PARTICIPATION IN THE FASB'S STANDARD-SETTING PROCESS AND THE BIG-4 ACCOUNTING FIRMS' EXTENT AND MOTIVATIONS FOR LOBBYING USING TEXTUAL ANALYSIS

by

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ABSTRACT OF THE DISSERTATION

PARTICIPATION IN THE FASB'S STANDARD-SETTING PROCESS AND THE BIG-4 ACCOUNTING FIRMS' EXTENT AND MOTIVATIONS FOR LOBBYING USING TEXTUAL ANALYSIS

By: Amy K. Lysak

The abundance of accounting standards issued since the FASB's inception is staggering. There is an enduring controversy surrounding the FASB's standard-setting process. Critics suggest that the multitude of accounting standards has made financial reporting more complex and a compliance exercise for preparers (Lev and Rajgopal 2016, Miller & Redding 1988). Others believe the increase in the number of accounting standards enhances the reporting model and eliminates ambiguity and opportunities for manipulation. My dissertation examines the FASB's standard-setting process and how lobbying by constituents has changed over time. Overall, I find the relative participation has declined for preparers and accounting firms compared to their participation on the first 100 FASB Statements (Tandy and Wilburn 1992).

The second part of my research focuses on the extent and motivations of the Big-4 to lobby in the standard-setting process. Using textual analysis, I measure the negative, uncertainty and risk-related language in the Big-4's comment letters. Based on the notion that auditors prefer well-specified rules to minimize judgment to ultimately reduce audit risk (Miller and Redding 1986, Buckmaster 1988), I develop a proxy for audit risk using

a modified rules-based continuum ("RBC") score (Mergenthaler 2009). I find the Big-4 are generally less negative for more rules-based proposed standards. However, I find the Big-4 generally express increasing uncertainty as proposed standards become more rules-based. Given this, I evaluate the Big-4's motivation to lobby on behalf of their clients, who may prefer more principles-based standards that allow for flexibility and judgment. I find the Big-4's negative and uncertainty languages are positively associated to their clients, suggesting that their lobbying efforts are influenced by client preference.

Finally, I evaluate whether the Big-4 influence the standard-setting process given the extent and language used in their comment letters. I develop a RBC change score to measure how much more (or less) rules-based a Final Standard is compared to the Exposure Draft. I find as the Big-4's uncertainty language increases, the changes in rules-based attributes ultimately reflected in the Final Standards increase. I also find that more extensive comment letters are associated to increases in the rules-based attributes of the Final Standard. My results suggest the Big-4's comment letters may influence the FASB's decision to include more rules-based attributes in Final Standards.

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This dissertation is dedicated to my dear mother-in-law, Junebug, and grandfathers, Albert and Edward. I'm sorry you aren't here to see me get to the finish line, but I know you were proud and I am sure still are.

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1. Introduction and Overview

"Constituents play an integral role in the work of the Financial Accounting Standards Board and the Governmental Accounting Standards Board. Throughout the course of the standard-setting process, both organizations regularly seek participation from a broad base of financial statement users, ranging from corporations to governments and regulators to investment analysts. Constituent input is critical to producing and strengthening U.S. accounting standards that are essential to the vitality of our capital markets, which depend on robust and rigorous accounting standards."

–Financial Accounting Foundation, 2003 Annual Report

1.1 Introduction

The Financial Accounting Standards Board (FASB) is responsible for developing the generally accepted accounting standards that govern the financial statements for nongovernmental companies in the United States. The FASB's primary mission is to "establish and improve standards of financial accounting and reporting that foster financial reporting by nongovernmental entities that provides decision-useful information to investors and other users of financial reports" (FASB 2013). Since its inception, the standard-setting process has supports public participation and deliberates objectively on all stakeholders' feedback (FAF 2003). Its primary objective is to supply financial information that is decision useful to investors; however, the FASB recognizes that there are costs and benefits to other stakeholders; such as, preparers (both public and non-public companies), accounting firms, trade organizations, individuals, and others (such as academics, law firms, and governmental agencies) (FASB 2013). Stakeholders can participate in the standard-setting process in various ways: provide topics for FASB's agenda, attend public meetings, provide oral testimony at public hearings, or issue a

comment letter to discuss its view support or opposition for the proposed standard (also known as “lobbying”). As part of its due process, all proposed FASB regulation is followed by a comment period where stakeholders provide feedback in the form of a comment letter submission on the proposed standard.

There is an enduring controversy surrounding the FASB and its standard-setting process, with critics calling for the FASB to “hit the pause button on issuing new standards” as the multitude of accounting standards has made financial reporting more complex and are viewed as a compliance exercise by preparers (Lev and Rajgopal 2016, Miller & Redding 1988). The abundance of accounting standards that have been issued since the FASB’s inception is staggering. Others believe the increase in the number of accounting standards enhances the reporting model and eliminates ambiguity and opportunities for manipulation. Given this, my dissertation examines the FASB’s standard-setting process and how lobbying by constituents has changed over time.

In Chapter 1, I provide an overview of the FASB and its standard-setting process to establish a background of the FASB’s due process. This overview includes the structure of the FASB, its mission, and its due process to issue a new accounting standard. I also provide a summary of the vast number of accounting standards that have been issued by the FASB.

In Chapter 2, given the extensive number of standards issued by the FASB, I evaluate the extent of participation, or lobbying efforts, in the standard-setting process focusing on standards that were issued during the period 2002 to September 1, 2015 (the

time period that comment letters are available online via the FASB's website). I assess overall participation and participation by constituent groups (preparers, accounting firms, trade associations, individuals and other participants) for a sample of 63 standards and compare it to Tandy and Wilburn (1992), who evaluates the participation at the FASB's milestone of issuing 100 Statements of Financial Accounting Standards. Similar to Tandy and Wilburn (1992), I evaluate participation overall and by constituent group. I find that, on an absolute basis, overall participation and participation by constituent groups has declined as compared to participation on the first 100 SFAS (Tandy and Wilburn 1992). On a relative basis, I also find that the participation in the current period has declined as compared to the relative participation reported by Tandy and Wilburn (1992) on the first 100 SFASs.

To better understand what may be driving constituent participation, I also categorize the proposed standards in my sample as substantive changes to the accounting guidance, amendments to the accounting, or industry-specific accounting guidance. Using a multivariate analysis of variance, I find that the overall level participation is influenced by the type of standard. However, I do not find a significant difference in participation by constituent group across standard type. This result differs from Tandy and Wilburn (1992), which finds that industry (preparers, excluding banking and securities firms), public accounting, and the academic groups participation are influenced by the type of standards.

I also evaluate participation based more rules-based v. principles-based standards characteristics of the proposed standard. I develop a modified rules-based continuum

("RBC") score (Mergenthaler 2009) to measure the rules-based characteristics of the proposed standards. Using this modified RBC score, I perform a multivariate analysis of variance and find that overall participation is influenced by the rules-based/principles-based attributes of the Exposure Draft and increases as proposed standards become more rules-based. Further analysis provides evidence that each constituent groups mean participation is statistically significant different by the modified RBC score. Specifically, proposed standards that are most rules-based elicit the highest mean participation among each constituent group.

In Chapter 3, my research focuses on the extent and motivations of the Big-4 to lobby in the standard-setting process. Gipper et al 2013 discuss three reasons that accounting firms may choose to participate in the standard-setting process: (1) to improve financial reporting because it is in the best interest of the profession, (2) to achieve their own self-interest (to increase audit wealth and/or reduce audit risk), and (3) to lobby on behalf of their clients (increase or maintain audit wealth). In the 1980s and 1990s, the motivations for accounting firm lobbying were first evaluated. W-Z (1986) find evidence to suggest that accounting firms lobby to increase their audit wealth. They find evidence to suggest the accounting firms lobby on behalf of their clients and support standards that require incremental audit effort (ultimately increasing audit fees). Meier et al. (1993) use the W-Z model and add in a variable for audit risk (measured by having increased risk if the standard allows for non-traditional accounting or lower audit risk if it requires additional disclosure). This research finds that auditor's will lobby for client as well as in their own self-interest including when additional risk is added as a result of the

proposed standard (indicating that auditors are risk averse). Research in this area tends to be case studies that focus on one or few standards. Prior research also focuses on a simplified use of the due process documents and comment letter documents, which have primarily been manually coded.

Given that accounting firms generally provide a comment letter for each Exposure Draft (excepted as noted in Chapter 3), my research seeks to ascertain the extent of the Big 4 participation in the comment letter process (as the comment letter is the most observable evidence to evaluate the extent of participation by the Big-4 accounting firms). My research is also one of the first to attempt to distinguish the extent of the Big-4 lobbying and how it is may be associated to its incentives to decrease audit risk for a large sample of comment letters submitted by the Big-4 firms over a period of time (from 2002 to 2015). Furthermore, I utilize textual analysis and machine-processing in order to facilitate analysis of a larger volume of data as opposed to one ED or case studies that have been done in the past. To my knowledge, there are no studies using sentiment to analyze the text of comment letters and its association to constituents' motivations to lobby in or to influence the standard-setting process. Tone, or sentiment, is a way to further investigate the motivations to participate in the standard-setting process and whether the lobbying efforts of the constituents (and specifically the Big-4 in my research) influence the process. Finally, there is also limited research on the notion of audit risk and the impact that the perceived audit risk has on the lobbying position of the audit firm (i.e. Meier et al 1993, Allen et al 2014).

I use two main premises to develop my proxy for audit risk: (1) auditor's prefer well-specified rules to minimize the judgment (for both management and auditors) in order to reduce audit risk (Miller and Redding 1986, Buckmaster 1988) and (2) restatements are less likely to result in a lawsuit filing for more rules-based standards, which indicates that audit risk (and ultimately litigation risk), are reduced for more rules-based standards as evidenced in Donelson, McInnis, and Mergenthaler (2012). I develop a modified rules-based continuum ("RBC") score (Mergenthaler 2009) as a proxy for audit risk. The modified RBC score identifies the four characteristics indicative of rules-based standards: (1) bright-line thresholds, (2) scope exceptions, (3) high-level of detail, and (4) large amounts of implementation guidance (SEC 2003).

Using textual analysis, I measure the extent of the Big-4 accounting firms' comment letters by measuring their total word count. I also measure the negative, uncertainty and risk-related language in the Big-4 accounting firms' comment letters using Loughran and McDonald's sentiment dictionaries. I find the Big-4 firms lobby more extensively for standards that represent substantive changes to the accounting standards as compared to proposed standards that are deemed amendments. I also find varying results for the sentiment measures. My evidence suggests that that the mean negative tone is higher for more principles-based standards as compared to most rules-based standards, indicating that the Big-4 firms may prefer well-specified accounting standards. However, the mean uncertainty tone is increasing as proposed standards become more rules-based. I find evidence to suggest that the Big-4 are generally less

negative for more rules-based proposed standards. However, I find the Big-4 generally express increasing uncertainty as proposed standards become more rules-based.

Given these results, in Chapter 4, I extend my research to examine the effect of the Big-4's motivation to lobby on behalf of their clients (client preference effect) and whether the Big-4 prefer proposed standards that increase the incremental audit effort/audit fees ("make-work" effect). Using a multiple regression analysis, I find the Big-4's and clients use of negative language are positively associated, suggesting that their lobbying efforts are influenced by client preference. However, I find a positive relationship between the level of uncertainty of the Big-4 and their clients. This is result opposite of what is expected; however, it provides further evidence that the Big-4 may lobby on behalf of their clients' preferences even in cases where proposed standards are more principles-based. For the "make-work" hypothesis, I do not find a significant result that the Big-4 support (as measured by negative language) proposed standards that increase their incremental audit effort. However, I find that the uncertainty language increases and is statistically significant, which indicates that the "make-work" effect provokes the Big 4 accounting firms to express their uncertainty as they may need clarification on the requirements for the proposed standard that is ultimately subject to their audit procedures.

Finally, in Chapter 5, I evaluate whether the Big-4 influence the standard-setting process given the extent and language used in their comment letters. Early research focuses on the influence and success of the various constituents' lobbying efforts; however, the results vary. Haring (1979) finds that the FASB and accounting firms'

preferences for a proposed standard are positively associated. This suggests that the FASB may be influenced by accounting firms. On the contrary, Haring finds an inverse relationship between the FASB and preparers (managers), which implies that the preparers negatively influence the FASB's final standard. Brown (1981) fails to find evidence to suggest there is any association between changes made by the FASB and any of its constituents. Brown's (1981) results ultimately suggest that lobbying efforts of the stakeholders are not influential in the standard setting process. Buckmaster et al (1994) further evaluate whether the FASB's constituents are influential in the standard-setting process by separating the standards in his samples into standardization of an accounting topic, disclosure related matters, and technical amendments. Their findings also indicate that there is no measurable influence on the FASB by accounting firms or any other constituents.

Given the prior literature, I seek to identify whether the Big-4 accounting firms influence the FASB's standard-setting process, specifically whether the Big-4 accounting firms' lobbying efforts influence whether the FASB's Final Standard is more principles-based or rules-based. I develop a RBC change score (based on Mergenthaler 2009 RBC) to measure how much more (or less) rules-based a Final Standard is compared to the Exposure Draft. I find as the Big-4's uncertainty language increases, the changes in rules-based attributes ultimately reflected in the Final Standards increase. I also find that more extensive comment letters are associated to increases in the rules-based attributes of the Final Standard. These results suggest the Big-4's comment letters may influence the FASB's decision to include more rules-based attributes in Final Standards. I do not find

a significant result for the level of opposition for a standard, as measured by negative tone, and risk of litigation, as measured by litigious tone. This suggests that the negative and risk-related language may not influence whether the FASB's includes additional rules-based criteria within the Final Standard.

This remainder of this dissertation is organized as follows: Chapter 1 includes a background of the FASB and its standard-setting process and literature review. Chapter 2 provides an assessment of the overall participation by constituents in the FASB's standard-setting process. Chapter 3 and 4 evaluate the extent and motivations of the Big-4 accounting firms. Chapter 5 analyzes the Big-4 influence on the FASB's standard setting process, specifically whether their comment letters impact how much more rules-based (or principles-based) the final standard.

1.2 The FASB and Its Standard-Setting Process

In this section, I provide an overview of the FASB and its standard-setting process. I also present descriptive information regarding the accounting standards issued since the FASB's inception. I then discuss the prior accounting literature that analyzes constituent participation (or lobbying) in the standard-setting process, motivations for lobbying by constituents' for accounting standards (specifically manager and accounting firms), and the influence associated to constituents'' lobbying efforts on the standard-setting process.

1.2.1 The FASB's Structure

The Securities Exchange Acts of 1933 and 1934 (the "Acts") grant the Securities and Exchange Commission (SEC) with the authority of determining the accounting methods to be applied by publicly-held companies as well as the form and content of the financial statements required by the Acts. In 1973, the SEC delegated the Financial Accounting Foundation[1] (FAF) as the body for setting the accounting standards that govern the financial statements of nongovernmental entities.

Incorporated in 1972, the FAF is an independent, private sector, not-for-profit organization. The FAF is managed by a Board of Trustees, which has the ultimate authority and oversight of the FAF and its organizations. The FAF's Board of Trustees has 14-18 members that are representative of various stakeholders such as users, preparers, auditors of financial statements, government officials, academics, and regulators. Each member serves a three-year term and is available for re-election with no term limits. The members also participate on committees to provide oversight and review. These governance committees include: Appointments and Evaluations; Audit and Compliance; Executive, Finance and Compensation; Private Company Review; and the Standard-Setting Process Oversight Committees.

Overall, the primary purpose of the FAF is to establish and improve the financial accounting and reporting standards for nongovernmental and governmental entities as well as educating its stakeholders on these standards. To facilitate its role in the

[1] Information obtained from FASB.org and the FASB 2013

standard-setting process and dialogue on financial reporting issues, the FAF established two standard-setting bodies and oversees three councils:

- *Financial Accounting Standards Board (FASB)*: The FASB is the operating entity of the FAF that is responsible for establishing the accounting standards utilized by nongovernmental entities in the U.S. The FASB was established in 1973.
- *Financial Accounting Standards Advisory Council (FASAC)*: The FASAC is a council that consults the FASB on technical matters, project agenda, and other matters that may impact the FASB. The FASAC is comprised of the FASB's stakeholders.
- *Governmental Accounting Standards Board (GASB):* The GASB is the operating entity of the FAF that is responsible for setting the financial reporting standards for state and local governments. The GASB was established in 1984.
- *Governmental Accounting Standards Advisory Council (GASAC):* The GASAC is a council that consults the GASB on technical matters, project agenda, and other matters that may impact the GASB. The GASAC is comprised of the GASB's stakeholders.
- *Private Company Council (PCC)*: The PCC develops alternatives to the U.S GAAP established by the FASB to address the needs of users of the financial information of privately-held companies. Any recommendations by the PCC are subject to the FASB's process. The PCC is also an advisor to the FASB regarding

the accounting treatment utilized by privately-held companies for matters on the FASB's agenda. The PCC was established in 2012.

The FAF also oversees the administration and finances for its organizations. In addition, the board members of the FASB, GASB, FASAC, GASAC and PCC are elected by the FAF's Board of Trustees. Members of the board for each of the organizations are representative of the FAF's stakeholders (i.e. industry, accounting firms, and trade associations). Since 2003, the FAF and its operating entities are funded through the accounting support fee paid by all SEC-registrants that was mandated by the Sarbanes-Oxley Act of 2002. Prior to 2003, the FAF was funded by contributions made by the stakeholders of the operating entities (FASB and GASB); in 2002, these contributions were primarily from public accounting firms (FAF 2002, 2003).

