11	0.19		-0.20	-0.08	0.12	-0.05	-0.06	-0.20	-0.05
(7) R&D	0.00	0.01	0.00	0.05	0.01	-0.15		0.07	0.02	0.04	-0.06	-0.05	-0.05
(8) Depreciation	0.00	0.05	-0.11	-0.06	0.00	-0.10	0.03		-0.04	0.02	0.11	0.08	-0.01
(9) Issue	0.36	-0.07	0.61	-0.10	0.45	0.13	-0.01	-0.03		-0.03	-0.25	-0.34	-0.01
(10) Predictability	0.05	-0.06	0.03	-0.04	0.02	-0.01	0.01	0.00	-0.03		-0.20	-0.11	0.01
(11) Std(Earn)	-0.17	0.11	-0.36	-0.09	-0.02	-0.08	0.05	0.16	-0.18	-0.19		0.58	-0.10
(12) Std(Ret)	-0.33	0.19	-0.47	0.01	-0.16	-0.22	0.05	0.12	-0.29	-0.14	0.55		-0.03
(13) Return	-0.04	-0.04	-0.05	-0.11	-0.04	-0.10	-0.01	0.01	-0.06	0.00	0.01	0.17	

Panel F: Correlation Matrix for Variables in Equation (9) for the Sample of Voluntary Accounting Policy Changes

Pearson's (Spearman's) correlation coefficients are presented in the lower (upper) triangle. **Bold** indicates significance at the 10% level or better.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Accuracy		-0.79	-0.11	-0.29	-0.27	-0.42	-0.10	-0.23	0.27	0.27	0.11	-0.38	-0.47	0.12	0.41
(2) Dispersion	-0.77		0.08	0.24	0.21	0.42	0.07	0.21	-0.22	-0.30	-0.16	0.40	0.50	-0.09	-0.39
(3) CUMU_V	-0.21	0.16		0.11	0.06	0.03	0.03	-0.02	-0.05	-0.15	-0.05	0.13	0.16	-0.03	-0.06
(4) ΔEarn	-0.31	0.28	0.07		0.13	0.43	0.24	0.17	-0.38	-0.01	-0.14	0.66	0.38	-0.14	-0.18
(5) NegUE	-0.23	0.15	0.09	0.17		0.41	0.29	0.05	-0.06	-0.07	-0.03	0.13	0.07	-0.32	-0.08
(6) Loss	-0.49	0.44	0.11	0.47	0.41		0.36	0.15	-0.26	-0.08	-0.13	0.47	0.35	-0.28	-0.24
(7) NegSI	-0.25	0.15	0.12	0.44	0.35	0.53		0.09	-0.05	0.20	-0.08	0.29	0.12	-0.11	-0.01
(8) Days	-0.23	0.18	0.04	0.14	0.06	0.16	0.14		-0.36	0.06	-0.11	0.20	0.19	-0.11	-0.38
(9) Assets	0.22	-0.20	-0.03	-0.34	-0.06	-0.26	-0.14	-0.37		0.05	0.02	-0.41	-0.46	0.13	0.64
(10) Intan	0.21	-0.23	-0.08	-0.05	-0.06	-0.08	0.06	0.03	0.07		-0.04	0.01	-0.19	0.06	0.10
(11) Predictability	0.13	-0.14	-0.10	-0.15	-0.04	-0.14	-0.16	-0.12	0.02	-0.03		-0.17	-0.06	0.05	0.09
(12) Std(Earn)	-0.31	0.37	0.18	0.68	0.12	0.44	0.39	0.16	-0.34	-0.05	-0.18		0.51	-0.12	-0.22
(13) Std(Ret)	-0.42	0.50	0.16	0.42	0.06	0.35	0.18	0.19	-0.42	-0.20	-0.09	0.53		-0.04	-0.33
(14) Return	0.17	-0.07	-0.01	-0.13	-0.29	-0.26	-0.19	-0.09	0.09	0.03	0.04	-0.10	0.03		0.13
(15) Analyst Following	0.37	-0.33	-0.07	-0.16	-0.10	-0.26	-0.11	-0.42	0.62	0.14	0.11	-0.18	-0.30	0.14	

Table 10: Analyst Forecast Variables around Accounting Policy Changes

Panel A: Analyst Following around Accounting Policy Changes

This panel presents the mean value of the number of analyst forecasts around mandatory accounting policy changes and voluntary accounting policy changes. Year 0 is the year when these events occur. The last column presents the value of the mean analyst following in year 0 minus that in year -1 and the value of T-test for the difference.

Year	-2	-1	0	1	2	Diff (0 - (-1)) (T-test)
Mandatory Accounting Changes	1.712	1.662	1.632	1.632	1.632	-0.030 (-1.40)
Voluntary Accounting Changes	1.843	1.852	1.875	1.875	1.887	0.023 (2.91)

Panel B: Analyst Forecast Accuracy around Accounting Policy Changes

This panel presents the mean value of analyst earnings forecast accuracy around mandatory accounting policy changes and voluntary accounting policy changes. Year 0 is the year when these events occur. The last column presents the value of the mean analyst forecast accuracy in year 0 minus that in year -1 and the value of T-test for the difference.

Year	-2	-1	0	1	2	Diff (0 - (-1)) (T-test)
Mandatory Accounting Changes	-0.025	-0.029	-0.048	-0.035	-0.033	-0.019 (-4.47)
Voluntary Accounting Changes	-0.011	-0.012	-0.016	-0.013	-0.014	-0.004 (-3.74)

Panel C: Analyst Forecast Dispersion around Accounting Policy Changes

This panel presents the mean value of analyst earnings forecast dispersion around mandatory accounting policy changes and voluntary accounting policy changes. Year 0 is the year when these events occur. The last column presents the value of the mean analyst forecast dispersion in year 0 minus that in year -1 and the value of T-test for the difference.

Year	-2	-1	0	1	2	Diff (0 - (-1)) (T-test)
Mandatory Accounting Changes	0.006	0.007	0.010	0.009	0.008	0.003 (3.61)
Voluntary Accounting Changes	0.004	0.004	0.005	0.005	0.004	0.001 (1.73)

Table 11: Accounting Changes and Analyst Coverage

This table presents the regressions of analyst coverage on the cumulative effect of mandatory accounting policy changes and voluntary accounting policy changes.

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{CUMU_M}_{i,t} (\text{CUMU_V}_{i,t}) + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} \\
 & + \beta_4 \text{Volume}_{i,t+1} + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned}$$

where $\text{Analyst Following}_{i,t+1}$ is the natural logarithm of one plus the number of analysts following firm i in year $t+1$. $\text{CUMU_M}_{i,t}$ ($\text{CUMU_V}_{i,t}$) is calculated as the absolute value of cumulative effect of a mandatory (voluntary) accounting change as reported in the income statement in year t , divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	Analyst Following _{i,t+1}	
CUMU_M	-0.163*** (-2.73)	
CUMU_V		-0.255 (-1.05)
Assets	0.109*** (7.57)	0.0402 (1.61)
BTM	0.000581 (0.04)	-0.0930** (-2.55)
Volume	0.309*** (26.79)	0.319*** (14.44)
Intan	0.376*** (4.11)	0.253** (2.13)
R&D	0.552** (2.50)	0.826 (1.47)
Depreciation	0.663** (1.97)	2.356** (2.49)
Issue	-0.124*** (-3.61)	-0.111** (-2.00)
Predictability	0.171*** (2.98)	-0.0188 (-0.19)
Std(Earn)	-0.396*** (-3.30)	-0.647 (-1.54)
Std(Ret)	-1.348*** (-5.43)	-3.107*** (-6.98)
Return	-0.0568*** (-4.18)	0.0151 (0.46)
Industry fixed effects	Yes	Yes

Year fixed effects	Yes	Yes
N	2,530	969
Adj. R-sq	0.729	0.668

Table 12: Accounting Changes and Analyst Forecast Accuracy and Dispersion

This table presents the regressions of analyst forecast accuracy (dispersion) on the cumulative effect of mandatory accounting policy changes and voluntary accounting policy changes.

$$\begin{aligned} \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{CUMU_}M_{i,t} (\text{CUMU_}V_{i,t}) + \beta_2 \Delta \text{Earn}_{i,t} \\ & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\ & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std}(\text{Earn})_{i,t} + \beta_{11} \text{Std}(\text{Ret})_{i,t} + \beta_{12} \text{Return}_{i,t} \\ & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t} \end{aligned}$$

where *Forecast Accuracy*_{*i,t*} is analyst forecast accuracy. *Forecast Dispersion*_{*i,t*} is analyst forecast dispersion. *CUMU_M*_{*i,t*} (*CUMU_V*_{*i,t*}) is calculated as the absolute value of cumulative effect of a mandatory (voluntary) accounting change as reported in the income statement in year *t*, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)
	Accuracy		Dispersion	
CUMU_M	-0.114** (-1.97)		0.0172** (1.98)	
CUMU_V		-0.123*** (-2.95)		0.0186* (1.83)
ΔEarn	-0.0524*** (-5.16)	-0.0311 (-1.26)	0.0128*** (3.44)	-0.00117 (-0.18)
NegUE	0.0162** (2.09)	-0.00175 (-0.95)	-0.00122 (-1.01)	0.000157 (0.33)
Loss	-0.0480*** (-3.79)	-0.0169*** (-5.06)	0.00745*** (3.48)	0.00392*** (4.67)
NegSI	-0.0611 (-0.34)	0.0244 (0.49)	-0.00633 (-0.22)	-0.0131 (-1.05)
Days	-0.0953*** (-3.08)	-0.0217* (-1.92)	0.00204 (0.42)	0.00193 (0.63)
Assets	-0.00452 (-1.24)	-0.00242*** (-3.21)	0.00198*** (3.27)	0.000776*** (3.92)
Intan	0.0261 (1.05)	0.0119** (2.27)	0.00227 (0.56)	-0.00272** (-2.19)
Predictability	0.00184 (0.12)	0.00170 (0.54)	-0.00297 (-1.19)	-0.000407 (-0.48)
Std(Earn)	-0.212** (-1.99)	0.00778 (0.22)	0.0574*** (3.33)	0.0140 (1.41)
Std(Ret)	-0.341*** (-3.28)	-0.116*** (-4.16)	0.0735*** (4.14)	0.0469*** (6.40)
Return	0.00792 (0.76)	0.00394 (1.45)	0.00198 (1.26)	-0.000507 (-0.64)
Analyst Following	0.0390***	0.00910***	-0.00748***	-0.00262***

	(5.75)	(4.54)	(-5.97)	(-4.87)
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	2,018	747	1,830	747
Adj. R-sq	0.218	0.385	0.287	0.413

Table 13: Analyst Forecast Variables around Voluntary Accounting Policy Changes

Panel A: Analyst Following around Voluntary Accounting Policy Changes

This panel presents the mean value of the number of analyst forecasts around voluntary accounting policy changes under APB Opinion No. 20 and under SFAS No. 154. Year 0 is the year when these events occur. The last column presents the value of the mean analyst following in year 0 minus that in year -1 and the value of T-test for the difference.

Year	-2	-1	0	1	2	Diff (0 - (-1)) (T-test)
APB20	1.784	1.783	1.760	1.724	1.737	-0.023 (-1.09)
SFAS154	1.878	1.893	1.946	1.969	1.991	0.053 (4.69)

Panel B: Analyst Forecast Accuracy around Voluntary Accounting Policy Changes

This panel presents the mean value of analyst earnings forecast accuracy around voluntary accounting policy changes under APB Opinion No. 20 and under SFAS No. 154. Year 0 is the year when these events occur. The last column presents the value of the mean analyst forecast accuracy in year 0 minus that in year -1 and the value of T-test for the difference.