1.2.2 Overview of the FASB, Its Mission and Its Structure

As noted above, beginning in 1973, the FAF delegated to the FASB, its responsibility of "establishing and improving the financial accounting standards that govern the preparation of accounts and the financial statements of nongovernmental entities" in the United States (FASB 2013). These accounting standards are deemed authoritative by the Securities and Exchange Commission (SEC) (Financial Reporting Release No. 1, Section 101, and reaffirmed in its April 2003 Policy Statement Pursuant to the Sarbanes-Oxley Act of 2002) and the American Institute of Certified Public Accountants (AICPA) (Rule 203, Rules of Professional Conduct, as amended May 1973 and May 1979). Ultimately, the SEC has the authority to establish these standards but

has relied on the FAF to act as an independent body as long as it continued to act in the public interest.

Aligned with the FAF, the FASB's primary mission is to "establish and improve standards of financial accounting and reporting that foster financial reporting by nongovernmental entities that provides decision-useful information to investors and other users of financial reports" (FASB 2013). The standard-setting process supports public participation, deliberates objectively on all stakeholders' feedback, and ensures oversight by its Board of Trustees (FASB 2013). Its ultimate objective is to develop accounting standards that supply financial information that is useful in making investment and other financial decisions about a firm. Therefore, the needs of the users of financial information are the primary concern in developing accounting standards (FASB 2013).

However, the FASB recognizes that there are also costs and benefits associated with providing financial reporting information for other stakeholders. The preparers of financial statements, the accounting firms that provide opinions on such statements, various regulators, and other stakeholders are all considered key stakeholders because of the costs and benefits associated with their implementation and compliance with the accounting standards. The FASB acknowledges that it is imperative that it demonstrates that it has considered the comments that have been received from stakeholders in reaching its conclusions on final accounting standards. Therefore, the standard-setting process supports public participation, deliberates objectively on all stakeholders' feedback, and ensures oversight by its Board of Trustees. (FASB 2013).

The FASB's achievement of its mission lies in its ability to "improve" the financial reporting of nongovernmental entities by focusing on "relevance" and "faithful representation" of financial information (FASB 2013). The FASB works towards its mission by educating the public, including its stakeholders, and by pursuing feedback from the public through its due process (FASB 2013). In addition, the FASB uses its due process to determine and propose standards that are current and that address changes in the business and economic environment (FASB 2013). The FASB also strives to identify any deficiencies that may exist in the current financial reporting that can be approved through its due process (FASB 2013). Finally, the FASB endorses convergence efforts as part of its mission to improve financial reporting quality (FASB 2013).

The FASB is comprised of seven members that are appointed by the FAF's Board of Trustees. The term of the each member is five years and each member has the ability to serve two terms. The FASB's members are expected to act in the best interest of the users and the public interest regarding accounting and reporting of financial information, which is consistent with the FASB's mission. Members are also required to possess knowledge and experience in investing, accounting, finance, business, accounting education and research (FASB 2013). Current and past members primarily have past experience in industry, public accounting, academia, and trade associations. All members are required to be independent and objective in his/her role as a member of the FASB.

1.2.3 The FASB's Standard-Setting Process

The FASB's due process for developing accounting standards begins with identifying financial reporting issues that are concerns of key stakeholders through an annual survey of the advisory councils, the Board, unsolicited feedback for agenda requests (new topics or to revisit existing authoritative guidance) from key stakeholders or "other means". The technical staff at the FASB research and analyze the key areas that are then voted on by the Board to add as a project to the technical agenda. Once added to the agenda, public meetings are held where the board deliberates based on research and analysis done by the staff. (FASB 2013)

One of the FASB's key objectives is to create rules and standards that enhance the usefulness of financial statements. To facilitate this process, the FASB issues Exposure Drafts, Discussion Papers, and other project documents for stakeholders to review and to respond with comments and suggestions. This feedback enables the FASB to "develop standards that provide decision-useful information for investors and other financial statement users" (FASB 2013). The FASB includes topics of interest on its monthly public meeting agenda. They discuss the proposed standard, status of the standard, and any current changes or finalization of the standard.

An Exposure Draft ("ED") is then composed to highlight new guidance that is being added or amendments that are being made to existing guidance. Prior to issuing an ED, the Board may also put out a preliminary views document or an invitation to comment document to solicit preliminary feedback on a topic prior to issuing an ED.

Since 2002, approximately 19 Invitation to Comment and Preliminary View documents have been issued for comment prior to the issuance of an ED (not all preliminary view or invitation to comment documents result in an ED). EDs are issued to provide the new standard or changes to the existing standard. Within the ED, the requirements are presented including the rules being specified, the technical aspects of implementing the rules, and other specific information including the effective date. The Board submits the ED to the public for feedback during a comment period. The comment period is generally 60 days or longer for significant and comprehensive changes to an accounting standard. Amendments that provide additional application guidance, interpretation or changes to existing guidance are generally 25 days or longer. Minor amendments or technical corrections are put out for a comment period of 25 days or less for minor change or amendments. The ED provides a summary of all the changes or new guidance that is being proposed. It also provides a brief explanation as to the reason for the proposed changes or guidance that is being proposed, the main provisions of the guidance and its differences to existing GAAP, who is impacted by the standard, the proposed effective date of the guidance, why the new guidance may be an improvement to existing GAAP, and in some cases, how the new guidance compares to International Financial Reporting Standards ("IFRS"). In addition, the FASB also requests the respondents to answers specific questions that are listed in the ED.

When this information is provided to the public for comment, all feedback is welcomed by the FASB. Responders to the ED will provide a comment letter that explains their support or opposition for the standard overall or for specific components of

the standard. The FASB considers all comments and then may reissue the ED or finalize the proposed accounting standard.

Stakeholders provide their feedback in the form of a comment letter or by using the electronic feedback form that is provided by the FASB. The electronic feedback form includes all of the FASB's Questions for Respondents; however, most stakeholders submit a letter in their own format. Some stakeholders provide responses to the FASB's questions to respondents (either all or some) and others may only provide their viewpoints and feedback to the proposed standard. Once the comment period ends, the comment letters are made available to the public via the FASB website.

The Board then may hold public roundtables on the Exposure Draft for standards that are major projects. (i.e. Exposure Drafts on Revenue Recognition- 2012, Leases and Revised Leases- 2010 and 2013, Balance Sheet Offsetting-2010). Participants of the public roundtables include the FASB Board and its technical staff, in some cases the IASB Board and its technical staff, and stakeholders in the standard-setting process. The feedback from the Public Hearing is considered in the Board's analysis of its due process on the proposed standard. (FASB 2013).

The Board then re-deliberates on the ED based on comments and its research on the proposed standard. The majority of the Board must approve the final modifications to the standard. A quorum must convene and a majority of the FASB members must approve the issuance of an Accounting Standards Update ("ASU"). This is usually done in a public meeting.

If a majority approves the accounting standard change, the Board then issues a Statement (pre-codification) or an Accounting Standards Update (post-codification). The final standard is issued or, in some circumstances, another ED is re-issued. The final standard includes a Basis for Conclusion, which often describes any similar comments provided by stakeholders and the FASB's conclusion on those viewpoints, includes background of the changes that have been made, the effective date, and transition guidance (prospective or retrospective application). The final standard also includes a summary of the finalized amendments to the existing guidance and any new guidance that is being introduced. Similar to the ED, the final standard provides a brief explanation as to the reason for the proposed changes or guidance that is being proposed, the main provisions of the guidance and its differences to existing GAAP, who is impacted by the standard, the proposed effective date of the guidance, why the new guidance may be an improvement to existing GAAP, and in some cases, how the new guidance compares to International Financial Reporting Standards ("IFRS"). Subsequent to finalizing the standard, the FASB promotes education of the new guidance and may conduct a post-implementation review.

1.2.4 Summary of Standards Issued by the FASB since Its Inception[2]

Since its inception in 1973, the FASB has issued 171 Statements of Financial Accounting Standards (SFAS) prior to the codification (1973-2009) and 95 Accounting Standard Updates post-codification (2009 to 2014). In 2009, the FASB implemented its codification system to simplify and enable easier research of accounting guidance as well

[2] Data obtained from the www.fasb.org from EDs, SFAS, and ASUs.

as mitigate the risk of non-compliance through a more user-friendly approach to organizing accounting guidance. For the period of time pre-codification, the guidance issued does not include Emerging Issues Task Force Abstracts (EITFs), FASB Staff Positions (FSPs), FASB Interpretations (FINs), FASB Technical Bulletins (FTBs), or Derivative (SFAS 133) Implementation Issues (DIG Issues), which all provide interpretative and clarifying guidance on existing accounting issues. With the implementation of the codification, the FASB no longer distinguishes between the various forms of guidance, except for ASUs that are issued as a consensus of the EITF. All guidance previously issued (i.e. EITFs, FSPs, FINs, FTBs, DIG Issues) was superseded and codified in 2009. Subsequent to the accounting standards codification system being implemented, 36 of the 95 ASUs issued are consensus of the EITF. Table 1 shows accounting standards issued by the FASB since its inception, except for DIG issues (170 issued from1999-2006). Table 2 provides a summary of the SFASs and ASUs issued by the FASB since its inception. Pre-codification, the FASB issued on average 4.68 SFASs a year and the highest number of SFASs were issued in 1982 (18 SFASs issued). There were 47 SFASs issued from 1979-1982, which is approximately 28% of all the SFASs issued by the FASB. Shortly, thereafter, in 1984, the EITF was established to assist the FASB with the timeliness in identifying, discussing, and resolving accounting topics and issues impacting financial reporting. The objective of the EITF is to minimize the time and effort spend by the FASB in regards to accounting issues and topics that relate to “narrow implementation, application, or other emerging issues that can be analyzed within existing GAAP” (FASB 2013). The EITF members are comprised of preparers, auditors, and users of financial statements and the Chairman

is a FASB representative. The Big 4 accounting firms are all represented on the EITF as well as industry, trade association, and academics. In addition, a representative from the SEC observes the process. The Task Force is made up of stakeholders that are knowledgeable about the accounting topics and issues that are discussed. The FASB feels that if a consensus can be reached by the Task Force on such matters, then the FASB does not need to intervene in the process (FASB). A consensus is reached if 9 out of 12 approve the Issue and after the issue has been put out for comment. Before the codification was implemented in 2009 by the FASB, the EITF had issued 515 abstracts. From July 2009 through 2014, there have been approximately 35ASUs that have been issued as a consensus of the EITF. In the period post-codification, the EITF still exists and acts in a similar capacity as when it was established.

After the implementation of the FASB's codification, 95 ASUs have been issued and, on average, approximately 17.27 ASUs are issued each year. This includes ASUs that were issued as a consensus of the EITF and guidance that is revised for SEC updates, which are not subject to comment. There are no comment letters for ASUs that are issued as a result of SEC updates. In 2010, the largest number of ASUs was issued; however, 22 out of the 29 include SEC updates or updates that are a consensus of the EITF. In total, there have been 47 ASUs issued since July2009 (excluding SEC updates and EITFs) or, on average, 8.55 ASUs each year. The FASB is active and continuously implementing new standards in an effort to improve financial reporting.

1.3 Theory and Prior Literature on Lobbying for Accounting Standards

In accounting regulation, the role of the regulator is to act as a mediator between the preparer of information and the user of this information (W-Z 1986). In accounting theory, it is difficult to resolve the appropriate level of financial reporting disclosure and the efficient contract role of accounting information. In other words, what is the socially right amount of information required to be disclosed for financial reporting purposes (W-Z 1986)?

Market forces can be sufficient to produce close to the first best information with minimal regulation. The first best information is when the marginal benefits of information are equal to the marginal cost of information; thereby creating the largest possible set of information that is available to the public. If additional information is produced, the costs exceed then exceed the benefits generated. If less information is produced, then society benefits from further production of information (Scott 2012).

There are many market-based incentives (such as, disclosure principle, signaling, motivated to increase reputation, lower investor estimation risk and improve contracting that ultimately increases firm value) for firms to produce information. However, it is impossible to attain close to the first best production of information by market forces alone given the existence of market failures in the information production (i.e. externalities, free-riding, and information asymmetry) (Scott 2012). These accounting market failures may transpire because, in the absence of regulation, the output of information in financial reporting is non-optimal or the resource allocation stemming from the market for financial information is biased or unfair to some groups or

individuals (W-Z 1986). This is indicative of the need for some level of regulation of financial disclosure as a means to increase social welfare (W-Z 1986). Nonetheless, even the regulator cannot achieve the first-best production of information through the standard setting process (Scott 2012). This is because of the complexity of the benefits and costs of information for everyone. Given these costs and benefits, the right amount of regulation is not known (Scott 2012).

The existing accounting literature has based its research of the standard-setting process on theory from economics. Although the accounting literature does not fit exactly into these models, these theories have been used to evaluate the political aspects of standard-setting. There are two theories that have prevailed as the backdrop for the research on accounting regulation: the public interest theory and the interest group theory.

Public interest theory suggests that regulators respond to a set of market failures and does its best to maximize social welfare (that is to attain the first-best amount of information production) (Posner 1974). Regulation is viewed as a "tradeoff of costs and benefits in the form of improved operations of the market" (Scott 2012). As mentioned above, it is hard to know what accounting standards maximize social welfare and what the appropriate amount of regulation is (Scott 2012). It is also impossible to cater to constituents impacted by regulation. This theory is descriptive to the extent that accounting standard-setters are interested in improving financial reporting (by increasing the decision usefulness, increasing transparency and reducing information asymmetry) (Scott 2012).

Interest group theory was introduced by Stigler (1971) with supplemental contributions made by Posner (1974), Peltzman (1976), and Becker (1983). This theory indicates that an industry operates in among a number of interest groups, which lobby the regulator for different amounts and types of regulation (Scott 2012). Becker views interest groups as competing for and against regulation; whereby the outcome is influenced by the group that is most effective in their lobbying efforts (Scott 2012). Interest groups are deemed rational and cease lobbying efforts when there is an indication that they will be unsuccessful (Scott 2012).

As noted above, the public interest theory is difficult to implement as the best tradeoff between how information is used (by users and the preparers cannot be determined (Scott 2012). Given this, the choice of accounting methods is considered a conflict between constituencies. Major constituents are represented on the standard-setting bodies and there is a due process that exists to manage constituency conflicts in standards setting. Therefore, the interest group theory is viewed as a better model in the accounting standard-setting process.

In the context of my research, the interest group theory provides a setting to evaluate the motivations of the constituents for participating in the standard-setting process (Scott 2012). Given this, there are three areas of focus when evaluating how interest groups, or constituents, impact the standard-setting process: who participates (or lobbies) and when, what are their motivations for lobbying, and does their lobbying efforts influence the FASB.

1.3.1 Existing Literature- Participation in the Standard-Setting Process

Tandy and Wilburn evaluate constituent participation over the FASB's milestone of issuing 100 SFASs (1992). They characterize the 100 SFASs by type: substantive, industry, and amendments and evaluate participation based on these characteristics. They find that substantive-type accounting standards generate more overall participation from constituents when compared to industry-type standards and amendments to existing standards. They also evaluate participation by constituent groups: industry (preparers of non-public and public companies excluding securities, banking and government organization), public accounting firms, securities, banking, academia, government, law, and other. They find that the type of standard significantly affects the mean number of responses for the industry, public accounting and academic groups (with no significant between the type of standard for the other constituent groups). Next, they assess the level of participation by constituent groups. Their results indicate that industry groups provide the most feedback to the FASB. However, they find that public accounting firms and banking groups rank higher then all constituents groups (except for industry) on an absolute basis and highest on a relative basis (relative participation was calculated using the total number of comment letters divided by the population of potential respondents).

In Chapter 2, I see to determine whether participation has changed as compared to the work performed by Tandy and Wilburn (1992) on the first 100 SFASs. Given the extensive number of standards issued by the FASB since its inception, in Chapter 2, I provide an updated analysis of the level of participation, or lobbying efforts, by the FASB's stakeholders in the standard-setting process for the period 2002-2015. I also

evaluate whether participation varies based on the type of standard (substantive, amendment, and industry-specific) and based on the rules-based versus principles-based characteristics of the proposed standard. I believe this research is interesting in that it provides some perspective as to the level of participation in the most recent period. It also provides insight into what may influence constituents, or stakeholders, to lobby (i.e. the type of standard or rules-based versus principles-based characteristics of the proposed standard).

1.3.2 Existing Literature- Motivations for Lobbying in the Standard-Setting Process

The existing literature also seeks to evaluate what motivates (or the incentives are) various constituents to engage in the standard setting process. Some of the key contributions that have been made from the prior literature include evidence on the motivations of managers and accounting firms.