Year	-2	-1	0	1	2	Diff (0 - (-1)) (T-test)
APB20	-0.012	-0.015	-0.020	-0.015	-0.013	-0.005 (-2.63)
SFAS154	-0.011	-0.011	-0.013	-0.011	-0.014	-0.002 (-1.96)

Panel C: Analyst Forecast Dispersion around Voluntary Accounting Policy Changes

This panel presents the mean value of analyst earnings forecast dispersion around voluntary accounting policy changes under APB Opinion No. 20 and under SFAS No. 154. Year 0 is the year when these events occur. The last column presents the value of the mean analyst forecast dispersion in year 0 minus that in year -1 and the value of T-test for the difference.

Year	-2	-1	0	1	2	Diff (0 - (-1)) (T-test)
APB20	0.004	0.005	0.006	0.006	0.004	0.001 (2.84)
SFAS154	0.005	0.004	0.005	0.005	0.005	0.001 (1.31)

Table 14: Voluntary Accounting Changes and Analyst Coverage

This table presents the regressions of analyst coverage on the cumulative effect of voluntary accounting changes under APB Opinion No. 20 and under SFAS No. 154.

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{CUMU_V}_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} \\
 & + \beta_4 \text{Volume}_{i,t+1} + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned}$$

where $\text{Analyst Following}_{i,t+1}$ is the natural logarithm of one plus the number of analysts following firm i in year $t+1$. $\text{CUMU_V}_{i,t}$ is calculated as the absolute value of cumulative effect of a voluntary accounting change as reported in the income statement in year t , divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	APB20	SFAS154
	Analyst Following _{i,t+1}	
CUMU_V	-0.172 (-0.57)	-0.197 (-0.42)
Assets	0.127*** (3.47)	0.000838 (0.03)
BTM	-0.0376 (-0.74)	-0.141** (-2.52)
Volume	0.296*** (8.46)	0.329*** (12.08)
Intan	0.159 (0.78)	0.389*** (2.77)
R&D	1.240 (1.13)	0.941 (1.29)
Depreciation	3.120** (2.39)	1.699 (1.18)
Issue	-0.110 (-1.30)	-0.102 (-1.52)
Predictability	0.177 (1.29)	-0.0769 (-0.56)
Std(Earn)	-2.052** (-2.40)	-0.163 (-0.32)
Std(Ret)	-1.161* (-1.67)	-3.797*** (-6.22)
Return	-0.0455 (-1.13)	0.0722 (1.34)
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	372	597
Adj. R-sq	0.720	0.662
t-test ($\beta_1^{(1)} = \beta_1^{(2)}$)	$p=0.48$	

Table 15: Voluntary Accounting Changes and Analyst Forecast Accuracy and Dispersion

This table presents the regressions of analyst forecast accuracy (dispersion) on the cumulative effect of voluntary accounting changes under APB Opinion No. 20 and under SFAS No. 154.

$$\begin{aligned}
 \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{CUMU_}V_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\
 & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\
 & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std}(\text{Earn})_{i,t} + \beta_{11} \text{Std}(\text{Ret})_{i,t} + \beta_{12} \text{Return}_{i,t} \\
 & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
 \end{aligned}$$

where *Forecast Accuracy*_{*i,t*} is analyst forecast accuracy. *Forecast Dispersion*_{*i,t*} is analyst forecast dispersion. *CUMU_V*_{*i,t*} is calculated as the absolute value of cumulative effect of a voluntary accounting change as reported in the income statement in year *t*, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)		(2)		(3)		(4)	
	APB20		SFAS154		APB20		SFAS154	
	Accuracy				Dispersion			
CUMU_V	-0.196**		-0.0647		0.0364*		0.00604	
	(-2.25)		(-1.26)		(1.84)		(0.50)	
ΔEarn	0.0124		-0.0408		-0.000750		-0.00197	
	(0.23)		(-1.38)		(-0.06)		(-0.25)	
NegUE	0.00283		-0.00225		-0.000608		0.000145	
	(0.80)		(-0.96)		(-0.65)		(0.24)	
Loss	-0.0180***		-0.0162***		0.00317**		0.00435***	
	(-3.31)		(-3.87)		(2.11)		(4.31)	
NegSI	0.0539		0.00101		-0.0124		-0.00484	
	(0.72)		(0.01)		(-0.62)		(-0.31)	
Days	-0.0186		-0.0260*		-0.00324		0.00567	
	(-0.90)		(-1.76)		(-0.63)		(1.47)	
Assets	-0.00193		-0.00246***		0.000402		0.000947***	
	(-1.32)		(-2.89)		(1.13)		(3.94)	
Intan	0.00327		0.0156**		0.000501		-0.00445***	
	(0.32)		(2.33)		(0.17)		(-2.97)	
Predictability	0.00877		-0.000300		-0.00156		-0.0000278	
	(1.43)		(-0.08)		(-0.89)		(-0.03)	
Std(Earn)	-0.116		0.0292		0.0289		0.0131	
	(-1.54)		(0.75)		(1.47)		(1.16)	
Std(Ret)	-0.0403		-0.154***		0.0364***		0.0526***	
	(-0.88)		(-4.14)		(2.96)		(5.29)	
Return	0.00603		0.00327		-0.000914		-0.000264	
	(1.40)		(0.97)		(-0.74)		(-0.25)	
Analyst Following	0.0109***		0.00672***		-0.00282***		-0.00215***	

	(2.64)	(2.90)	(-2.83)	(-2.97)
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	267	480	267	480
Adj. R-sq	0.416	0.364	0.355	0.463
t-test ($\beta_1^{(1)} = \beta_1^{(2)}$ or $\beta_l^{(3)} = \beta_l^{(4)}$)	<i>p=0.07</i>		<i>p=0.03</i>	

Table 16: An Alternative Measure of Accounting Consistency—Prices Lead Earnings

Panel A: Accounting Consistency and Analyst Coverage

This panel presents the regression of analyst coverage on accounting consistency.

$$\begin{aligned} \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{Consistency_PLE}_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} + \beta_4 \text{Volume}_{i,t+1} \\ & + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\ & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\ & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1} \end{aligned}$$

where $\text{Analyst Following}_{i,t+1}$ is the natural logarithm of one plus the number of analysts following firm i in year $t+1$. $\text{Consistency_PLE}_{i,t}$ is an alternative measure of accounting consistency that adjusts for systematic differences in the ability of prices to lead earnings across firms. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	Analyst Following _{i,t+1}
Consistency_PLE	0.780*** (10.31)
Assets	0.122*** (16.98)
BTM	-0.122*** (-14.13)
Volume	0.284*** (46.41)
Intan	0.309*** (8.47)
R&D	0.477*** (7.02)
Depreciation	0.553*** (2.81)
Issue	-0.158*** (-10.97)
Predictability	0.113*** (4.30)
Std(Earn)	-0.462*** (-9.57)
Std(Ret)	-1.868*** (-22.34)
Return	-0.0767*** (-18.92)
Industry fixed effects	Yes
Year fixed effects	Yes
N	68,574
Adj. R-sq	0.711

Panel B: Accounting Consistency and Analyst Forecast Accuracy and Dispersion

This panel presents the regressions of analyst forecast accuracy (dispersion) on accounting consistency.

$$\begin{aligned} \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{Consistency_PLE}_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\ & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\ & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std(Earn)}_{i,t} + \beta_{11} \text{Std(Ret)}_{i,t} + \beta_{12} \text{Return}_{i,t} \\ & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t} \end{aligned}$$

where *Forecast Accuracy*_{*i,t*} is analyst forecast accuracy. *Forecast Dispersion*_{*i,t*} is analyst forecast dispersion. *Consistency_PLE*_{*i,t*} is an alternative measure of accounting consistency that adjusts for systematic differences in the ability of prices to lead earnings across firms. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	Accuracy	Dispersion
Consistency_PLE	0.610*** (5.88)	-0.104*** (-4.08)
ΔEarn	-0.243*** (-9.87)	0.0566*** (8.73)
NegUE	0.00356 (1.16)	-0.00389*** (-4.80)
Loss	-0.0964*** (-13.51)	0.0260*** (13.62)
NegSI	-0.0484 (-0.57)	-0.0822*** (-3.96)
Days	-0.192*** (-10.19)	0.0421*** (6.53)
Assets	-0.00447* (-1.75)	0.00134* (1.89)
Intan	-0.00603 (-0.35)	-0.00252 (-0.55)
Predictability	0.00791 (0.80)	-0.00129 (-0.49)
Std(Earn)	-0.194*** (-3.79)	0.0748*** (4.97)
Std(Ret)	-0.520*** (-7.14)	0.139*** (7.49)
Return	0.0230*** (5.71)	-0.00584*** (-5.67)
Analyst Following	0.0294*** (6.72)	-0.00722*** (-5.48)
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	54,252	48,011
Adj. R-sq	0.160	0.175

Table 17: An Alternative Measure of Accounting Consistency—Measuring Accounting Function Stability Directly

Panel A: Accounting Consistency and Analyst Coverage

This panel presents the regression of analyst coverage on accounting consistency.

$$\begin{aligned} \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{Consistency_Direct}_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} + \beta_4 \text{Volume}_{i,t+1} \\ & + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\ & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\ & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1} \end{aligned}$$

where *Analyst Following*_{*i,t+1*} is the natural logarithm of one plus the number of analysts following firm *i* in year *t+1*. *Consistency_Direct*_{*i,t*} is an alternative measure of accounting consistency where accounting function stability is calculated as the negative value of the average absolute difference between the current year's accounting function and the last year's accounting function. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	Analyst Following _{<i>i,t+1</i>}
Consistency_Direct	1.154*** (10.56)
Assets	0.118*** (16.92)
BTM	-0.117*** (-13.89)
Volume	0.286*** (47.68)
Intan	0.307*** (8.52)
R&D	0.490*** (7.39)
Depreciation	0.527*** (2.73)
Issue	-0.157*** (-11.00)
Predictability	0.112*** (4.27)
Std(Earn)	-0.485*** (-10.53)
Std(Ret)	-1.983*** (-24.46)
Return	-0.0737*** (-18.44)
Industry fixed effects	Yes
Year fixed effects	Yes
N	70,212
Adj. R-sq	0.709

Panel B: Accounting Consistency and Analyst Forecast Accuracy and Dispersion

This panel presents the regressions of analyst forecast accuracy (dispersion) on accounting consistency.

$$\begin{aligned}
 \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{Consistency_Direct}_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\
 & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\
 & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std(Earn)}_{i,t} + \beta_{11} \text{Std(Ret)}_{i,t} + \beta_{12} \text{Return}_{i,t} \\
 & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t}
 \end{aligned}$$

where *Forecast Accuracy*_{*i,t*} is analyst forecast accuracy. *Forecast Dispersion*_{*i,t*} is analyst forecast dispersion. *Consistency_Direct*_{*i,t*} is an alternative measure of accounting consistency where accounting function stability is calculated as the negative value of the average absolute difference between the current year's accounting function and the last year's accounting function. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	Accuracy	Dispersion
Consistency_Direct	0.611*** (4.68)	-0.0852*** (-2.78)
ΔEarn	-0.268*** (-11.12)	0.0613*** (9.43)
NegUE	0.00581* (1.82)	-0.00419*** (-5.01)
Loss	-0.102*** (-13.60)	0.0276*** (13.93)
NegSI	0.00195 (0.02)	-0.0979*** (-4.62)
Days	-0.199*** (-10.47)	0.0412*** (6.26)
Assets	-0.00696*** (-2.69)	0.00170** (2.37)
Intan	-0.00668 (-0.37)	-0.00267 (-0.55)
Predictability	0.00825 (0.80)	-0.00170 (-0.62)
Std(Earn)	-0.209*** (-3.99)	0.0780*** (5.06)
Std(Ret)	-0.610*** (-8.20)	0.155*** (8.06)
Return	0.0259*** (6.19)	-0.00630*** (-6.00)
Analyst Following	0.0325*** (7.15)	-0.00786*** (-5.78)

Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	55,094	48,742
Adj. R-sq	0.152	0.170

Table 18: Ranked Measure of Accounting Consistency

Panel A: Accounting Consistency and Analyst Coverage

This panel presents the regression of analyst coverage on accounting consistency.