W-Z are one of the first researchers to evaluate the motivations for both managers and accounting firms. In W-Z (1978), they develop the economic consequences argument to predict how and why companies/managers lobby. They argue that firms are exposed to political and regulatory pressures and are more likely to lobby for accounting rules that reduce net income as the lower profits reduce the likelihood of adverse political actions. Their primary finding shows that firm size and the effect on earnings is significant. This supports that larger firms are likely to favor standards that lower reported earnings. Kelly (1982) also looks to evaluate the lobbying positions for foreign

currency translation (SFAS 8) and their association to management compensation plans, leverage, management ownership, and size. However, there are no significant results given the limited sample of one accounting standard. Francis (1987) evaluates the motivations for lobbying using SFAS 87 (accounting for pensions). He uses the various comment letter documents to find that larger firms are more likely to lobby instead of the smaller firms or the firms that are more likely to suffer the adverse effects of a standard. Deakin (1989) evaluates the lobbying efforts for SFAS 19 (Oil and Gas Industry: full cost method versus successful efforts method). Deakin (1989) provides a unique perspective as he is able to evaluate both firms that lobbied as well as the firms in the industry that did not lobby given the industry-specific setting (oil and gas). The results support lobbying is driven by the impact of the standard on a company's net income and the compensation and debt contracts as well as the company's exploration activities in context of oil and gas. Finally, Dechow et al. (1996) evaluate the proposed standard to expense stock options and argue that the lobbying position is tied to those organizations with executives that have a high use of stock options (thought these individuals would be scrutinized). This is different from prior research in that the motivation to lobby is driven by management's own self-interest as compared to the political cost argument, which states that managers act on behalf of the firm and the shareholders to reduce political costs. Each of these studies contributes to the research on the standard-setting process by identifying motivations for managers to lobby for accounting standards. However, these studies include small sample size, are often limited to an industry-specific setting, and use manual or simplified evaluation of text.

In addition to evaluating managers' motivations to lobby, the prior literature also studies the motivations for accounting firms to participate in the FASB's standard-setting process. In W-Z (1982), they examine the relationship between the accounting firms and their clients and find that the accounting firm's position is positively associated with that of their client. However, they also find that accounting firms may not always lobby the same way as their clients and may lobby in their own self-interest (to increase their wealth). W-Z (1982) find that the accounting firm's position is associated to the weighted value of its clients. Also, they find that the accounting firm is likely to oppose standards that affect a client's contracts by reducing the demand for audit. These results suggest that accounting firms lobby to increase their audit wealth. Puro (1984) further evaluates whether accounting firms lobby in their own self-interest and if they lobby on behalf of their clients (both increase audit wealth). Findings are consistent with W-Z (1982) in that accounting firms will lobby in their own self-interest as well as the interest of their clients. Meier et al. (1993) use the W-Z (1982) model and introduce a variable for audit risk (measured by having increased risk if the standard allows for non-traditional accounting or lower audit risk if it requires additional disclosure). This research finds that auditor's will lobby for client. However, accounting firms also lobby for their own self-interest in instances when additional audit risk is expected given the proposed standard (indicating that auditors are risk averse).

In their working paper, Allen et al (2014) are the first to evaluate the Big N accounting firms' changing motivations for lobbying over the period of 1973-2006. They evaluate whether Big N's motivations to participate in the accounting standard-setting

process is influenced by the desire to manage litigation and regulation costs (limiting audit risk), to serve clients' preference for flexibility in GAAP (e.g. W-Z 1986; Zeff, 2003; Folsom et al 2013), or to align themselves with the FASB's agenda (specifically fair value accounting). They find evidence to indicate the Big N accounting firms lobby efforts are motivated by standards that are likely to reduce litigation and regulation costs using the notion of "reliability." The notion of "reliability" to evaluate audit risk is unique to their work and they evaluate if the Big N accounting firms identify decreased liability across their sample of Exposure Drafts. Specifically, they find that, in periods where there is increased litigation and SEC enforcements, accounting firms are likely to express concerns with decreased reliability in their comment letters. Next, they find that Big N accounting firms lobby to support the priorities of the FASB by focusing on the FASB's agenda for fair value. They find that the Big N accounting firms are less likely to express concerns with decreased reliability when there are a larger proportion of FASB board members from securities and banking firms that are tied to the growth of standards for fair value accounting. Finally, Allen et al (2014) do not find any evidence that accounting firms are lobbying for greater flexibility in GAAP on behalf of their clients' preferences. They use firm-level characteristics (such as total assets, stock return volatility, operating cycles, and Tobin's Q for the client base), whether the Exposure Draft is industry specific, and the lobbying intensity (number of comment letters submitted for an Exposure Draft) to identify client preferences for flexibility and find no evidence that these preferences impact the lobbying position of accounting firms. Their research is limited in that they do not evaluate and include in their analysis of client preferences any information on the content of the clients' comment letters (as they

indicate this information is hard to obtain) nor based on the lobbying intensity specific to Big N and its clients.

In Chapter 3 and 4, I perform a large scale analysis of the motivation for Big-4 accounting firm lobbying. In this setting, there has been little to none large scale analysis of the lobbying for accounting standards using automated textual analysis on the comment letters submitted by constituents to the FASB (with the exception of Allen et al 2014). I extend the existing research by using textual analysis to evaluate the Big-4 accounting firms motivations for lobbying (for their own self-interest and to reduce audit risk). To my knowledge, I am also one of the first to use sentiment to analyze the text of comment letters and its association to constituents' motivations to lobby in or to influence the standard-setting process. Tone, or sentiment, is a way to further investigate the motivations to participate in the standard-setting process and whether the lobbying efforts of the constituents (and specifically the Big 4 in my research) influence the process. Finally, I further extend research for audit risk as a motivation to lobby and attempt to identify whether the rules-based versus principles-based characteristics of a proposed standard serve as a proxy for audit risk. This is based on the premise that auditors may prefer well-specified rules to minimize judgment in order to reduce audit risk (Miller and Redding 1986, Buckmaster 1988).

1.3.3 Existing Literature- Influence of Lobbying in the Standard-Setting Process

In addition to studying the motivations of stakeholders' participation in the lobbying process, the existing literature also evaluates whether these various stakeholders' lobbying position influences the FASB in the standard-setting process. Research is limited with respect to how lobbying efforts by the various constituent groups influence the FASB's standard-setting process. The research is also limited to small case studies and is primarily conducted prior to the regulatory change in 2002 whereby the FASB is funded by public registrants as part of the Sarbanes-Oxley Act of 2002. Prior to this, the FASB was funded by contributions made from primarily accounting firms. The results of the influence of stakeholders in the lobbying for accounting standards vary.

In Haring (1979), his evidence indicates that accounting firms' and sponsoring organizations' (i.e. the AICPA, state accounting societies, etc.) preferences influence the ultimate standards implemented by the FASB. Haring (1979) uses a probit model to evaluate whether accounting firms, sponsoring organizations, business firms, and academia influence changes made from the proposed standard to the final standard issued by the FASB. Haring (1979) models influence using a binary coding of change ("1") or no change ("0") to the ED. The support or opposition of the ED is then coded as the independent variable for each consistent. The results indicate the likelihood of the FASB to support a rule is positively associated to the preferences of accounting firms and sponsoring organizations. He also finds that the likelihood that the FASB support for a standard is inversely associated to the business firms preferences.

However, additional research by Brown (1981) finds that over a period of time the actions taken by the FASB are not aligned with the preferences of any stakeholders, which conflicts with the results of Haring (1979). Using the content of the comment letters in his sample, Brown evaluates eight EDs and found that the FASB's conclusions were scattered when compared to the preferences indicated in the stakeholders' comment letters. These results indicate that the FASB may consider the feedback provided by the various stakeholders, but neglect to take into account the stakeholders' comments (Brown 1981). This research ultimately suggests that lobbying efforts of the stakeholders are not influential in the standard setting process. Similarly, limitations are also noted of Brown (1981)'s sample because only EDs that become formal standards are included in the sample.

Given these limitations, Buckmaster et al. (1994) investigates whether lobbying efforts are influenced by the types of requirements proposed by the FASB in the seven EDs included in the sample. They classify the types of requirement by on whether the ED proposes: standardization of accounting methods, disclosure of specific data, or specific technical components of the standard (i.e. the effective date, definitions, or types of transactions in scope). They then use various measures to evaluate the proportion of the respondents supporting the various issues noted in the proposed rule as well as the interaction with whether the level of support was for the standardization, disclosure, or technical requirements. Finally, they evaluate whether the FASB's position changed from ED to final standard by evaluating the key issues noted by the FASB in its ED and comparing to the final standard to determine whether the FASB changed its position.

Their findings indicate that there is no measurable influence on the FASB by accounting and non-accounting firms.

Given the conflicting results, in Chapter 5, I evaluate whether the Big-4 accounting firms influence the outcome of the Final Standard. Based on the premise that accounting firms prefer well-specified rules to mitigate audit risk, I examine whether the Big 4's tone and comment letter length are associated to how much more rules-based a proposed standard becomes once it is finalized. I develop a measure based on Mergenthaler's (2009) RBC score to identify how much more (or less) rules-based a Final Standard is compared to an Exposure Draft.

2. Participation in the Standard Setting Process (2002-2015)

2.1 Introduction

Given the extensive number of standards issued by the FASB since its inception, in this chapter, I evaluate the level of participation, or lobbying efforts, by the FASB's stakeholders in the standard-setting process for the period 2002-2015. In this setting, participation and lobbying are used interchangeably. Also, this is not the traditional notion of lobbying as there are no monetary contributions that made to the FASB by its constituents[3]. The term lobbying is a merely sharing of opinions and viewpoints with the expectation that the FASB consider the feedback before implementing the proposed standard.

To better understand the constituents' role in the standard-setting process; it is important to identify how constituents, or stakeholders, may engage in the standard-setting process. The FASB's stakeholders participate in the standard-setting process in various ways by: (1) providing topics for FASB's agenda, (2) attending public meetings, (3) providing oral testimony at public hearings, or (4) providing their support or opposition for a proposed standard via submission of a comment letter. The latter of

[3] Beginning in 2003, voluntarily financial contributions were no longer taken by the FASB as a result of specific provisions put in place as part of the SOX Act of 2002. The Act mandated that public companies (with a market capitalization of greater than $75 million) pay an accounting support fee to the SEC. The fee is based on an average of the monthly market capitalization of the preceding year relative to the total monthly market capitalization average of all those required to pay the accounting support fee (PCAOB 2013). This fee is distributed to the various regulators to support their operations. The FASB receive a portion of this fee to fund the operations of the organization. Prior to the accounting support fees, the funds received by the FASB were received from public accounting firms and other sponsoring organizations and not from business firms (FAF 2003).

these means of participation is the most observable as comment letters are made available to the public by the FASB.

Gipper et al. (2013) define lobbying efforts as the "purposeful intervention in the standard-setting process by an economic entity with the goal of affecting the outcome of the process to increase the entity's economic value or wealth or achieve some other self-interested purpose inconsistent with the FASB's mission," which is similar to Schipper 1989's definition. Lobbying efforts are through the various means in which the stakeholder's participate. For purposes of my research, I define participation, or lobbying, in the standard-setting process as the submission of a comment letter, consistent with Tandy and Wilburn (1992).

Focusing on standards that were issued during the period 2002 to September 1, 2015 (the period that comment letters are available online via the FASB's website), my research questions whether participation by the FASB's constituent groups has changed as compared to participation on the first 100 FASB statements. I also examine whether the extent of participation is influenced by the rules-based versus principles-based attributes of the proposed standards. I assess overall participation and participation by constituent groups (preparers, accounting firms, trade associations, individuals and others) for a sample of 63 standards and compare it to Tandy and Wilburn (1992), who evaluate the participation at the FASB's milestone of issuing 100 Statements of Financial Accounting Standards. Similar to Tandy and Wilburn (1992), I categorize the accounting standards in my sample into three types of standards: substantive, amendment, and industry and evaluate participation overall and by constituent group. I also categorize

the proposed standards in my sample on a rules-based continuum (Mergenthaler 2009) to evaluate if the rules-based versus principles-based attributes of a standard influence participation.

I find that, on an absolute basis, overall participation and participation by constituent groups has declined when compared to Tandy and Wilburn (1992)'s evaluation. On a relative basis, I specifically obtain data on preparers and accounting firms and compare it to the relative participation reported by Tandy and Wilburn (1992). I find that the relative participation has declined in the current period as compared to the participation by constituents on the first 100 SFASs.

To better understand what is driving constituent participation, I categorize the proposed standards in my sample as substantive changes to the accounting guidance, amendments to the accounting, or industry-specific accounting guidance. I then perform a multivariate analysis of variance and find a statistically significant result indicating that the overall level participation is influenced by the type of standard. However, when I evaluate each individual constituent group to determine if an individual group is influenced by the type of standard, I do not find a statistically significant result. This differs from Tandy and Wilburn (1992) as they find that industry (preparers, excluding banking and securities firms), public accounting, and the academic groups participation are influenced by the type of standards.

I also evaluate participation based on the rules-based v. principles-based standards characteristics of the proposed standard. Using a modified rules-based continuum (RBC)

score (Mergenthaler 2009), I assign an *RBC_EDscore* for each ED based on the level of rules-based characteristics of the proposed standard. I then perform a multivariate analysis of variance and find a statistically significant result that overall participation is influenced by the rules-based/principles-based attributes of the Exposure Draft. Further analysis by constituent groups finds that there is a statistically significant difference in participation for each constituent group based on the *RBC_EDscore*. The drivers of this result are those proposed standards classified as most rules-based (*RBC_EDscore* = 4) eliciting higher and significantly different participation as compared to the proposed standards with a lower *RBC_EDscore*.

Various explanations may be attributed to the decline and changes in participation. For example, comment letters are more readily accessible and may inhibit a constituents desire to participate. The FASB has also committed to converging standards with the IASB (The Norwalk Agreement (FASB 2002)) and proposed standards are, therefore, established trying to achieve more principles-based characteristics. Management (preparers) may favor more principles-based standards given their ability to apply judgment based on the underlying transaction (e.g. W-Z, 1986; Zeff, 2003; Folsom et al 2013; Allen et al. 2014). In addition, based on my analysis, there is more participation by trade associations, which represent groups through one comment letter submission. Finally, there is criticism about the abundance of accounting standards that has been issued by the FASB and constituents may view financial reporting as a compliance exercise (Lev and Rajgopal 2016), which may lead to lower absolute and relative participation.

I contribute to the existing research in several ways. First, I create a large dataset of participants to evaluate how participation may vary based on several characteristics: the type of standard and rules-based versus principles-based characteristics of the proposed standard. I provide an updated analysis of constituent participation and how participation may be influenced by the type of standard. I compare to the work of Tandy and Wilburn (1992) to evaluate how constituent participation has changed since the FASB was established in 1973. Furthermore, given the current landscape and focus on convergence towards a more principles-based set of accounting standards, I evaluate participation based on the rules-based versus principles-based attributes of proposed standards to identify if participation is influenced by these characteristics.

2.2 Background of Lobbying Efforts by Constituent Groups

The FASB permits comment letters to be submitted once it releases an Exposure Draft for public comment. Various stakeholders including preparers of financial statements (i.e. SEC- registrants and private institutions), public accounting firms, trade associations (that represent various industries including public accounting firms), individuals, and other stakeholders (such as law firms, academia or government organizations) participate by providing feedback through a comment letter. The FASB makes Exposure Drafts and their respective comment letters available to the public. Prior to 2002, the comment letters for Exposure Drafts can be obtained from the archives at the FASB's location in Connecticut. Starting in 2002, Exposure Drafts and their respective comments letters are publicly available on the FASB's website.

Since the inception of the FASB, the average time to the issuance of an Exposure Draft for public comment to the finalization into an SFAS or ASU is approximately 9.00 months. Prior to 2002, the average time from issuance of an Exposure Draft to a finalized SFAS is approximately 8.51 months. For the period 2002-2014 (the period of time when comment letters became available electronically on the FASB's website), the average time from issuance of an exposure draft to an ED is approximately 9.67 months. For the period pre-and post-codification, the average time from ED to issuance is 9.36 months and 7.76 months, respectively.

One reason that there may not be a change in the time to issuance is that my sample includes only those EDs that have been finalized into a SFAS or ASU. Proposed standards that are not finalized may have an extensive comment letter process and are, at times, released for multiple comment periods. For example, the FASB and IASB's joint project for *Leases* was issued for preliminary views on March 19, 2009 by the IASB. The FASB issued the initial exposure draft on August 17, 2010 for public comment and received over 786 comment letters. Given the volume of responses and feedback, the FASB deliberated on the proposed guidance and reissued the Exposure Draft on May 16, 2013 and received another 641 comment letters. The FASB finally issued this guidance within the first quarter of 2016.

SFAS 109, *Accounting for Income Taxes* has the longest time from issuance of the Exposure Draft to finalization of the SFAS. It took approximately 66 months to issue the final standard in February 1992 (approximately 400 comment letters). Approximately 38 months passed from the issuance of the ED to the finalization of SFAS 162, *The*

Hierarchy of Generally Accepted Accounting Principles in May 2008 (32 comment letters received). SFAS 141R, *Business Combinations* 30 months (280 comment letters) was issued in December 2007, SFAS 160, *Non-controlling Interests in Consolidated Financial Statements—an amendment of ARB No. 51* 30 months (49 comment letters) was issued in December 2007, and SFAS 164, *Not-for-Profit Entities: Mergers and Acquisitions—Including an amendment of FASB Statement No. 142* (45 comment letters received) was issued in April 2009. ASU 2014-09—Revenue from Contracts with Customers (Topic 606) 48 months (two comment periods with 974 and 359) and was issued in May 2014. ASU 2015-02, *Consolidation (Topic 810): Amendments to the Consolidation Analysis* (79 comment letters received) was issued in February 2015. Of the five longest time periods from Exposure Draft to Issuance, four of them are within my sample selection. The above information provides some context as to the overall participation and the time frame comment letter to final issuance of the accounting standard.