$$\begin{aligned}
\text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{Consistency_Rank}_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} + \beta_4 \text{Volume}_{i,t+1} \\
& + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
& + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
& + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
\end{aligned}$$

where $\text{Analyst Following}_{i,t+1}$ is the natural logarithm of one plus the number of analysts following firm i in year $t+1$. $\text{Consistency_Rank}_{i,t}$ is the ranking (between 0 and 9) of the accounting consistency measure. Observations with a higher value of accounting consistency measure receive a higher ranking. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	Analyst Following _{i,t+1}
Consistency_Rank	0.0162*** (13.65)
Assets	0.126*** (17.73)
BTM	-0.123*** (-14.43)
Volume	0.283*** (46.79)
Intan	0.292*** (8.12)
R&D	0.483*** (7.23)
Depreciation	0.562*** (2.90)
Issue	-0.157*** (-11.04)
Predictability	0.112*** (4.29)
Std(Earn)	-0.454*** (-9.67)
Std(Ret)	-1.909*** (-23.27)
Return	-0.0774*** (-19.33)
Industry fixed effects	Yes
Year fixed effects	Yes
N	69,729
Adj. R-sq	0.710

Panel B: Accounting Consistency and Analyst Forecast Accuracy and Dispersion

This panel presents the regressions of analyst forecast accuracy (dispersion) on accounting consistency.

$$\begin{aligned} \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{Consistency_Rank}_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\ & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\ & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std(Earn)}_{i,t} + \beta_{11} \text{Std(Ret)}_{i,t} + \beta_{12} \text{Return}_{i,t} \\ & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t} \end{aligned}$$

where *Forecast Accuracy*_{*i,t*} is analyst forecast accuracy. *Forecast Dispersion*_{*i,t*} is analyst forecast dispersion. *Consistency_Rank*_{*i,t*} is the ranking (between 0 and 9) of the accounting consistency measure. Observations with a higher value of accounting consistency measure receive a higher ranking. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	Accuracy	Dispersion
Consistency_Rank	0.00341*** (3.22)	-0.000309** (-2.03)
ΔEarn	-0.275*** (-11.15)	0.0424*** (11.81)
NegUE	0.00524* (1.67)	-0.00296*** (-5.79)
Loss	-0.101*** (-13.56)	0.0216*** (17.16)
NegSI	-0.0118 (-0.13)	-0.0667*** (-5.40)
Days	-0.199*** (-10.47)	0.0285*** (7.22)
Assets	-0.00640** (-2.39)	0.00120*** (2.81)
Intan	-0.00752 (-0.42)	-0.00320 (-1.09)
Predictability	0.0111 (1.09)	-0.00102 (-0.60)
Std(Earn)	-0.225*** (-4.39)	0.0548*** (6.10)
Std(Ret)	-0.581*** (-7.87)	0.108*** (9.55)
Return	0.0250*** (6.05)	-0.00304*** (-4.89)
Analyst Following	0.0325*** (7.13)	-0.00601*** (-7.36)
Industry fixed effects	Yes	Yes

Year fixed effects	Yes	Yes
N	54,956	48,626
Adj. R-sq	0.152	0.171

Table 19: Changes Analysis

Panel A: Changes in Accounting Consistency and Changes in Analyst Coverage

This panel presents the regression of changes in analyst coverage on changes in accounting consistency.

$$\begin{aligned} \Delta \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \Delta \text{Consistency}_{i,t} + \beta_2 \Delta \text{Assets}_{i,t+1} + \beta_3 \Delta \text{BTM}_{i,t+1} \\ & + \beta_4 \Delta \text{Volume}_{i,t+1} + \beta_5 \Delta \text{Intan}_{i,t+1} + \beta_6 \Delta \text{R\&D}_{i,t+1} + \beta_7 \Delta \text{Depreciation}_{i,t+1} \\ & + \beta_8 \Delta \text{Issue}_{i,t+1} + \beta_9 \Delta \text{Std}(\text{Earn})_{i,t+1} + \beta_{10} \Delta \text{Std}(\text{Ret})_{i,t+1} + \beta_{11} \Delta \text{Return}_{i,t+1} \\ & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1} \end{aligned}$$

where $\Delta \text{Analyst Following}_{i,t+1}$ is changes in the natural logarithm of one plus the number of analysts following firm i from year t to year $t+1$. $\Delta \text{Consistency}_{i,t}$ is changes in the measure of accounting consistency from year $t-1$ to year t . All control variables are measured as changes in firm-level value from year t to year $t+1$. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	$\Delta \text{Analyst Following}_{i,t+1}$
$\Delta \text{Consistency}$	0.138*** (4.68)
ΔAssets	0.180*** (30.55)
ΔBTM	-0.0355*** (-10.04)
ΔVolume	0.0694*** (27.86)
ΔIntan	-0.114*** (-4.89)
$\Delta \text{R\&D}$	-0.118*** (-3.56)
$\Delta \text{Depreciation}$	-0.588*** (-8.00)
ΔIssue	-0.0229*** (-6.99)
$\Delta \text{Std}(\text{Earn})$	-0.181*** (-5.36)
$\Delta \text{Std}(\text{Ret})$	-0.638*** (-13.00)
ΔReturn	-0.0467*** (-25.88)
Industry fixed effects	Yes
Year fixed effects	Yes
N	68,382
Adj. R-sq	0.083

Panel B: Changes in Accounting Consistency and Changes in Analyst Forecast Accuracy and Dispersion

This panel presents the regressions of changes in analyst forecast accuracy (dispersion) on changes in accounting consistency.

$$\begin{aligned} \Delta Forecast Accuracy_{i,t} \text{ or } \Delta Forecast Dispersion_{i,t} = & \beta_0 + \beta_1 \Delta Consistency_{i,t} + \beta_2 \Delta (\Delta Earn)_{i,t} \\ & + \beta_3 \Delta NegUE_{i,t} + \beta_4 \Delta Loss_{i,t} + \beta_5 \Delta NegSI_{i,t} + \beta_6 \Delta Days_{i,t} + \beta_7 \Delta Assets_{i,t} \\ & + \beta_8 \Delta Intan_{i,t} + \beta_9 \Delta Std(Earn)_{i,t} + \beta_{10} \Delta Std(Ret)_{i,t} + \beta_{11} \Delta Return_{i,t} \\ & + \beta_{12} \Delta Analyst Following_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t} \end{aligned}$$

where $\Delta Forecast Accuracy_{i,t}$ ($\Delta Forecast Dispersion_{i,t}$) refers to changes in analyst forecast accuracy (dispersion) for firm i from year $t-1$ to year t . $\Delta Consistency_{i,t}$ is changes in the measure of accounting consistency from year $t-1$ to year t . All control variables are measured as changes in firm-level value from year $t-1$ to year t . Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	$\Delta Accuracy$	$\Delta Dispersion$
$\Delta Consistency$	0.516*** (11.96)	-0.0835*** (-8.63)
$\Delta(\Delta Earn)$	-0.0267*** (-2.77)	-0.00221 (-0.97)
$\Delta NegUE$	-0.00426*** (-3.67)	-0.000815*** (-3.06)
$\Delta Loss$	-0.0172*** (-6.65)	0.00249*** (4.33)
$\Delta NegSI$	-0.204*** (-7.15)	0.00713 (1.15)
$\Delta Days$	-0.0912*** (-11.95)	0.0155*** (5.80)
$\Delta Assets$	0.0400*** (8.02)	-0.0111*** (-9.48)
$\Delta Intan$	-0.0184 (-1.27)	0.0141*** (4.23)
$\Delta Std(Earn)$	-0.192*** (-4.98)	0.0327*** (3.55)
$\Delta Std(Ret)$	-0.419*** (-8.57)	0.140*** (11.36)
$\Delta Return$	-0.0180*** (-12.85)	0.00552*** (16.80)
$\Delta Analyst Following$	0.0401*** (11.65)	-0.0101*** (-12.57)
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	52,046	45,418
Adj. R-sq	0.089	0.089

Table 20: Individual Accounting Standard Change and Analyst Forecast Characteristics

Panel A: Accounting Standard Changes and Analyst Coverage

This panel presents the regressions of analyst coverage on the cumulative effect of the adoption of SFAS No. 133 and SFAS No. 142.

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{CUMU_M}_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} \\
 & + \beta_4 \text{Volume}_{i,t+1} + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned}$$

where *Analyst Following*_{*i,t+1*} is the number of analyst followings of firm *i* in year *t+1*. *CUMU_M*_{*i,t*} is calculated as the absolute value of cumulative effect of an accounting standard change as reported in the income statement in year *t*, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	SFAS133	SFAS142
	Analyst Following _{<i>i,t+1</i>}	
CUMU_M	-0.865*** (-3.53)	-0.415* (-1.78)
Assets	0.101*** (3.37)	0.0589*** (2.59)
BTM	0.0100 (0.53)	-0.0731** (-2.16)
Volume	0.242*** (9.76)	0.306*** (15.10)
Intan	0.697*** (4.30)	0.513*** (3.24)
R&D	1.828** (2.06)	0.0274 (0.05)
Depreciation	1.488* (1.77)	0.370 (0.53)
Issue	-0.139** (-2.23)	-0.112 (-1.55)
Predictability	0.115 (1.01)	0.189* (1.72)
Std(Earn)	0.911* (1.90)	-0.264 (-1.62)
Std(Ret)	-0.237 (-0.50)	-1.786*** (-4.33)
Return	-0.157***	-0.0462*

	(-3.81)	(-1.77)
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	390	447
Adj. R-sq	0.762	0.764

Panel B: Accounting Standard Changes and Analyst Forecast Accuracy and Dispersion

This panel presents the regressions of analyst forecast accuracy (dispersion) on the cumulative effect of the adoption of SFAS No. 133 and SFAS No. 142.

$$\begin{aligned} \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{CUMU_}M_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\ & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\ & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std(Earn)}_{i,t} + \beta_{11} \text{Std(Ret)}_{i,t} + \beta_{12} \text{Return}_{i,t} \\ & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t} \end{aligned}$$

where $\text{Forecast Accuracy}_{i,t}$ is analyst forecast accuracy. $\text{Forecast Dispersion}_{i,t}$ is analyst forecast dispersion. $\text{CUMU_}M_{i,t}$ is calculated as the absolute value of cumulative effect of an accounting standard change as reported in the income statement in year t, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)		(2)		(3)		(4)	
	SFAS133		SFAS142		SFAS133		SFAS142	
	Accuracy				Dispersion			
CUMU_M	-0.0270***	-0.0431***			0.00811***	0.00697**		
	(-3.21)	(-4.41)			(4.48)	(2.22)		
Δ Earn	0.00277	-0.00274			-0.00190**	-0.00185**		
	(0.63)	(-0.96)			(-2.16)	(-2.29)		
NegUE	-0.00227	-0.00149			-0.000296	0.000378		
	(-1.18)	(-0.56)			(-0.76)	(0.51)		
Loss	-0.0170***	-0.00920***			0.00397***	0.000952		
	(-6.00)	(-2.95)			(6.98)	(1.04)		
NegSI	0.0501	-0.00544			-0.00729	0.00772		
	(1.28)	(-0.16)			(-0.94)	(0.77)		
Days	-0.0112	-0.0104			-0.00110	0.00260		
	(-1.35)	(-1.38)			(-0.59)	(1.05)		
Assets	-0.00238**	-0.00242***			0.000884***	0.00104***		
	(-2.41)	(-2.65)			(4.40)	(3.98)		
Intan	-0.00286	0.0151**			0.00128	-0.00197		
	(-0.43)	(2.11)			(0.96)	(-0.94)		
Predictability	0.000893	0.00298			-0.00126	-0.00104		
	(0.20)	(0.62)			(-1.42)	(-0.77)		
Std(Earn)	0.0331	-0.0385**			-0.00240	0.00786		
	(1.09)	(-2.01)			(-0.40)	(1.44)		
Std(Ret)	-0.0864***	-0.0806***			0.0254***	0.0363***		
	(-4.46)	(-4.02)			(6.32)	(6.13)		
Return	0.000652	-0.00399*			0.000839*	0.00262***		
	(0.27)	(-1.67)			(1.68)	(3.78)		
Analyst Following	0.00878***	0.0120***			-0.00223***	-0.00287***		
	(3.97)	(6.24)			(-4.63)	(-5.11)		

Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	346	355	326	321
Adj. R-sq	0.334	0.485	0.456	0.378

Table 21: Inventory Costing Method Changes and Analyst Forecast Characteristics

Panel A: Inventory Costing Method Changes and Analyst Coverage

This panel presents the regressions of analyst coverage on the cumulative effect of inventory costing method changes under APB Opinion No. 20 and under SFAS No. 154.