2.3 Data Collection

In this chapter, I evaluate the participation in the comment letter process based on the data that is accessible via the FASB website. Approximately 270 Exposure Drafts are listed on the FASB website, which include Exposure Drafts on the various types of FASB standards. I exclude comment letters submitted for EITFs, FSPs, FIN, Technical Bulletins, or DIG Issues (pre-codification) or consensus of the EITF (post-codification). I also only include those Exposure Drafts that are final standards issued by the FASB. Any open Exposure Drafts are excluded from my sample. As a result, my data focuses

on the comment letters submitted for Exposure Drafts that ultimately resulted in a SFAS (pre-codification) or an ASU (post-codification). I use this subset of available data primarily for comparison purposes. I evaluate my main results against the results obtained by Tandy and Wilburn (1992) on participation on the first 100 SFASs issued. In addition, the sample excludes any SFASs and ASUs that have not been finalized. I included in my sample those EDs that have been issued as Final Standards in order to evaluate certain characteristics (i.e. type of standard and a standard is deemed rules-based versus principles-based) to assess how participation may vary as well as throughout my dissertation.

The FASB provides a listing of the Exposure Drafts that have been issued since 2002 on its website. From this listing, I match the finalized standards SFASs and ASUs with the respective Exposure Drafts for the period 2002-2015 to ensure that I am only capturing those Exposure Drafts that have become final SFASs and ASUs. Table 3 provides a reconciliation of the total EDs listed on the FASB website to the sample utilized in my research, which results in 63 SFASs and ASUs (as listed in Table 4). I use this sample to evaluate consistent participation in the comment letter process. From the FASB website, I download the Exposure Draft and Final Standard for my sample. I convert these files from PDF format to .txt files.

I also classify each standard by “Topic” and “Subtopic” based on the FASB codification implemented in July 2009. I map the SFASs issued prior to the codification to their respective “Topic” and “Subtopic” for comparative purposes based on the

FASB's Cross-Reference Tool.[4] I use the FASB's Topics and Subtopics to link the pre-codification statements to the standards issued under the codification system. This is for informational purposes to gauge what types of standards are issued by topic and subtopic.

Next, for each Exposure Draft in my sample, I extract the respondent listing of the comment letters submitted for the Exposure Drafts associated to the finalized standards in my sample. The FASB website provides a listing of the constituents that have submitted a letter for each Exposure Draft on its website. Table 5 and Table 6 summarize the total comment letters submitted for my sample. I then categorize each of the respondents by constituent group: preparers (public and private companies), accounting firms (Big 4 and non-Big 4 firms), individuals, trade associations, and other (academia, government entities, law firms, etc.). If a respondent provides more than one comment letter, it is counted only as one respondent. This generally aligns with the FASB disclosure of the number of comment letter within the final standard. I use this information to evaluate overall and each constituent group's participation in Section 2.4.

I then download each comment letter submitted by the various constituents for the Exposure Drafts in my sample. Each constituent's comment letter is available in PDF format, which can be converted into machine-readable format for text analysis. In order to download the comment letters, I use an internet "add-on" that allows me to download the comment letters, in bulk, for each Exposure Draft's listing of comment letters. This allows me to pull-down all the PDF files found on a page simultaneously. There is a maximum of 100 comment letters per page; therefore, I am able to download a maximum

[4] www.fasb.org

of 100 comment letters at once. I utilize the individual comment letters for my research in subsequent chapters to analyze the motivations and influence of accounting firms and their lobbying efforts in the standard-setting process.

2.4 Overall Participation in the Standard-Setting Process

This section presents descriptive statistics of the overall participation in the comment letter process. For my sample selection, the mean level of participation by constituents is approximately 300 comment letters (median = 41 comment letters). However, this includes SFAS 123R (*Share-based Payments*), which received a large volume of comment letters (14,239 comment letters) from employees of large corporations given the nature of the proposed standard (employee stock-based compensation). If I exclude SFAS 123R as an outlier, the mean level of participation is approximately 79 comment letters (median= 41 comment letters). When compared to the first 100 SFASs, the mean level of participation is approximately 138 comment letters (Tandy and Wilburn 1992). Overall participation has declined as compared to the participation in the first 100 SFASs.

Some potential explanations for the decline may be that the comment letters are easily accessible to the public via the FASB website. Prior to this, comment letters were made available to the public; however, they could only be obtained at the FASB's location in Connecticut. Constituents may not want their responses and opinions on a proposed standard readily accessible. Further, there is a higher overall participation by trade association (discussed in Section 2.4.1), which may eliminate participation by

smaller companies based on representation by the trade association. Another explanation may be that the first 100 SFASs tackled the major accounting topics and built the foundation for the accounting standards. In the more recent period, the FASB is refining the accounting to address changes in the economic environment and other initiatives (i.e. convergence type matters). Furthermore, the FASB continues to focus on its convergence project, which looks to implement more principles-based standards. Constituents, specifically preparers, may prefer principles-based standards given the flexibility associated with principles-based standards that focus on the economic substance of transactions (e.g. W-Z, 1986; Zeff, 2003; Folsom et al 2013; Allen et al. 2014). Finally, Lev and Rajgopal (2016) believe that accounting standards are superfluous and, as a result, financial reporting is deemed a compliance exercise. If this sentiment is well-founded, then constituents may not find it necessary to participate and seek to influence the FASB.

2.4.1 Highest and Lowest Participation by Standard

To further understand how participation has changed over time, I evaluate the proposed and finalized standards that solicited the largest and smallest participation. Table 7 Panel A and B lists the top 10 and lowest ten Exposure Drafts in terms of participation. The participation for the ten highest SFASs and ASUs in my sample ranges from 95 to 14,239 comment letters. Overall, the highest number of participation was solicited for SFAS 123R, *Share-based Payment*. The second highest participation was received for the guidance on ASU 2014-09, *Revenue from Contracts with Customers* with 1,333 comment letters. Four of the ten Exposure Drafts included in the top ten were

proposed standards on the "Subtopic" of "Compensation." In prior literature, there are varying results as to the manager's motivations for lobbying and whether it is linked to management's incentive compensation (Kelly 1982, Dechow et al. 1996). For standards on compensation, managers' participation is higher than their mean absolute participation of 37.81% of total constituent participation. Two of the proposed standards related to the "Topic: Presentation Matters" for the "Subtopic: Balance Sheet" and "Comprehensive Income." Four of the proposed standards related to the "Topic" of "Broad Transactions" for the "Subtopics" of "Business Combinations" and "Fair Value Measurements." These four standards are part of the FASB's focus to on fair value accounting. The mean level of participation for the top ten proposed standards were 1558 comment letters (median= 162 comment letters) and 290 comment letters (median= 148 comment letters) if SFASs 123R is excluded. When compared to Tandy and Wilburn (1992), the mean level of participation for the ten highest SFASs was 555 comment letters (median= 418 letters). In their paper, the participation for the ten highest comment letter totals range from 269 to 1,435 comment letters. The topics of the top ten in their sample relate to compensation-related matters, the statement of cash flows, income taxes, foreign currency matters, oil and gas industry accounting, and loan/interest costs.

The participation for the ten lowest comment letter totals in my sample ranges from three to 15 comment letters. Overall, the lowest participation was solicited for ASU 2010-08, *Technical Corrections for Various Topics*. The second lowest participation received four comment letters for the guidance on SFAS 152, *Accounting for Real Estate*

Time-Sharing Transaction- an amendment of FASB Statements No. 66 and 67, which is an asset/industry focused standard. Five of the ten Exposure drafts included in the lowest ten for participation were proposed standards on "Broad Transactions" for various "Subtopics" ("Consolidation," "Derivatives and Hedging," "Financial Instruments," and "Subsequent Events," and "Consolidation") and were primarily amendments and scope clarifications to existing guidance. Two of the proposed standards related to "Master Glossary" items requiring "Technical Corrections." The mean level of participation for the lowest ten proposed standards were 10 comment letters (median= 11 comment letters). When compared to Tandy and Wilburn 1992, the mean level of participation for the ten lowest SFASs was 20 comment letters (median= 23 comment letters). Nine out of ten of the standards from their sample are related to industry specific accounting topics. In their paper, the participation for the ten lowest comment letter totals range from 10 to 26 comment letters.

Both the highest and lowest participation further demonstrate that the overall level of participation has declined during the time period January 2002 to March 2015 as compared to the time period December 1973 to December 1988. In the next section, I further evaluate participation on an absolute and relative basis.

2.4.2 Participation by Constituent Group

The FASB's mission is to "establish and improve" accounting standards that provide "decision-useful information to investors and other users" (FASB 2013). However, the FASB acknowledges that there are cost and benefits to the other stakeholders, or constituents, impacted by new, amended, and existing accounting

standards (FASB 2013) and welcomes feedback from the various constituents to better understand the costs (and benefits) to the stakeholders' impacted by the proposed standard.

As noted in Section 2.3, I categorize each respondent as preparers (both public and private companies), individuals, trade associations, accounting firms (either Big-4 and non-Big-4), and other (such as government agencies, regulators, law firms, academia, etc.) to analyze the participation by constituent group. Table 8 provides the each constituent group participation by standard. Table 9 summarizes the overall participation by constituent groups (in absolute terms) and compares to Tandy and Wilburn (1992)'s summary of participation.

Overall, for the period 2002-2015[5], 4,955 comment letters were submitted by the various constituent groups[6] across sixty-two standards included from my sample. The mean level of participation across my sample is approximately 78.65 comment letters per standard compared to the first 100 SFASs where the participation mean was approximately 133.69 comment letters per standard (Tandy and Wilburn 1992). This is significantly lower than the SFASs issued since the first SFAS through the issuance of SFAS 100. Given this decline in overall participation, I then further analyze the participation by constituent group.

Table 10 provides descriptive statistics for the constituent groups. In Panel A, preparers have the highest mean participation (mean = 34.76), which is then followed by

[5] Through September 1, 2015

[6] This excludes the 14,239 comment letters for SFAS 123R as the FASB website does not include the complete dataset of comment letters for this standard.

trade associations (mean = 17.78), individuals (mean = 9.71), accounting firms (mean =9.35) and other (mean = 7.05). In Panel B, I further break down the preparer group by public and non-public companies and find that public companies have a higher mean participation (mean = 19.63) as compared to non-public companies (mean =15.13). I also find that the Big 4, generally participate in the standard-setting process as evidenced with mean participation of 3.95. The non-Big 4 mean participation is 5.40.

Preparers of financial statements have the highest level of participation, in absolute terms, with 2,190 of the 4,955 comments letters or 44.20% of total participation. Tandy and Wilburn (1992) find a consistent result with preparers having the highest level of participation; however, they find that preparers comprise 67.18% of the total participation. This decline may be related to an overall increase in the participation of trade associations, which comprise 22.60% of the total participation in my sample (compared 10.88% in Tandy and Wilburn 1992). Trade associations may be speaking on behalf of large groups of constituents to alleviate the cost of participation for small preparers. Accounting firm participation has increased slightly with 11.89% of total participation (compared to 10.82% in Tandy and Wilburn 1992). Individual participation has more than doubled with 12.35% of participation as compared to 5.95% in Tandy and Wilburn 1992. This is primarily driven by four standards. In ASU 2009-01 (*Hierarchy of GAAP/Codification*) and SFAS 154 (*Accounting Changes and Error Corrections*), 20 and 26, respectively, of the individuals represent MBA students who were tasked with responding to the FASB as part of an assignment. For ASU 2011-09, a majority of the respondents classified by the FASB as individuals are from small business owners who

were notified by a trade association of the impacts of the proposed standard. Forty of the 50 respondents to FAS 163 (Accounting for Financial Guarantee Contracts) were from local and state government officials and employees, who indicated their support for the proposed standard that required more disclosure and transparency for guarantee contracts. In addition, the "other" group has also increased its participation (in absolute terms) with approximately 8.96% of the total participation as compared to 5.17% in Tandy and Wilburn 1992). For ASU 2014-09 (Revenue from Contracts with Customers), 247 employees of construction companies in responded to the first draft of the proposed standard with an identical form letter. Overall participation has declined, on average, as compared to the first 100 SFASs issued by the FASB.

Next, I evaluate participation on a relative basis: the number of respondents from each constituent group in relation to the total population of the constituent group. For each group, I calculate the weighted average based on the total population of respondents in the year that the Exposure Draft was issued. For the preparers and accounting firms, I obtain data from the Internal Revenue Service Statistics of Income[7], which is based on the tax returns filed by partnerships and corporations. I focus on these two groups given the availability of data for total population. There is no data on trade associations available, government entities, or individuals. The IRS website only has data available through 2013. I use this information to obtain the total amount of tax returns submitted by corporations for the SFASs and ASUs in my sample from 2002 through 2013. For this time period, the total number of comment letters submitted to the FASB is 3,101

[7] Data obtained from https://www.irs.gov/uac/soi-tax-stats-statistics-of-income

responses, of which 1543 and 349 are from preparers and accounting firms, respectively. The absolute participation is 49.76% for preparers, which is a decline in participation compared to 67.18% in Tandy and Wilburn (1992). However, accounting firms' participation increased to 11.25% from 10.82% in Tandy and Wilburn (1992).

On a relative basis, I find that relative participation for preparers is 0.002%. Tandy and Wilburn analyze preparers by industry, banking and securities corporations. They find that relative participation is 0.002%, 0.016%, and 0.077%, respectively. Given that industry preparers in my sample have a relative participation of 0.002%, I can deduce that the relative participation has declined as my measure of relative participation includes banking and securities corporations in the total preparers and Tandy and Wilburn's measure of industry excludes this group. For accounting firms, I find that their relative participation is 0.030%. This is less than the relative participation of 0.060% for accounting firms in Tandy and Wilburn 1992.

As noted in Section 2.4, there may be various explanations as to the decline in participation. The accessibility of comment letters, the higher overall participation by trade association, the FASB may have tackled major accounting topics, the FASB's focus on its convergence project resulting principles-based standards may be preferred by constituents (specifically preparers) this sentiment that financial reporting has becomes too complex and is a compliance exercise may all contribute to the decline in the absolute participation. In the next two sections, I attempt to better understand what is driving constituent participation by categorize standards into groups (i.e. the type of standard and

the rules-based versus principles-based characteristics) and evaluate the levels of participation.

2.4.3 Constituent Participation by Type of Standard

To further investigate constituent participation, I categorize the standards into three types based on the nature of the standard: substantive, amendment, or industry. The following are the classifications assigned to each standard[8]:

- *Substantive Standard*: Standards did not previously exist or are significantly changed by the standard issued. In addition, the FASB indicates that when an Exposure Draft's comment period is longer than two months, then there is usually a significant or comprehensive change to the guidance (FASB 2013). Therefore, I have categorized any proposed standards that have a comment period greater than 2 months as "substantive."
- *Amendment Standard*: Standards that amend, clarify, interpret, or supersede a portion an existing standard. In addition, the FASB indicates that an Exposure Draft with a comment period of greater than 25 days are for additional application guidance, interpretation, or changes to existing guidance. Any Exposure Draft with a comment period of less than 25 days is for proposed standards that are minor changes or amendments (FASB 2013). I have categorized any proposed standards that have a comment period of less than 60 days as "amendment." I also have categorized any standard that are "Technical Corrections" in the

[8] Consistent with Tandy and Wilburn (1992) and Briloff (1986), except as noted, where I also consider the length of time the Exposure Draft is out for comment as another factor to determine the type of standard (FASB 2013).

"Master Glossary" as amendments regardless of the number of days in the proposed standards comment period.

- *Industry Standard*: Standards that pertain to a specific industry or specialized accounting for a group, i.e. governmental entities or not-for-profit. Any Exposure Draft that is industry-specific will be classified as such regardless of the length of the comment period. Also, standards that are specific to non-public entities are also classified as industry.

Table 11 shows a listing of how each of the standards in my sample is classified: 18 substantive, 30 amendments, and 15 industry-specific. In addition, Table 12 shows the mean level of participation for each group constituent group based on the type of standard. Mean participation is highest for proposed standards that are substantive changes to the accounting standards. Preparers have the highest mean participation (mean = 55.83) among the substantive-type standards. The lowest mean participation across the constituent groups is for standards classified as amendments, except for trade association, which have a higher mean participation (mean 11.87) for amendments than for industry (mean = 10.27).

In Table 13, I prepare a correlation matrix of the participation among constituents groups. I find statistically significant correlations between the constituents groups at the 0.0001 level. Similar to Tandy and Wilburn (1992), the participation of the public accounting firms is the least correlated with the others groups.

Next, I test whether the overall mean level of participation is different across the three types of standards. I perform a multivariate analysis of variance (MANOVA) and observe the resulting Wilks' lambda is significant (p=0.0488). There is a significant difference in the overall mean level of participation, which indicates that overall constituent participation is influenced by the type of standard[9]. I further analyze the overall mean level of participation by separating the preparers into two groups (public and non-public companies) and the accounting firms into two groups (Big-4 and non-Big-4). The result of the MANOVA shows a Wilks' lambda that is significant (p=0.0244). This further shows that the overall participation is influenced by the type of standard.

Using a univariate analysis of variance (ANOVA), I then analyze whether the type of standard impacts the mean level of participation for each constituent group. I do not find a significant result for any constituent group, which indicates that the type of standard does not influence participation by constituent group. This result differs from Tandy and Wilburn who found that the constituent groups of industry (preparers), accounting firms, and academia (included in "other") may be influenced to participate given the type of standard. However, I separate the participation of the accounting firms into Big 4 and non-Big 4 and perform another univariate analysis specific to the Big-4. I find there is no significant difference in the mean participation (p=0.3689). This is expected as the Big 4 generally participate in the comment process for each standard (except as noted above). Given that the Big 4 generally participate on every proposed

[9] This result is consistent with Tandy and Wilburn 1992 using MANOVA.

standard, in Chapter 3 and 4, I investigate the extent of the Big 4's participation given that they consistently participate in the comment letter process.

2.4.4 Constituent Participation by Rules-based Versus Principles-based Characteristics

Another characteristic that may influence the level of participation is whether a standard is rules-based or principles-based. In 2002, the FASB and the IASB agreed to collaborate to achieve convergence of US GAAP and IFRS (The Norwalk Agreement (FASB 2002)) to enhance the comparability of financial reporting across the globe. In 2003, the SEC published a study to evaluate the approach to standard-setting. The SEC's study describes what they believe are the flows in a rules-based and principles-only approach. Their view is that standard-setting should be principles-based or "objective-oriented basis" (SEC 2003). This approach would avoid the use of "bright-line" tests and minimize exceptions, which are prevalent in rules-based standards. This approach would provide the objective and ensure that is "sufficient detail and structure so that the standard can be operationalized and applied on a consistent basis" (SEC 2003).

The SEC's study (SEC 2003) provides examples of what they define as rules-based, principles-based (or objective-based[10]), and principles only. Below are list of examples of each type of sample from their study (2003):

[10] Components of objectives-oriented standards are (1) relevance, reliability, and comparability, (2) asset/liability view and (3) the theory of optimal scope, which is an "effort to find the 'sweet spot' on the continuum, which appropriately applies the asset liability view, while selecting the proper trade-off among relevance, reliability, and comparability" (SEC 2003). Optimal scope is "devoid of scope exceptions and bright lines" and "significantly increases the likelihood that the standard will result in the accounting that is more representationally faithful in capturing the substance of the related class of transaction or events" (SEC 2003).

- Rules-based standards: lease accounting, derivatives and hedging, stock-based compensation, and de-recognition of financial assets and liabilities. Characteristics of rules-based standards are existence of exceptions and bright-line tests that lead to large amounts of implementation guidance (i.e. SFAS 133 there are over 800 pages, including a vast number DIG Issues). Lease accounting included 16 SFASs and FINs, nine FTBs, and over 30 EITFs. Bright-lines also exist for consolidation /SPEs, Pension gains/losses, real estate sales guidance and implementation guidance on issues for pensions and postretirement benefits and accounting for income taxes. (SEC 2003)
- Examples of principles-based standards (objectives-only standards)- SFAS 141, 142, 143, 144, and 146. SFAS 34 and 52. (SEC 2003)
- Examples of principles-only guidance: Impairment of long-lived assets and historical cost (SEC 2003)

Using the SEC's study, Mergenthaler (2009) develops a Rules Based Continuum (RBC) score to evaluate the extent to which a standard contains certain attributes that are more indicative of rules-based standards. These attributes are (1) bright-line thresholds, (2) scope and legacy exceptions are included, (3) high levels of implementation guidance, and (4) high levels of detail. He scores all the SFASs and a select sample of other types of standards final standards using a continuum of "0" to "4" (as the RBC score increases, the number of rules-based characteristics increases). His scoring does not, however, extend to cover an ASUs issued post-codification. For my research, I re-perform the

calculation for a subset of Mergenthaler's sample to better understand the methodology he employs to score each Final Standard.

My research in this chapter utilizes Exposure Drafts (and not Final Standards). I leverage the methodology used by Mergenthaler (2009) to develop a modified RBC score (*RBC_EDscore*) for each EDs in my sample. In his research, Mergenthaler uses the four criteria for rules-based standards are (1) bright-line thresholds, (2) scope exceptions, (3) high-level of detail, and (4) large amounts of implementation guidance (SEC 2003) to determine if a final standard is more rules-based versus principles-base. I modify or use Mergenthaler 2009 measures for the characteristics of rules-based standards for the Exposure Draft in my sample as follows:

1) Bright-line thresholds: "a bright-line is a numeric threshold that delineates which of two alternative accounting treatments is appropriate. Bright-lines are identified using key words: (1) "criteri", (2) "condition", (3) "provision", (4) "require", (5) "percent", and (6) "all of the following" (except when used in terms of a list of disclosure required). Each paragraph surrounding each key word or phrase is read to confirm the presences of a bright-line threshold. Finally, the total number of bright-line thresholds in each standard is recorded" (Mergenthaler 2009). The bright-line threshold captures numerical thresholds in the ED. However, I also have included non-numeric wording (i.e. if all the following conditions are met") for those circumstances that indicate that all of a list of criteria be met for the application of a specific rule. If bright line threshold exist, the ED is scored as "1" and "0" otherwise.

2) Scope Exceptions: "search each standard for the following key words: (1) "not subject," (2) "not consider," (3) "exclu," (4) "exempt," (5) "except," (6) "scope," and (7) "does (do) not apply." I then read the paragraphs surrounding these words to identify scope and legacy exceptions. I count the number of scope and legacy exceptions in each standard to determine the total number of exceptions in each standard" (Mergenthaler 2009). I calculate the difference in the number of bright-line threshold in the Exposure Draft and the Final Standard. If scope exceptions exist, the ED is scored as "1" and "0" otherwise.
3) High-level of detail: "identify standards that contain a high level of detail by performing the following procedure: (i) counting the number of words in each standard; (ii) ranking the standards by the total number of words in each standard; and (iii) classifying those standards in the upper detail decile as "high level of detail" standards. He excludes the "'background information' and the 'basis for conclusions' as these sections do not prescribe how to account for the transaction. However, the results are not changed when I include these sections in the word count." I include the total number of words for the whole standard and do not exclude the background info or basis for conclusions. I then take the ED's total word count and establish quartiles (similar to Mergenthaler (2009) who also uses quartiles). I score all those standards in the Quartile 4 or the top quartile (i.e. with the greatest changes in the level of detail or word count) as "1". All other are classified as zero.
4) Large amounts of implementation guidance: The evaluation of this characteristic by Mergenthaler is ex-post (since it is of the Final Standard),

whereby he identifies implementation guidance that is issued (such as EITFs, SOP, FSP, etc.) subsequent to the Final Standard. Given that I am evaluating the implementation guidance in the proposed standard (ED), I am unable to use the same measure as Mergenthaler as he evaluates implementation guidance issued subsequent to the final standard. I evaluate the implementation guidance included within the ED. I count the specific examples listed, if there are example tables for disclosure, and if there are any flowcharts/decision trees included within the both the ED. If scope exceptions exist, the ED is scored as "1" and "0" otherwise.

5) Scoring: The *RBC_EDscore* is the sum of each of the rules- based criteria. A score of zero indicates that the ED has no rules-based characteristics and is "more" principles-based. A score of "4" indicates that the ED has all of the rules-based characteristics and is "most" rules-based.

Figure 1 presents a summary of the calculation of the *RBC_EDscore* and Table 14 includes a listing of the *RBC_EDscore* for each ASU and SFAS in my sample. Table 15 provides the mean participation by constituent group for each *RBC_EDscore*. Total participation is increasing as the *RBC_EDscore* increases. Using the *RBC_EDscore* to assess the rules versus principles-based characteristics of the Exposure Drafts in my sample, I test whether the overall mean level of participation is significantly different for the *RBC_EDscore* to determine if participation is influenced by the rules-based versus principles-based nature of a proposed standard. I perform a multivariate analysis (MANOVA) and find that the *RBC_EDscore* is significant ($F(4,58)= 2.44$, $p=0.0002$),

indicating that mean level of overall participation is influenced by the nature of rules-based versus principles-based characteristics of the proposed standard. I also perform a univariate analysis (ANOVA) for each constituent group (public, nonpublic, Big 4, Non-Big 4, individuals, trade associations and other) and find significant results (at p=0.0001), which indicates that individual constituent groups' participation are influenced by the rules-based versus principles-based attributes of the proposed standard (See Table 16 for results by constituent). I perform a Tukey post-hoc analysis, which reveal that there is a significant difference and increasing participation between each *RBC_EDscore* compared to *RBC_EDscore* = 4 for each constituent group. This result is driven by ASU 2014-09, *Revenue from Contracts with Customers,* which was subject to two comment periods prior to being finalized and took four years to be finalized. No other significant differences were noted for the other *RBC_EDscore* group comparisons. See Table 17 for the detailed results of the Tukey post-hoc analysis.

In the next chapter, I investigate the extent of the Big 4's participation given that they consistently participate in the comment letter process. More specifically, I evaluate whether there is a difference in the tone (negative, positive, uncertainty, litigious) and the length of their comment letters given the *RBC_EDscore*.

2.5 Conclusions

The purpose of this chapter is to provide an updated study of constituent participation in the comment letter process of standard-setting during the period 2002-2015. I also seek to gain new insights as to whether certain characteristics drive

participation. Overall, I find that, on an absolute basis, overall participation and participation by constituent groups has declined when compared to Tandy and Wilburn (1992)'s evaluation. On a relative basis, I find that the relative participation has declined in the current period as compared to the participation by constituents on the first 100 SFASs.

I find that substantive standards receive more participation as compared to amendments and industry-specific proposed standards. Results indicate that overall level participation is influenced by the type of standard and significantly affect the mean number of responses. However, when I evaluate each individual constituent group to determine if an individual group is influenced by the type of standard, I do not find a statistically significant result. This differs from Tandy and Wilburn as they find that industry (preparers, excluding banking and securities firms), public accounting, and the academic groups participation are influenced by the type of standards.

Finally, my results find that the mean responses increase as the rules-based attributes increase (as measure by an increasing RBC score) in the proposed standards. I find a statistically significant result that overall participation is influenced by the rules-based/principles-based attributes of the Exposure Draft. Further analysis by constituent groups finds that there is a statistically significant difference in participation based on the RBC score. The drivers of this result are those proposed standards classified as most rules-based (*RBC_EDscore* = 4), which elicit significantly higher participation compared to proposed standards with lower *RBC_EDscore*.

Given these results, the FASB may need to investigate or consider whether the overall decline in participation is an indicator of a larger issue with its due process. Given the increased scrutiny in the number of accounting standards that exist, constituents may believe that the cost of lobbying outweigh the benefits as financial reporting may be deemed more of a compliance exercise. Without input from its constituents, the FASB may lose the insights and feedback necessary to support its objective to evaluate the costs and benefits of new accounting guidance for all its stakeholders. Without participation from its constituents, the FASB may be inhibited in creating accounting standards that are decision-useful in accordance with its overall mission.

3. Extent of Big 4 Participation in the Comment Letter Process

3.1 Introduction

Accounting firms are a key stakeholder in the standard-setting process. Gipper et al 2013 identify three reasons that accounting firms may choose to participate in the standard-setting process: (1) to improve financial reporting because it is in the best interest of the profession, (2) to achieve their own self-interest (to increase audit wealth and/or reduce audit risk), and (3) to lobby on behalf of their clients (to increase/maintain audit wealth). The first reason is consistent with the FASB's mission and is not deemed as a motivation to participate, on its own, since it is consistent with the FASB's standard-setting objective (Gipper et al 2013).

The second motivation for accounting firms to lobby is for their self-interest. Accounting firms may lobby to reduce their audit risk (i.e. reduce litigation costs) or to increase their audit wealth (i.e. the ability to assess incremental fees for additional procedures that may be required by a new standard). For example, if a proposed standard suggests non-traditional accounting practices this may increase the audit firm's risk, the standard may be opposed by the audit firm (Meier et al. 1993). Furthermore, an accounting firm may prefer well-specified rules as a way to minimize the judgment for both management and auditors since well-specified rules may ultimately reduce audit risk (Miller and Redding 1986, Buckmaster 1988). Finally, an accounting firm may have to implement additional testing procedures to ensure compliance with new accounting guidance.

The third reason accounting firms may be motivated to participate is to lobby on behalf of their clients (which also has an impact on the accounting firm's audit wealth). The demand for auditing exists because auditors act as an agent between management and stockholders/board members. However, in a large company, ownership is often spread among many shareholders. Therefore, the power to hire and fire an auditor is delegated to management. As such, management has the opportunity to influence auditor lobbying positions (Meier et al. 1993) and accounting firms may be motivated to lobby on behalf of their clients. Refer to Chapter 1, *Theory and Literature Review*, for further description of the motivations for accounting firms to participate in the standard-setting process.

Accounting firms generally provide a comment letter for each Exposure Draft (with the exception of EITFs Abstract (pre-codification) and ASUs that are a consensus of EITF (post-codification) as accounting firms are part of the EITF and their feedback is considered as part of developing the standard). In this chapter, my research focuses on the extent of the Big-4 accounting firms' participation in the comment letter process as the comment letter is the most observable evidence to evaluate the extent of participation by the Big-4 accounting firms. This leads to my research question: What is the extent of the Big-4 accounting firms' participation in the standard-setting process? More specifically, is the length of Big-4's comment letters related to the type (substantive, amendment, industry-specific) of Exposure Draft? Is the tone in Big-4's comment letters related to how rules-based versus principles-based an Exposure Draft is?

I analyze the extent of the Big-4's participation to assess whether the Big 4 submit a comment letter as part of their "responsibility to the profession" or if their submission is motivated by their own self-interests, specifically audit risk. (I incorporate clients' preferences and the make-work effect as a motivation in Chapter 4). I hypothesize that the more extensive a submission, the more self-serving the participation is. I measure the extent of participation based on the length of the letter (number of words) in the each of the Big-4's comment letters for the sample selected. I also measure the extent of the Big-4's lobbying efforts using Loughran and McDonald's (2011) negative, uncertain, and litigious dictionaries to develop tone measures. I hypothesize that the tone of a comment letter may be indicative of the Big-4's motivation to participate, particularly if their motivation is driven by increased audit risk. Specifically, I evaluate if the Big-4's tone in their comment letters is associated to the rules-based versus principles-based characteristics of an Exposure Draft. I hypothesize that the various tone measures are higher when a proposed standard is more principles-based as auditors may prefer well-specified rules to minimize judgment in order to reduce audit risk (Miller and Redding 1986, Buckmaster 1988). As this proxy for audit risk, I develop a modified RBC score (Mergenthaler 2009) to identify the rules-based characteristics in the Exposure Drafts in my sample.

I find the Big-4 firms lobby more extensively for standards that represent substantive changes to the accounting standards as compared to proposed standards that are deemed amendments. I also find varying results for the sentiment measures. My evidence suggests that the mean negative tone is higher for more principles-based

standards as compared to the most rules-based standards, indicating that the Big-4 accounting firms may prefer well-specified accounting standards. However, the mean uncertainty tone is generally increasing as proposed standards become more rules-based. This indicates that Big-4 firms may not be motivated solely on audit risk and may also be expressing concerns on behalf of their clients.

My research contributes to the existing literatures in several ways. First, a majority of the research was performed in the 1980s-1990s and is case studies that focus on one or few standards. My research includes an analysis of the comment letters submitted by the Big 4 firms over a period of time (from 2002 to 2015). Second, since the Big 4 generally lobby for every accounting standard, this research is one of the first to attempt to distinguish the extent of the Big-4 lobbying and how it may be associated to its incentives to decrease audit risk. Third, prior literature focuses on a simplified use of the due process documents and comment letter documents, which have primarily been manually coded. My research utilizes textual analysis and machine-processing in order to facilitate analysis of a larger volume of data as opposed to one ED or case studies that have been done in the past. To my knowledge, this study is one of the first to use textual analysis to assess the extent (using tone and word counts) of the Big 4's motivations for lobbying in the FASB's standard-setting process. Finally, there is also limited research on the notion of audit risk and the impact that the perceived audit risk has on the lobbying position of the audit firm (i.e. Meier et al 1993). In my research, I identify a proxy for audit risk and develop a modified RBC score (Mergenthaler 2009) to identify the rules-based versus principles-based characteristics of the ED in my sample. I use this measure

to analyze whether the extent Big 4 lobbying efforts are influenced by these characteristics.

The remainder of this chapter proceeds as follows. Section 3.2 includes the development of my hypotheses. In Section 3.3, I provide a brief summary of the data used and the research methodology. In Section 3.4, I present the results. Finally in Section 3.5, I provide the conclusion of this chapter.