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{CUMU_}V_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} \\
 & + \beta_4 \text{Volume}_{i,t+1} + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned}$$

where *Analyst Following*_{*i,t+1*} is the natural logarithm of one plus the number of analysts following firm *i* in year *t+1*. *CUMU_**V*_{*i,t*} is calculated as the absolute value of cumulative effect of a voluntary accounting change as reported in the income statement in year *t*, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	APB20	SFAS154
	Analyst Following _{<i>i,t+1</i>}	
CUMU_V	-0.374 (-0.13)	1.150 (0.46)
Assets	0.0779 (0.77)	-0.154** (-2.14)
BTM	-0.104 (-0.55)	0.108 (0.84)
Volume	0.393*** (4.94)	0.454*** (7.53)
Intan	-0.282 (-0.62)	1.383*** (3.20)
R&D	-3.491 (-1.14)	-2.539 (-1.07)
Depreciation	2.178 (0.59)	13.25*** (3.45)
Issue	-0.260 (-0.97)	0.0910 (0.66)
Predictability	0.458* (1.68)	0.131 (0.64)
Std(Earn)	-1.806 (-0.98)	-0.832 (-0.58)
Std(Ret)	-1.714 (-1.11)	-4.996*** (-3.66)
Return	-0.138 (-1.17)	0.0845 (0.90)
Industry fixed effects	Yes	Yes

Year fixed effects	Yes	Yes
N	108	107
Adj. R-sq	0.654	0.812
t-test ($\beta_1^{(1)} = \beta_1^{(2)}$)	<i>p=0.30</i>	

Panel B: Inventory Costing Method Changes and Analyst Forecast Accuracy and Dispersion

This panel presents the regressions of analyst forecast accuracy (dispersion) on the cumulative effect of inventory costing method changes under APB Opinion No. 20 and under SFAS No. 154.

$$\begin{aligned} \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{CUMU_}V_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\ & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\ & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std(Earn)}_{i,t} + \beta_{11} \text{Std(Ret)}_{i,t} + \beta_{12} \text{Return}_{i,t} \\ & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t} \end{aligned}$$

where $\text{Forecast Accuracy}_{i,t}$ is analyst forecast accuracy. $\text{Forecast Dispersion}_{i,t}$ is analyst forecast dispersion. $\text{CUMU_}V_{i,t}$ is calculated as the absolute value of cumulative effect of a voluntary accounting change as reported in the income statement in year t, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)
	APB20	SFAS154	APB20	SFAS154
	Accuracy		Dispersion	
CUMU_V	-0.254*	-0.0774	0.104***	0.0250
	(-1.95)	(-0.89)	(3.40)	(0.96)
ΔEarn	-0.0420	-0.100***	0.00168	0.0125
	(-1.03)	(-3.45)	(0.13)	(1.49)
NegUE	-0.00116	-0.00349	0.00275*	0.000
	(-0.22)	(-1.30)	(1.77)	(0.09)
Loss	-0.00573	-0.0125***	0.000567	0.00137
	(-1.02)	(-2.77)	(0.34)	(0.99)
NegSI	0.0313	0.362***	-0.00908	-0.0423**
	(0.43)	(4.66)	(-0.35)	(-2.24)
Days	-0.0539	-0.0545**	0.000163	0.00452
	(-1.61)	(-2.40)	(0.02)	(0.80)
Assets	-0.00130	-0.00274**	0.0000657	0.000542
	(-0.71)	(-2.36)	(0.12)	(1.51)
Intan	-0.00211	0.0159*	0.000489	-0.00352
	(-0.16)	(1.80)	(0.11)	(-1.59)
Predictability	-0.00554	-0.00136	0.00129	0.000414
	(-0.84)	(-0.29)	(0.60)	(0.36)
Std(Earn)	-0.149**	-0.117**	0.0218	0.0517***
	(-2.34)	(-2.43)	(1.17)	(3.47)
Std(Ret)	-0.0511	-0.0206	0.0316*	0.00859
	(-0.98)	(-0.53)	(1.81)	(0.77)
Return	0.00106	0.000261	0.000148	-0.00104
	(0.16)	(0.05)	(0.08)	(-0.82)
Analyst Following	0.00532	-0.00340	-0.00152	-0.000395
	(1.36)	(-1.17)	(-1.46)	(-0.45)

Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	71	79	71	79
Adj. R-sq	0.648	0.742	0.488	0.745
t-test ($\beta_1^{(1)} = \beta_1^{(2)}$ or $\beta_1^{(3)} = \beta_1^{(4)}$)	<i>p=0.05</i>		<i>p=0.00</i>	

Table 22: Pseudo-Change Year Test of Voluntary Accounting Changes

Panel A: Voluntary Accounting Changes in Pseudo Year and Analyst Coverage

This panel presents the regressions of analyst coverage on the cumulative effect of voluntary accounting changes under APB Opinion No. 20 and under SFAS No. 154.