3.2 Background and Hypothesis Development

3.2.1 Background and Theory for Rules-Based versus Principles-Based Standards

Accounting firms are in the business to provide quality client service to ensure retention of its existing clientele and to attract new clientele. However, accounting firms also focus on minimizing and reducing their own audit risk. Given this, accounting firms may prefer well-specified rules to minimize judgment (for both management and auditors) and ultimately in reducing their audit risk (Miller and Redding 1986, Buckmaster 1988). Using this notion, my research evaluates the extent in which the Big 4 accounting firms lobby for (against) rules-based (principles-based) Exposure Drafts to limit or reduce audit risk (and ultimately to mitigate litigation risk). I use the *RBC_EDscore* (as discussed in Chapter 2) to evaluate the rules-based versus principles-based characteristics of the proposed standards as a proxy for audit risk. In the next section, I provide the background and theory for considering the rules-based versus principles-based characteristics of an accounting standard to assess audit risk. In 2002,

the FASB and the IASB agreed to collaborate to achieve convergence of US GAAP and IFRS (The Norwalk Agreement- FASB 2002) to enhance the comparability of financial reporting across the globe. In 2003, the SEC published a study to evaluate the overall approach to standard-setting. The SEC's study describes what they believe are the flaws in a rules-based and principles-only approach. Their view is that standard-setting should be principles-based or "objective-oriented basis" (SEC 2003). This approach avoids the use of "bright-line" tests and minimizes exceptions, which are prevalent in rules-based standards (SEC 2003). The principles-based approach provides the objective of the accounting standard and ensures that there is "sufficient detail and structure so that the standard can be operationalized and applied on a consistent basis" (SEC 2003). Using the SEC's study, Mergenthaler (2009) develops a Rules Based Continuum (RBC) score to evaluate the degree to which a standard contains certain attributes that are more indicative of rules-based standards as based on the 2003 SEC report and other resources (Mergenthaler 2009). Specifically, these attributes are (1) bright-line thresholds, (2) scope and legacy exceptions are included, (3) high levels of implementation guidance, and (4) high levels of detail. Mergenthaler (2009) scores each attribute with a "0" or "1" depending on whether the attribute is present. He sums the score for attribute to determine the RBC score. A high RBC score indicates that the standard has more rules-based characteristics.

Using this RBC score, Donelson, McInnis, and Mergenthaler (2012) further test the impact that rules-based versus principles-based characteristics have on potential litigation risk. They develop two competing theories: the "protection theory" and the

"roadmap theory." Each theory presents an explanation as to why both rules-based and principles-based standards predispose accounting firms to litigation claims. The overall premise of the "protection theory" is that rules-based standards decrease the likelihood of lawsuits and an unfavorable outcome in a lawsuit in restatement cases. This is based on the notion that rules-based standards provide a safe harbor for accounting firms. In litigation, plaintiffs are not able to establish violations of rules-based standards due to lack of discovery when there is no restatement. If there is a known misstatement, under rules-based standards, an accounting firm can argue the misstatement was an unintentional mistake caused by the complexities of rules-based standards. Principles-based standards allow plaintiffs to question the judgment made by auditors and to find potential fault in the judgment made (Donelson, McInnis, and Mergenthaler 2012).

On the contrary, their competing "roadmap theory" indicates that rules-based standard increase the likelihood of a lawsuit and an unfavorable outcome in litigation. The idea of the roadmap theory is that when rules-based standards result in a known misstatement, the rules-based standards provide a direct roadmap to the misapplication of the standards and thus plaintiffs have a more compelling litigation claim (Donelson, McInnis, and Mergenthaler 2012). However, principles-based standards provide flexibility and allow for explanations of the judgment/decision-making used to arrive at the accounting applied by the accounting firm's client.

In their research, Donelson, McInnis, and Mergenthaler (2012) test these two theories using two groups of restatement cases: restatements resulting in no litigation versus restatements that resulted in litigation. Their results indicated that violations of

rules-based standards are less likely to result in a lawsuit filing, thus supporting the protection theory (Donelson, McInnis, and Mergenthaler 2012). Based on their results, which indicate that rules-based standards alleviate the litigation risk, my hypotheses are based on the notion that the audit risk of the firm is lowered when more rules-based standards are implemented and adopted. There is a degree of judgment that is required when applying principle-based standards (which can be scrutinized in litigation), auditors are more likely to lobby against principle-based standards. My research tests whether audit firms are more supportive of proposed standards that are more rules-based as opposed to principle-based standards (given the that rules-based standards decrease the likelihood of litigation based on the results of Donelson, McInnis, and Mergenthaler 2012). My research also tests whether auditors express concern for the uncertainty, or audit and litigation risk, associated to a proposed standard that is more principles-based as compared to more rules-based standards.

3.2.2 Hypotheses Development

I analyze the extent of the Big 4's participation to assess whether the Big-4 submit a comment letter as part of their "responsibility to the profession" or if their submission is motivated by their own self-interests (i.e. audit risk) (Gipper et al 2013). I hypothesize that the more extensive a submission, the more self-serving the participation is. I measure the extent of participation based on the length of the letter (number of words) in each of the Big-4's comment letters for the sample selected. I hypothesize that proposed standards that are more substantive or industry-specific are associated to more extensive submissions by the Big-4 when compared to proposed standards that are amendments.

Proposed standards that are more substantive or industry specific are likely to garner more extensive lobbying as compared to proposed standards that are amendments as the impact on auditors and their clients may be more significant. There may be more audit procedures required, implementation of new accounting methods, additional new disclosure requirements, etc. Given this, I hypothesize:

- *H1: EDs that propose substantive or industry type changes to the accounting standards are associated with more extensive comment letters from the Big-4 firms.*

Using the length of the comment letter, I evaluate whether the extent of the Big-4 lobbying efforts differs by the type of accounting standard to evidence that the Big-4's motivation for lobbying are driven by something more than an obligation to the profession. A difference in the length of the comment letters indicates that there is a motivation to lobby that is driven by audit risk and/or audit wealth. If there is no difference in the length of the comment letters, this indicates that the Big-4 may be lobbying as an obligation to the profession.

Next, I consider how tone may vary given the rules-based versus principles-based attributes in the Exposure Draft. I use the two main premises described above as the foundation for my research in this chapter: (1) auditor's prefer well-specified rules to minimize the judgment (for both management and auditors) in order to reduce audit risk (Miller and Redding 1986, Buckmaster 1988) and (2) restatements are less likely to result

in a lawsuit filing for more rules-based standards, which indicates that audit risk (and ultimately litigation risk), are reduced for more rules-based standards as evidenced in Donelson, McInnis, and Mergenthaler (2012). I hypothesize that the various measures of tone are associated to how rules-based versus principles-based a proposed standard is:.

- *H2a: The more rules-based a proposed standard (Exposure Draft) is, the less negative the language in the Big-4's comment letters.*

- *H2b: The more rules-based a proposed standard (Exposure Draft) is, the less litigation risk-related the language in the Big-4's comment letters.*

- *H2c: The more rules-based a proposed standard (Exposure Draft) is, the less uncertain-related the language in the Big-4's comment letters.*

For each tone measure, I evaluate the tone of the comment letter to determine if accounting firms are motivated to lobby to reduce their audit risk. Using Donelson, McInnis, and Mergenthaler's (2012) notion that more principles-based standards are more likely to result in litigation over rules-based standards, I test whether the Big-4 tone differs for rules-based versus principles-based EDs (as measured by the *RBC_EDscore*). I use the tone to evaluate whether there is a difference in the extent of participation by the Big 4. Indifferent, neutral, or similar tones may indicate that the submission is for the sake of providing a submission on behalf of the profession. However, variations in the negative, litigious, or uncertain tones may indicate that there is a motivation to lobby to reduce their audit risk (or to affect audit wealth).

I hypothesize that accounting firms are likely to prefer, or support, rules-based accounting standards (as indicated in the tone of their comment letters) to reduce potential audit risk (litigation risk). I use a negative tone measure to assess the support associated to the proposed standard. A higher negative tone is a potential indicator that the Big 4 has less support for the proposed standard. Therefore, I hypothesize that the more rules-based the proposed standard the less negative the tone associated to the Big-4's comment letters for that standard.

Next, I hypothesize that the tone of the comment letters of the Big-4 is likely to be more negative, litigious, and uncertain given the associated audit risk with principles-based standards. I also use the uncertainty tone and litigious tone measures as proxies for audit risk (and ultimately litigation risk). A higher uncertainty and litigious tones is a potential indicator of the concern for the restatement and/or litigation risk the Big-4 may associate to the proposed standard. I hypothesize that the more-rules based the proposed standard, the less uncertainty (reducing audit risk) and the less litigation risk. Section 3.3 describes how each of the tone measures is determined.

3.3 Research Methodology

To facilitate my research, I use textual analysis to extract the tone and word count from the Big-4's comment letters. Textual analysis has become a compelling topic for accounting and finance research. Given the amount of qualitative disclosure that is associated with financial reporting and the power of computers to analyze text systematically, textual analysis allows researchers to convert qualitative information to

quantitative information and apply statistical methods to draw inferences regarding the content of the text. It is a means to extract word counts related to sentiment and broad topics and to identify similarity, readability, and understandability of documents. With the ability to use machine-processing, textual analysis has allowed for large scale empirical analysis of various forms of text, including public companies SEC filings (i.e. Form 10-K/10-Q and earnings releases), news articles, transcripts from earnings conference calls and even social media in finance and accounting research.

In this setting, there has been little to none large scale analysis of the lobbying for accounting standards using automated textual analysis on the comment letters submitted by constituents to the FASB (with the exception of Allen et al 2014). Furthermore, to my knowledge, there are no studies using sentiment to analyze the text of comment letters and its association to constituents' motivations to lobby in or to influence the standard-setting process. Tone, or language, is a way to further investigate the motivations to participate in the standard-setting process and whether the lobbying efforts of the constituents (and specifically the Big-4 in my research) influence the process. Below, I describe the data and methods I use to extract negative, litigious, and uncertainty tones from comment letters submitted by the Big-4.

3.3.1 Data Collection

My sample consists of 62 SFASs and ASUs, which yields 247 comment letters that have been submitted by the Big-4 during the time period January 2002 through September 2015. I categorize each proposed standard into three types based on the nature of the standard: substantive, amendment, or industry, as defined in Chapter 2. I

also assign a *RBC_EDscore*, ranging from zero to four (0=most principles-based and 4= most rules-based), for each of the EDs in my sample as described in Chapter 2.

First, as discussed in Chapter 2, I download each comment letter submitted by the various constituents for the Exposure Drafts in my sample. Each constituent's comment letter is available in PDF format, which can be converted into machine-readable format for text analysis. I use an "add-on" that allows me to download the comment letters, in bulk, for each Exposure Draft. This allows me to pull-down all the PDF files found on a page simultaneously. For this chapter, I extract the comment letters specific to the Big-4 from the sample population to extract the tone measures.

Next, I convert the PDF files to ".txt" files to enable the content to be read and analyzed systematically. I scan each ".txt" file to ensure there are no large errors that may have occurred in conversion. Six files cannot be converted to ".txt" from the PDF reader; as such, I manually type these files. This mainly occurs in scanned comment letters that were submitted in the earlier years in my sample. Next, I compose a python code to automatically generate the total word count, *wordcount*, for each of the comment letters within my sample. My measure, *wordcount*, is used as one measure of extent. I also use the *wordcount* to develop my measure for tone as described below.

3.3.2 Measurement of Tone in the Big-4's Comment Letters

To determine the tone, I obtain a dictionary of "negative," "uncertain," and "litigious" words determined by Loughran and McDonald (2011). In their research, Loughran and McDonald (2011) develop various dictionaries of words to assess the tone

of documents representing a financial context. They identify widely-used dictionaries, such as the Harvard Psychological Dictionary (specifically, the Harvard-IV-4 TagNeg ("H4N")) in psychology and sociology research, classify words (73.8%) as negative (i.e. "capital," "liability," "tax") that do not have a negative connotation in a financial context (Loughran and McDonald 2011). In addition, they identify words that have a negative connotation that are not on the H4N list (i.e. "misstatement," "restate," "unanticipated"). Given these differences, they develop sentiment dictionaries to evaluate negative and positive tone and extend their analysis to develop dictionaries for uncertain and litigious tones in a business setting[11].

Loughran and McDonald develop a list of 2,355 words that have a negative connotation in a finance and business context[12]. They also create word lists that are indicative of the following sentiments in a financial context: positive (354 words), litigious (903 words), and uncertainty (297 words). One advantage of using an established dictionary is that it provides for a controlled and objective dictionary. However, a disadvantage is that the setting of my research is unique and the word lists may not be comprehensive to address language used by auditors to express audit risk. As such, I analyze the words included on each list and make adjustments to eliminate words that may bias the results. Specifically, I remove the following words from the litigious

[11] I consider using the H4N dictionary to assess tone in this setting as it is unique and not specifically text related to financial statements or financial performance. However, given that the information is specific to the standards that govern financial reporting in the US and that the Big-4 are responsible for auditing the financial statements of public companies, I feel that the dictionaries established by Loughran and McDonald are more appropriate and relevant to evaluate the tone. I also perform my statistical analysis using the H4N dictionary and find no significant results, which may be attributed to the potential noise associated with words that may not be negative in the financial reporting context.

[12] For Loughran and McDonald's dictionaries, refer to http://www3.nd.edu/~mcdonald/Word_Lists.html

tone dictionary that are used as part of the system and naming convention for the FASB's accounting standards: codification, codifications, codify, codified, codifies, codified, codifying, amend, amends, amendments, amending, amendable, subparagraph, and subparagraphs. Similarly, from the uncertainty tone dictionary, I remove the following words: exposure, exposures, intangibles, intangible, and unhedged.

I also consider whether any additional words should be included from the Loughran and McDonald dictionaries that may be indicative of audit risk from an auditor's perspective based on my own experience. In the audit field, any judgments that are made by clients give rise to uncertainty (and increase audit risk). Using the word "judgment," I use WordNet[13] to derive a list of synonyms for judgment and include in my revised uncertainty dictionary. I also consult WordNet to identify any additional synonyms for uncertainty and determine if there are relevant words not included in the Loughran and McDonald uncertainty dictionary. Figure 2 includes a listing of the words added to the uncertainty dictionary. I develop and alternative uncertainty measures using the additional words in the dictionary and recalculate the *percuncertain2_tone* measure. See section 3.4.2 for results using both dictionaries.

I use the adjusted sentiment dictionaries to extract the tone from the Big-4's comment letters. I compile a Python code to search the ".txt" files for my sample. The Python code automatically calculates the total occurrences of each word for the tone

[13] Princeton University "About WordNet." WordNet. Princeton University. 2010. <http://wordnet.princeton.edu>

measures based on the adjusted dictionaries for each sentiment (negative, positive, uncertain, and litigious tones).

Next, using the total occurrences for each sentiment dictionary, I calculate the measures for tone within each comment letter submission made by the Big-4 in my sample as follows:

$$\textit{percneg\_tone} = \frac{\text{number of negative words used in the comment letter}}{\text{total words in the comment letter submission}}$$

$$\textit{percuncertain\_tone} = \frac{\text{number of uncertainty words used in the comment letter}}{\text{total words in the comment letter submission}}$$

$$\textit{perclitig\_tone} = \frac{\text{number of litigious words used in the comment letter}}{\text{total words in the comment letter submission}}$$

For each measure, I use a ratio to control for the varying lengths of the comment letters submitted by the Big-4 accounting firms and measure the tone variables as a percentage of the word counts for each sentiment divided by the total word count in the comment letter.

My measures for extent of participation of the Big-4 *wordcount*, *percneg_tone*, *percuncertain_tone*, and *perclitig_tone* are my dependent variables. The *type_standard*

[14] In a working paper that surveys the use of textual analysis in finance and accounting research, Loughran and McDonald (2016) indicate that some research uses a net measure of the positive and negative constructs. However, they suggest that positive tones are best left untested unless research has a method to "convincingly eliminate the problems with negation." They find that there is less ambiguity with a negative statement (i.e. using negative words to make a positive statement as compared to using positive words to frame a negative statement). In addition to *percneg_tone*, I also derive a net negative tone (negative words minus positive words) for the numerator of the *percneg_tone* measure. I do not find a significant difference in the results when I use the net negative tone.

and *RBC_EDscore* are the independent variables. In the next section, I use these measures to evaluate the extent and the motivation for the Big 4's participation.

3.4 Results

Table 20, Table 22, Table 24, and Table 26 provides descriptive statistics for my measures of the extent of the Big-4's participation: *wordcount, percneg_tone, percuncertain_tone,* and *perclitig_tone*. I use a non-parametric statistical test, Welch's ANOVA, to determine if there is a significant difference in the mean of each of the dependent variables by *type_standard* and/or by *RBC_EDscore*. In my sample, the assumption of the homogeneity of variances assumption is violated given the difference in the samples sizes across groups. In addition, the dependent variables are not normally distributed for each group of the independent variable. The Welch's ANOVA allows to evaluate whether the mean across two or more groups are equal given that there is varying samples size across groups and when samples sizes are small when such assumptions are violated. In sections 3.4.1 and 3.4.2, I provide the main results of my findings for extent (measured by *wordcount, percneg_tone, percuncertain_tone, and perclitig_tone)* and the motivation to lobby to reduce audit risk (measured by the *RBC_EDscore*).

3.4.1 Results for *Wordcount*

Table 18 includes the descriptive statistics for *wordcount.* I analyze the *wordcount* by the type of standard (substantive, amendment, industry) and find that the mean *wordcount* is higher for "substantive" standards (mean=4987.43 words) and "industry" specific standards (mean = 2777.07 words) and is lowest when the exposure

draft is deemed an “amendment” (mean= 2416.34 words). The mean *wordcount* in the Big-4’s comment letters by *type_standard* is significantly different (Welch's F (2, 108.26) = 8.985, p = .0002). Next, I perform a Games-Howell post-hoc analysis to compare the mean *wordcount of* all combinations of group differences by *RBC_EDscore*. There is also a decrease in the mean *wordcount* for proposed standards when comparing the substantive-type standards *wordcount* to amendments of -2571.09 words (p=.0001), which is statistically significant at the 0.01% level. There is also a decrease in the mean *wordcount* when comparing substantive-type standards to industry-specific standards. There is no significant difference in the mean *wordcount* of amendments and industry-specific proposed standards. Overall, this results is consistent with the my conjecture, *H1,* that new accounting standards or substantive changes to existing accounting standards may impact the effort and extent of the Big-4’s comment letter submission as they have more of a vested interest in the influencing the final standard. Exposure Drafts that are deemed amendments and industry-specific elicit less extensive participation as the compared to substantive. Therefore, there is a difference in the extent of participation by the Big-4 given the type of standard that is proposed by the FASB.

Finally, I evaluate whether the extent of the comment letters used is higher when the Big-4 accounting firms are likely required to perform additional audit procedures. I perform a Kruskal-Wallis equality of populations rank test. This statistical test is a rank-based non-parametric test that determines if there is a statistical difference between two groups. I find that the *wordcount* for those procedures requiring more work is higher as

compared to those proposed standards and is statistically significant at p= 0.0001. This suggests that more extensive comment letters are written when there is more work or audit effort required. Table 31 provides the summary of the Kruskal-Wallis test.

3.4.2 Results for the Various Measures of Tone

Next, I evaluate the tone of the comment letter to determine if the extent accounting firm's participation consists of more negative, litigious, or uncertain tones if there is more audit risk associated to a standard. Using Donelson, McInnis, and Mergenthaler's (2012) notion that more principles-based standards are less preferred over rules-based standards for reducing audit/litigation risk, I seek to find evidence of this based on the tone of the Big-4's comment letters. The tone of the comment letters of the Big-4 is likely to be more negative, litigious, and uncertain given the associated audit risk with principles-based standards. I use this analysis to determine if the *RBC_EDscore* is a potential proxy for audit risk. Using the calculations of *percneg_tone*, *percuncertain_tone*, and *perclitig_tone*, I test whether the mean for each sentiment is significantly different for the Big-4's comment letters by *RBC_EDscore*.

3.4.2.1 Negative Tone

First, I find the mean *percneg_tone* is the highest (mean = 1.80%) for the most principles-based proposed standards (*RBC_EDscore* = 0) and is the lowest (mean = 1.26%) for the most rules-based standards (*RBC_EDscore* = 4). I perform a one-way Welch's ANOVA test to determine if the mean *percneg_tone* is different by *RBC_EDscore.* The negative tone in the Big-4's comment letters is statistically significant different (at the p <0.01 level) by *RBC_EDscore* (Welch's F (4, 92.77) =

3.800, p = .0066). It can also be concluded that not all *RBC_EDscore* means are equal in each of the populations based on the *RBC_EDscore*.

Next, I perform a Games-Howell post-hoc analysis to analyze to compare all possible combinations of group differences by *RBC_EDscore*. There is also a decrease in negative tone for proposed standards that have an *RBC_EDscore* of "4" (most rules-based) as compared to "2" as there is a decrease in the mean negative tone of 0.384% (p=.0210), which is statistically significant at the 5% level. There is a similar result for "4" compared to "0", where the mean tone is decreasing by 0.542% (p = .0870), which is statistically significant at the 10% level. These results indicate that the *percneg_tone* is higher for principles-based EDs when compared to the most rules-based (*RBC_EDscore* = 4) and the Big-4 may prefer rules-based EDs versus principles-based ED. This is consistent with hypothesis, *H2a*, however, there are only two comparisons that yield a significant result. The remaining comparisons of *RBC_EDscore* for *percneg_tone* also show an increase in the negative tone; however, there are no statistically significant results that indicate there is a difference in the mean tone among the other group comparisons. Table 21 shows the results of the Games-Howell post-hoc analysis for each comparison of *RBC_EDscore*.

I also evaluate *percneg_tone* for proposed standards that I have classified as substantive and industry-specific proposed standards. I find that there is statistically significant difference in the mean negative tone by *RBC_EDscore* for substantive EDs (Welch's ANOVA: F (4, 27.12) = 8.248, p= 0.0002). However, I find a similar result as above for the Games-Howell post-hoc analysis. There is generally a decrease in

negative tone as the EDs become more rules-based. Next, I evaluate the *percneg_tone* for industry specific and find that there is significant difference in the mean across the RBC_EDscore groups (Welch's ANOVA 3, 17.81) = 3.694, p= 0.0315). However, I do not find any significant results across the pairwise comparison of means by *RBC_EDscore*. See Table 28 for detailed results.

Finally, I evaluate whether the negative language used is higher when the Big-4 accounting firms are likely required to perform additional audit procedures. Accounting firms are likely to support standards that increases the procedures required to be performed, which ultimately increase the audit wealth of accounting firms (W-Z 1982). As noted above, certain proposed accounting standards require complex accounting methods or extensive disclosures that are subject to audit. Incremental audit costs are thus required and additional audit fees are charged (Firth 1985). I classify proposed standards that may increase the audit procedures performed by the Big-4 in Figure 7. I perform a Kruskal-Wallis equality of populations rank test. I find that the *percneg_tone* for those procedures requiring more work is higher as compared to those proposed standards and is statistically significant at p= 0.0455. This suggests that the negative tone is higher when there is more work or audit effort required, which is opposite as expected. Table 31 provides the summary of the Kruskal-Wallis test.

3.4.2.2 Litigious Tone

Next, I evaluate the difference in the mean *perclitig_tone*. Table 22 shows that the mean *perclitig_tone* (mean = 0.0085) is the highest for the most rules-based proposed standards (*RBC_EDscore* = 4). However, there is only two proposed standards that have

an *RBC_EDscore* of 4; one of which is ASU 2014-9 "*Revenue Recognition,*" an extensive and controversial standard that resulted in two comment periods and outstanding as a proposed standard for several years. The next highest mean *perclitig_tone* is 0.0066, which is for proposed standards with an *RBC_EDscore* of 2, indicating a more principles-based standard. I find the mean *perclitig_tone* (mean = 0.006) is lowest for the more rules-based standards (*RBC_EDscore* = 3). I perform a one-way Welch's ANOVA test to determine if the mean *perclitig_tone* was different by *RBC_EDscore.* I find there is statistically significant difference (at the p <.10 level) in the mean litigious tone by RBC_EDscore. It can be concluded that there is a significant difference in the *perclitig_tone* by *RBC_EDscore*, Welch's F (4, 64.31) = 2.352, p = 0.0633. However, when I perform a Games-Howell post-hoc analysis, I do not find any statistically significant results when comparing the RBC_EDscore groups to each other (see Table 23). Given these results, the null hypothesis of *H2b* is not rejected as there is no significant difference in the mean *perclitig_tone* across the pairwise comparisons of *RBC_EDscore*.

I also evaluate *perclitig_tone* for proposed standards that I have classified as substantive and industry-specific proposed standards. I find that there is statistically significant difference in the mean litigious tone by *RBC_EDscore* for substantive EDs (Welch's ANOVA F (4, 28.07) = 4.717, p= 0.0049). I also find a different result compared to above for the Games and Howell post-hoc analysis. There is generally increasing litigious tone as the EDs become more rules-based. Specifically, this result exists when comparing EDs with score of 0, 1, and 3 to the most-rules based standard,

"4." The results are larger driven by *ASU 2014-09, Revenue Recognition for Contracts.* This standard had two comment periods and the time to issuance was several years. However, it is important to see how this rules-based ED generated a difference in tone as compared to other proposed standards. Next, I evaluate the *perclitig_tone* for industry-specific EDs and find that there is not a significant difference in the mean across the RBC_EDscore groups (Welch's ANOVA F (3, 17.72) = 2.007, p= 0.1496). See Table 29 for detailed results.

Finally, I evaluate whether the litigious language used is higher when the Big-4 accounting firms are likely required to perform additional audit procedures. I perform a Kruskal-Wallis equality of populations rank test. The results show that the *perclitig_tone* for those procedures requiring more work is higher as compared to those proposed standards and is statistically significant at p= 0.0947. This suggests that the litigious tone is higher when there is more work or audit effort required. Table 31 provides the summary of the Kruskal-Wallis test.

3.4.2.3 Uncertainty Tone

Finally, I evaluate the difference in the mean *percuncertain_tone.* Table 24 shows the mean *percuncertain_tone* (mean = 1.99%) is the highest for the most rules-based proposed standards (*RBC_EDscore* = 4). Similar to above, there is only two proposed standards that have an *RBC_EDscore* of 4; one of which is ASU 2014-9 "*Revenue Recognition,"* an extensive and controversial standard that resulted in two comment periods and outstanding as a proposed standard for several years. The next highest mean *percuncertain_tone* is 1.55%, which is for proposed standards with an

RBC_EDscore of "2," indicating a more principles-based standard. I find the mean *percuncertain_tone* (mean = 1.08%) is lowest for the more principles-based standards (*RBC_EDscore* = "1"). The descriptive statistics demonstrate the opposite as hypothesized as more principles-based standards tend to have a lower mean uncertainty tone. To test if the mean *percuncertain_tone* are significantly different, I perform a one-way Welch's ANOVA test. The *percuncertain_tone* in the Big 4's comment letters is statistically significantly different for the different *type_standard*, Welch's $F(4, 68.65) = 20.203$, $p < .0001$. Therefore, it can be concluded that not all group means are equal in the population and that there is significant difference in the mean *percuncertain_tone* by *RBC_EDscore*.

I perform a Games-Howell post-hoc analysis to analyze to the pairwise comparison of *RBC_EDscore*. Table 25 provides the results. There is a significant difference (p= 0.001) in the mean uncertainty tone for those ED's with an *RBC_EDscore* of "2" and "0;" however, the mean uncertainty tone is increasing as the ED becomes more rules-based (as indicated by the positive difference in the mean *percuncertain_tone* of 0.415%). Similarly, there is a significant difference for "4" versus "0" ($p < 0.0001$), "2" versus "1" ($p=0.0010$), "4" versus "1" ($p < 0.0001$) and "4" versus "3" ($p < 0.0001$) and there is an increase in mean *percuncertain_tone* as the proposed statement becomes more rules-based. These results contradict my hypothesis, *H2c*. The only *RBC_EDscore* comparison that is decreasing in mean *percuncertain_tone* (as hypothesized) is an *RBC_EDscore* of "3" versus "2" and is statistically significant (p=0.0320). Overall, I find that the uncertainty mean tone is increasing as *RBC_EDscore* increases. This

indicates that the Big-4 exhibit higher uncertainty when the proposed standard is more rules-based as compared to principles-based.

I also evaluate *percuncertain_tone* for proposed standards that I have classified as substantive and industry-specific proposed standards. I find that there is statistically significant difference in the mean uncertainty tone by *RBC_EDscore* for substantive EDs (Welch's ANOVA F (4, 27.74) = 15.729, p< 0.0001). However, I find a similar result as above for the Games and Howell post-hoc analysis. There is generally increasing uncertainty tone as the EDs become more rules-based. See Table 30 for detailed results. Next, I evaluate the *percuncertain_tone* for industry specific and find that there is not a significant difference in the mean across the *RBC_EDscore* groups (Welch's ANOVA F (3, 23.21) = 0.242, p= 0.8660).

Finally, I evaluate whether the uncertainty language used is higher when the Big-4 accounting firms are likely required to perform additional audit procedures. I perform a Kruskal-Wallis equality of populations rank test. I find that the *percuncertain_tone* for those procedures requiring more work is higher as compared to those proposed standards and is statistically significant at p= 0.0003. This suggests that the uncertainty language is higher when there is more work or audit effort required. Table 31 provides the summary of the Kruskal-Wallis test.

3.4.2.4 Alternate Measure of Uncertainty Tone

I also test *H2c* using the revised uncertainty dictionary (*percuncertain2_tone*) whereby I include additional words that from an auditor's perspective may express

concerns of uncertainty (resulting in increased audit risk) as discussed in section 3.3.2. Table 26 provides the descriptive statistics for this measure. I perform a one-way Welch's ANOVA test to determine if the mean *percuncertain2_tone* was different by *RBC_EDscore.* The *percuncertain2_tone* in the Big-4's comment letters is also statistically significantly different for the different *type_standard*, Welch's $F(4, 85.36) = 16.731$, $p < .0001$. With this revised uncertainty tone measure, I also conclude that not all group means are equal in the population and that there is significant difference in the mean *percuncertain2_tone* by *RBC_EDscore*. In Table 27, I provide the results of the Games-Howell post-hoc analysis. I find a different result as compared to *percuncertain_tone.* I find that there is only a statistically significant difference in the mean when comparing "2" and "0" ($p < 0.0001$), "4" and "0" ($p < 0.0001$), and "4" and "3" ($p = 0.039$). However, there is a similar result in that the mean uncertainty is increasing as the *RBC_EDscore* increases (becomes more rules-based). This also contradicts as hypothesized at *H2c*.

3.4.2.5 Potential Explanations for Uncertainty Tone

There are several potential explanations for the increasing uncertainty in comment letters for more-rules based Exposure Drafts. First, my premise that audit risk is higher for principles-based standards is based on the conjecture that, at the audit engagement level, field auditors seek to mitigate audit risk as the primary objective. Focus on audit wealth and engagement economic is also imperative, but auditors in the field are required to ensure that their procedures address the audit risk of their clients. At the overall firm level, the primary objective may be to manage relationships with clients and to maintain

an appearance that is supportive of the FASB's initiatives (i.e. the Convergence Project). Therefore, the tone may be more uncertain for rules-based standards as managers may prefer accounting standards that allow for flexibility and judgment to best reflect the underlying economics of a transaction. Rules-based standards also may be viewed as more strict (given the bright-lines and detailed implementation guidance). The inflexibility of the rules-based standard put auditors at greater risk for client conflict over the accounting treatment. Therefore, the Big-4 accounting firms may lobby on behalf of their clients. I further test motivations for the Big-4 lobbying in Chapter 4.

A second potential explanation is based on Donelson, McInnis, and Mergenthaler's (2012) roadmap theory. The roadmap theory indicates that rules-based principles provide a "roadmap" in litigation and that principles-based standards provide more flexibility and room for judgment for both managers and auditors. This may be beneficial when faced with a litigation claim. Although the protection theory is not in line with their results, it still offers a potential explanation for the increase in uncertainty tone as proposed standards become more rules-based.

Another possible explanation is that there may be higher uncertainty tone for proposed standards that are more rules-based as these standards have more detail or information (which is one measure used in calculating the *RBC_EDscore*). Higher levels of detail present more information to be applied. Standards that are more rules-based include detailed implementation guidance and specific requirements, which may be difficult for auditors to attest to the information required by the proposed standard. The Big-4 accounting firms may express their uncertainty as they may want to clarify what is

required for the proposed standard that is ultimately subject to their audit procedures. This may result in greater uncertainty and the Big-4 may request clarification from the FASB.

3.5 Conclusion

The purpose of this chapter is to provide an evaluation of the extent of participation by the Big-4 in the comment letter process. Given that the Big-4 generally participate in comment letter process for each SFASs and ASU, my research seeks to identify if the Big-4 lobbying as an obligation to the profession or if there is a difference in the overall level of participation given other motivations to participate (to reduce audit risk and to maintain/increase audit wealth. I find that there is a significant difference in the extent of the Big-4's lobbying efforts as measured by the length (total words) and the tone (negative, uncertainty, and litigious) of the comment letter.

Overall, the Big-4 tend to lobbying more extensively (as measured by the total words in their comment letters) for substantive changes to the accounting guidance as compared to standards that are amendments. Large scale changes to the accounting standards may have a direct impact on the level of audit risk and the audit wealth of the Big 4. However, minor amendments to the accounting standards are not likely to result in changes to audit risk or audit wealth. Therefore, the Big-4 may be more motivated to lobby more heavily for proposed standards that are substantive changes to the accounting guidance.

My results also indicate that there is a significant difference in negative, litigious, and uncertainty tones of the Big-4's comment letters based on the level of rules-based versus principles-based attributes in the proposed standard. I find evidence to suggest that as the proposed standards become more rules-based the negative tone of the Big-4's comment letter decreases. This indicates that the Big-4 tend to be more supportive for proposed standards that are more rules-based. However, I find that that evidence that the uncertainty tone increases as proposed standards become more rules-based. This contradicts my hypothesis that auditor's may prefer rules-based standards as they mitigate audit risk.

There are several potential explanations for the increasing uncertainty in comment letters associated to proposed standards that are more-rules based. First, my hypothesis centers around rules-based standards mitigating audit risk; however, another motivation for accounting firms to lobby is it increase or maintain audit wealth. The overall objectives of the firm may be to mitigate risk, but there may be more emphasis placed on growing and maintaining audit wealth. Managers may prefer more principles-based standards given the flexibility and judgment that is the spirit of principles-based standards and principles-based standards may minimize auditor-client conflict. In addition, the roadmap theory also provide a similar explanation that accounting firms face more litigation risk when there is a roadmap of the requirements as is the case with rules-based standards. Finally, the increasing uncertainty may merely be a result of the level of detail associated to more rules-based standards. More clarification may be requested by the Big-4 in their comment letters when there is more detail.