$$\begin{aligned}
 \text{Analyst Following}_{i,t+1} = & \beta_0 + \beta_1 \text{CUMU_}V_{i,t} + \beta_2 \text{Assets}_{i,t+1} + \beta_3 \text{BTM}_{i,t+1} \\
 & + \beta_4 \text{Volume}_{i,t+1} + \beta_5 \text{Intan}_{i,t+1} + \beta_6 \text{R\&D}_{i,t+1} + \beta_7 \text{Depreciation}_{i,t+1} + \beta_8 \text{Issue}_{i,t+1} \\
 & + \beta_9 \text{Predictability}_{i,t+1} + \beta_{10} \text{Std(Earn)}_{i,t+1} + \beta_{11} \text{Std(Ret)}_{i,t+1} + \beta_{12} \text{Return}_{i,t+1} \\
 & + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t+1}
 \end{aligned}$$

where *Analyst Following*_{*i,t+1*} is the natural logarithm of one plus the number of analysts following firm *i* in pseudo year *t+1*. *CUMU_**V*_{*i,t*} is calculated as the absolute value of cumulative effect of a voluntary accounting change as reported in the income statement in Pseudo-change year *t*, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)
	APB20	SFAS154
	Analyst Following _{<i>i,t+1</i>}	
CUMU_V	-0.524 (-0.42)	-0.186 (-0.20)
Assets	0.0936** (2.10)	-0.00747 (-0.19)
BTM	0.0116 (0.11)	-0.299*** (-3.24)
Volume	0.369*** (8.08)	0.359*** (10.77)
Intan	0.221 (0.84)	0.473** (2.57)
R&D	-0.978 (-0.74)	0.570 (0.64)
Depreciation	1.369 (0.85)	1.544 (0.86)
Issue	-0.0500 (-0.46)	-0.0774 (-1.06)
Predictability	0.264* (1.75)	-0.0613 (-0.43)
Std(Earn)	-2.070* (-1.76)	-1.032 (-1.51)
Std(Ret)	-2.201** (-2.32)	-3.550*** (-4.30)
Return	-0.00859 (-0.08)	-0.0555 (-0.63)
Industry fixed effects	Yes	Yes

Year fixed effects	Yes	Yes
N	335	486
Adj. R-sq	0.728	0.675
t-test ($\beta_1^{(1)} = \beta_1^{(2)}$)	<i>p=0.41</i>	

Panel B: Voluntary Accounting Changes in Pseudo Year and Analyst Forecast Accuracy and Dispersion

This panel presents the regressions of accounting accuracy (dispersion) on the cumulative effect of voluntary accounting changes under APB Opinion No. 20 and under SFAS No. 154.

$$\begin{aligned} \text{Forecast Accuracy}_{i,t} \text{ or Forecast Dispersion}_{i,t} = & \beta_0 + \beta_1 \text{CUMU_}V_{i,t} + \beta_2 \Delta \text{Earn}_{i,t} \\ & + \beta_3 \text{NegUE}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{NegSI}_{i,t} + \beta_6 \text{Days}_{i,t} + \beta_7 \text{Assets}_{i,t} + \beta_8 \text{Intan}_{i,t} \\ & + \beta_9 \text{Predictability}_{i,t} + \beta_{10} \text{Std(Earn)}_{i,t} + \beta_{11} \text{Std(Ret)}_{i,t} + \beta_{12} \text{Return}_{i,t} \\ & + \beta_{13} \text{Analyst Following}_{i,t} + \text{Industry and Year Fixed Effects} + \varepsilon_{i,t} \end{aligned}$$

where $\text{Forecast Accuracy}_{i,t}$ is analyst forecast accuracy in pseudo year t. $\text{Forecast Dispersion}_{i,t}$ is analyst forecast dispersion in pseudo year t. $\text{CUMU_}V_{i,t}$ is calculated as the absolute value of cumulative effect of a voluntary accounting change as reported in the income statement in pseudo-change year t, divided by beginning-of-period market value. Definitions of all variables are reported in Appendix C. I include industry and year fixed effects. T-statistics are presented underneath the coefficient estimates. Standard errors are White heteroskedasticity-robust and clustered by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.

	(1)	(2)	(3)	(4)
	APB20	SFAS154	APB20	SFAS154
	Accuracy		Dispersion	
CUMU_V	-0.0134 (-0.13)	-0.0114 (-0.24)	0.0105 (0.39)	0.00691 (0.43)
ΔEarn	-0.0663 (-1.60)	-0.0539* (-1.67)	0.0264* (1.80)	0.00910 (0.86)
NegUE	-0.000623 (-0.19)	-0.00333 (-1.31)	-0.00120 (-0.97)	0.000 (0.03)
Loss	-0.0252*** (-3.35)	-0.0135*** (-2.95)	0.00749*** (2.81)	0.00347** (2.39)
NegSI	0.208** (2.13)	0.107 (1.53)	-0.103*** (-2.94)	-0.0134 (-0.67)
Days	-0.0708*** (-4.09)	-0.0319** (-2.09)	0.0180*** (2.96)	0.0106* (1.88)
Assets	-0.00128 (-0.90)	-0.00373*** (-3.39)	0.000655 (1.25)	0.00141*** (4.41)
Intan	0.0112 (1.24)	0.0169*** (2.65)	-0.000253 (-0.07)	-0.00435** (-2.54)
Predictability	0.00807 (1.37)	0.00468 (0.96)	-0.00268 (-1.18)	-0.00216 (-1.48)
Std(Earn)	0.0143 (0.23)	0.0412 (0.93)	0.000957 (0.04)	0.00334 (0.24)
Std(Ret)	0.00351 (0.08)	-0.149*** (-3.93)	0.0485*** (2.79)	0.0460*** (3.77)
Return	-0.00828 (-1.61)	-0.000916 (-0.22)	0.00387*** (2.69)	0.000489 (0.40)
Analyst Following	0.00619* (1.61)	0.00619** (1.92)	-0.00110 (-0.29)	-0.00312*** (-2.77)

	(1.79)	(2.39)	(-0.96)	(-3.69)
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	232	389	232	389
Adj. R-sq	0.439	0.304	0.461	0.315
t-test ($\beta_1^{(1)} = \beta_1^{(2)}$ or $\beta_1^{(3)} = \beta_1^{(4)}$)	<i>p=0.49</i>		<i>p=0.45</i>	