In the next chapter, I further investigate the Big-4 accounting firms' incentives for lobbying by incorporating audit wealth as another motivation for lobbying.

4. Risk or Reward? Further Analysis of Motivations for Accounting Firm Lobbying

4.1 Introduction

In the previous chapter, I analyze the extent of the Big-4's participation in the FASB's standard setting process to assess whether the Big-4 submit a comment letter as part of their "responsibility to the profession" or if their submission is motivated by their own self-interests, specifically audit risk. Using a modified RBC score (Mergenthaler 2009) as a proxy for audit risk, I evaluate if the Big-4's tone in their comment letters is associated to the rules-based versus principles-based characteristics of an Exposure Draft. I hypothesize that the negative, uncertain, and risk-related (or litigious) language in the Big-4's comment letters are higher when a proposed standard is more principles-based as auditors may prefer well-specified rules to minimize judgment in order to reduce audit risk (Miller and Redding 1986, Buckmaster 1988). However, I find varying results across these sentiment measures.

As expected, my evidence suggests that that the mean negative language is higher for more principles-based standards as compared to the most rules-based standards, indicating that the Big-4 firms may prefer well-specified accounting standards. However, the Big-4's mean uncertainty language is increasing as proposed standards become more rules-based. This suggests that the Big-4 may not express concern for certain aspects of principles-based standards as expected; instead, they may lobby on behalf of their clients' preference for more principles-based standards. There are no significant results for the

risk-related (litigious) language used by the Big-4. To further investigate these results, I extend my research to evaluate the Big-4 accounting firms' other motivations for lobbying: client preference and audit wealth.

Several authors have evaluated the potential factors that motivate the audit firm's lobbying position in the standard setting process: W-Z (1982); Puro (1984); Meier et al. (1993); and McKee et al (1991). The prior research includes case studies on specific standards or on standards impacting a specific industry. Through these case studies, the authors evaluate whether an accounting firm's lobbying position for a proposed standard is motivated by client preference and the ultimate impact the new standard has on auditor wealth (i.e. the proposed standard "makes work" for the auditor given the substantive changes in the accounting methods to be applied or extensive disclosure required) (W-Z 1982, Meier et al 1993, and Firth 1985).

As discussed in Chapter 3, another potential motivation for the accounting firm's lobbying position is the perceived audit risk associated with a proposed standard. Over the past fifteen years, there has been increased regulation of the auditing profession and an even greater emphasis on reducing the accounting firm's litigation risk. If a proposed standard suggests non-traditional accounting practices this may increase the accounting firm's risk and the standard may be opposed by the accounting firm (Meier et al 1993). Furthermore, an accounting firm may prefer well-specified rules as a way to minimize the judgment for both management and auditors since well-specified rules may ultimately reduce audit risk (Miller and Redding 1986, Buckmaster 1988). Given this, I pose the following research question: is an accounting firm's perceived audit risk associated to a

proposed standard evident in the position taken by the accounting firm (as indicated in their comment letter)? Are auditor lobbying efforts for standard setting processes a function of the audit wealth, audit risk, or both?

In this chapter, I evaluate three motivations for Big-4 lobbying: client preference, audit risk, and the "make-work" effect. For the client preference effect, I hypothesize that the Big-4 accounting firms are likely to lobby on behalf of their clients. The Big-4 accounting firms' negative language is increasing with their clients' negative language, which is used to measure the level of support for a proposed standard. Conversely, as the Big-4 accounting firms' uncertainty language increases, I expect the clients' uncertainty language to decrease. This is based on the notion that auditors prefer well-specified rules that limit judgment (Miller and Redding 1986, Buckmaster 1988); however, their clients may prefer proposed standards that promote the use of judgment to allow for the economic substance of a transaction to be reflected (W-Z 1986; Zeff, 2003; Folsom et al 2013). For the audit risk effect, I hypothesize that the negative language (used as proxy for the level of support for a proposed standard) and the uncertainty language (used as a proxy for audit risk/litigation risk concerns in a proposed standard) are associated to the rules-based versus principles-based characteristics of a proposed standard. Finally, for the "make-work" effect, I hypothesize that the Big-4 accounting firms are more supportive (i.e. use less negative language) for proposed standards that increase their audit effort and ultimately their audit fees. However, I hypothesize that the Big-4 accounting firms express more uncertainty when there is an increase in the audit effort required by the proposed standard. The Big-4 may need additional clarification on

substantive changes required by the proposed standard in situations where there will be incremental audit work.

I measure the negative and uncertainty language in the comment letters of the Big-4 accounting firms using the Loughran and McDonald sentiment dictionaries. Given the lack of results using the litigious sentiment dictionary in Chapter 3, I exclude this risk-related proxy from this chapter. To measure client preference, I measure the negative and uncertainty language used by each Big-4's clients in their clients letters using the same dictionaries. For the audit risk motivation, I modify Mergenthaler's (2009) RBC score to identify rules-based attributes in each of the Exposure Drafts in my sample. Finally, I assess each of the Exposure Drafts to evaluate whether it introduces a complicated accounting method or an extensive disclosure that is likely to increase the audit effort and consequently increase the audit fees.

Using a multiple regression analysis, I find, as expected, that there is a positive relationship that is statistically significant between the level of support expressed for a proposed standard between the Big-4 accounting firms and its client. However, I find a positive relationship that is statistically significant between the level of uncertainty of the Big-4 and their clients. This is opposite of what is expected; however, it provides further evidence that the Big-4 may lobby on behalf of their clients' preferences even in cases where proposed standards are more principles-based.

For the audit risk hypothesis, I find consistent results with Chapter 3. I find evidence that suggests that the Big-4 accounting firms become less negative (more

supportive) for standards that are rules-based. However, the uncertainty language increases as standards become more rules-based, which is the opposite as predicted (that accounting firms prefer well-specified rules that reduce audit and litigation risk). This result combined with result from the client preference effect suggests that accounting firms' may lobby on behalf of their clients when it comes to reducing uncertainty in proposed standards that are more principles-based.

Finally, for the "make-work" hypothesis, I do not find a significant result that the Big-4 support (as measured by negative language) proposed standards that increase their incremental audit effort. However, I find that the uncertainty language increases and is statistically significant, which indicates that the "make-work" effect provokes the Big-4 accounting firms to express their uncertainty as they may want to clarify what is required for the proposed standard that is ultimately subject to their audit procedures.

Similar to Chapter 3, I contribute to the existing literatures in several ways. First, a majority of the research was performed in the 1980s-1990s and is case studies that focus on one or few standards. My research provides an updated analysis on the comment letters submitted by the Big-4 firms over a period of an extensive period of time (from 2002 to 2015). Second, prior literature focuses on a simplified use of the FASB's due process documents (i.e. Exposure Drafts and Final Standards) and comment letter documents, which have primarily been manually coded. I use textual analysis and machine-processing to analyze a large volume of data across sixty-one proposed ASUs and SFASs as compared to a limited number of EDs in a case study. To my knowledge, this study is one of the first to use textual analysis to assess the extent (measured by

sentiment dictionaries and word counts) of the Big-4's motivations for lobbying in the FASB's standard-setting process. Third, there is also limited research on the notion of audit risk and the impact that the perceived audit risk has on the lobbying position of the audit firm (i.e. Meier et al 1993). In my research, I identify a proxy for audit risk by assessing the rules versus principles-based characteristics of a proposed standard using a modified RBC score (Mergenthaler 2009). I analyze whether the extent of the Big- 4's lobbying efforts are motivated by these characteristics. Finally, I further extend my research in Chapter 3 and include the client preference effect and "make-work" effect of proposed standards to analyze the audit wealth motivation for the Big-4 accounting firms.

The remainder of this chapter proceeds as follows. Section 4.2 includes the development of my hypotheses. In Section 4.3, I provide a brief summary of the data used and the research methodology. In Section 4.4, I present the results. Finally, in Section 4.5, I provide the conclusion of this chapter.

4.2 Background and Hypothesis Development

4.2.1 Background on Accounting Firms' Motivation for Lobbying

I extend my research in Chapter 3 to further evaluate two explanations for audit firm lobbying: to achieve their own self-interest (to increase audit wealth and/or reduce audit risk) and to lobby on behalf of their clients (to increase/maintain audit wealth). The demand for auditing exists because auditors act as an agent between management and stockholders/board members. However, in a large company, ownership is often spread among many shareholders. Therefore, the power to hire and fire an auditor is delegated

to management. As such, management has the opportunity to influence auditor lobbying positions (Meier et al 1993). Prior research focuses on the position of the audit firm's client and the impact that a proposed standard could have on the audit firm's wealth. One of the initial contributors to this topic includes the research of W-Z (1982), who develop a model to measure the impact of client preference and auditor wealth. W-Z (1982) evaluate several new accounting standards and assess the relationship between the audit firm and their respective client's comment letters. Their model focuses on several aspects of auditor wealth: client preference, the monitoring effect, the income effect, and the "make-work" effect. W-Z (1992) use these components to measure the effect on the auditor's lobbying position of the accounting standard (the dependent variable).

The first component is client preference, which is expected to impact the lobbying position of the auditor because it is ultimately the client that has the power to fire and hire. W-Z (1982) find a positive association with respect to the audit firm's position and their client's position. The second component is the monitoring effect. The monitoring effect is related to the client-agency relationship and the auditor's role in the agency relationship as the contractor. If the accounting firm believes that the proposed standard would reduce the demand for their contract monitoring role, the audit firm is be expected to oppose standards that restrict the accounting procedures that are available to be and the usefulness of accounting numbers. W-Z (1982) find that contract monitoring role has a negative association between the audit firm's position and the decrease in contract monitoring, which ultimate decrease the auditor's wealth. The third component is the income effect, which considers the impact the proposed standard has on the reported

income and the compensation of management. Managers are more likely to support standards that increase the reported income and ultimately their compensation given the favorable impact to the reported results. Accounting firms most likely follow their client preference with the assumption that the increase in firm value will ultimately benefit the audit firm by increasing audit fees. W-Z (1982) find a positive association between the audit firm's position and the impact of the proposed standard on reported earnings. The final component is the "make-work" effect, which considers the standard's effect on the amount of mandatory audit services that clients must purchase. If the proposed accounting standard requires for a significant change in accounting method or introduces a brand new accounting method, then the auditor is likely to incur incremental costs to perform procedures regarding the client's implementation of the new accounting method. Proposed standards may also require for an increase in disclosure, which may result in incremental costs to audit the information in the disclosure. W-Z (1982) find a positive association between the accounting firm's position and the demand for additional audit services required by the proposed standards.

Taking the W-Z (1982) model, Meier et al (1993) add the component of audit risk as another factor that influences the accounting firm's lobbying position. Meier et al (1993) evaluate this component in a case study on accounting standards that specifically impacted the Banking and Savings & Loan industry. They hypothesize that if a proposed standard increased the audit firm's risk there would be a negative association to the accounting firm's lobbying position. This hypothesis is based on the notion that an audit firm's audit risk may be greater than the potential incremental audit fees that could

be generated from the proposed standard. As a result, an accounting firm may likely not want to take on the additional risk if this cost is greater than the potential incremental audit fees to be received. Meier et al (1993) measure audit risk using a dummy variable that coded standards that provided additional disclosure as lowering audit risk (coded "0"), which accounting firms would likely support. Proposed standards that required new or additional audit procedures (coded "1") are expected to increase audit risk and likely result in opposition to the proposed standard. Based on the modification to the W-Z (1982) model, Meier et al (1993) find evidence that indicates audit risk is a significant component of the accounting firm lobbying position. However, their results are limited to the Banking and Savings & Loan industry and the subset of standards included in their study.

Given the prior literature, my research further evaluates the component of audit risk and its impact on the audit firm's lobbying position standard position. Accounting firms are in the business to provide quality client service; however, the auditor must also minimize and reduce their own audit risk. Given this, accounting firms may prefer well-specified rules to minimize the judgment (for both management and auditors) in order to reduce audit risk (Miller and Redding 1986, Buckmaster 1988). The intuition of my research is that auditors lobby for standards that are rules-based in order to limit or reduce audit risk in order to ultimately mitigate litigation risk.

As discussed in Chapter 3, Donnelson, McInnis, and Mergenthaler (2012) evaluate the rules-based versus principles-based characteristics of the proposed standards and their implication on litigation claims against an accounting firm. To do this,

Donnelson, McInnis, and Mergenthaler (2012) develop two competing theories: the "protection theory" and the "roadmap theory." The overall premise of the protection theory is that rules-based standards decrease the likelihood of lawsuits and an unfavorable outcome in a lawsuit. Protection theory is based on the notion that rules-based standards provide a safe harbor when audit firms do not admit to an accounting misstatement. If there is a known misstatement, under rules-based standards, an accounting firm can argue the misstatement was an unintentional mistake caused by the complexities of rules-based standards. Principles-based standards allow plaintiffs to question the judgment made by auditors (Donnelson, McInnis, and Mergenthaler 2012).

On the contrary, the competing roadmap theory suggests that rules-based standard increase the likelihood of a lawsuit and an unfavorable outcome in litigation. The roadmap theory postulates that rules-based standards provide a direct roadmap to the misapplication of the standards and thus plaintiffs have a more compelling litigation claim in misstatement cases related to rules-based standards. These two theories are tested using two groups of restatement cases: restatements resulting in no litigation versus restatements that resulted in litigation. Their results indicated that violations of rules-based standards are less likely to result in a lawsuit filing, thus supporting the protection theory (Donnelson, McInnis, and Mergenthaler 2012).

Based on their results that rules-based standards alleviate the litigation risk, my research assumes that the audit risk of the accounting firm is lowered when rules-based standards are implemented and adopted. In Chapter 3, I test the intuition that audit firms support standards that are more rules-based as opposed to principle-based standards. I

measure support using the negative language contained in the Big-4 accounting firm's comment letters as a proxy. Using Loughran and McDonald negative language dictionary, I find that there is a significant difference in the negative language that is used in the Big-4 accounting firm's comment letters. I find evidence to suggest that as proposed standards become more rules-based the negative language in the Big-4's comment letter decreases. This indicates that the Big-4 tend to be less negative towards proposed standards that are more rules-based. To measure the Big-4 accounting firm's concern for audit/litigation risk, I also test (using Loughran and McDonald uncertainty dictionary) whether the Big 4 accounting firms express less uncertainty when proposed standards are more rules-based. However, I find evidence that the uncertainty language increases as proposed standards become more rules-based. This contradicts my hypothesis that auditors prefer rules-based standards as they may mitigate audit/litigation risk.

There are several potential explanations for the increasing uncertainty language in comment letters associated to proposed standards that are more-rules base. First, in addition to mitigating audit/litigation risk, another motivation for accounting firms to lobby is it increase or maintains audit wealth. Managers may prefer more principles-based standards given the flexibility and judgment that is the spirit of principles-based standards (W-Z 1986; Zeff, 2003; Folsom et al 2013). Accounting firms may lobby on behalf of their client because it is ultimately the client that has the power to fire and hire. In addition, rules-based standards may be viewed as more strict (given the bright-lines and detailed implementation guidance). The inflexibility of the rules-based standard put

auditors at greater risk for client conflict over the accounting treatment, thus, jeopardizing the auditor-client relationship. To address these varying results in Chapter 3, I extend my research to evaluate the Big-4 accounting firms' other motivations for lobbying: the client preference and "make-work" effect.

4.2.2 Hypothesis Development

Using the motivations identified by W-Z (1982) for client preference, I hypothesize that negative and uncertainty language in the comment letters is associated to each Big-4 accounting firm's clients' position on the proposed standard. Managers influence the audit committee in their decision to fire, hire, and maintain an auditor. Audit firms are in the business to provide quality client service, which includes maintaining a favorable auditor-client relationship. Therefore, given this relationship between the auditor and their clients, *H3a* indicates that the Big-4 accounting firms are likely to lobby on behalf of their clients. The Big-4 accounting firms' negative language is expected to increase with their clients' negative language, which is used to measure the level of support. This association is representative of the Big-4 lobbying for their clients' preference for a proposed standard. Conversely, as the Big-4 accounting firms' uncertainty language increases, I expect the clients' uncertainty language to decrease (*H3b*). This conjecture is based on the notion that auditors favor well-specified rules to limit the judgment (for both management and auditors), which reduces audit risk (Miller and Redding 1986, Buckmaster 1988). Managers, on the other, prefer flexibility and the ability to use their judgment to reflect the economic substance of the transaction and may express less uncertainty for proposed standards that are more principles-based (i.e.

RBC_EDscore = 0 is the most principles-based). As such, I expect an inverse relationship between the uncertainty language used by Big 4 and the uncertainty language used by their clients in the comment letters. Given the above, I hypothesize:

- *H3a*: The negative language in the Big-4 accounting firms' comment letters on the proposed standard are positively associated to their clients' negative language in their comment letters on the proposed standard.

- *H3b*: The uncertainty-related language in the Big-4's comment letters on the proposed standard are negatively associated to their clients' uncertainty-related language in their comment letters on the proposed standard.

Next, for the audit risk motivation to lobby (Meier et al 1993), I develop two hypotheses consistent with the hypotheses included in Chapter 3. I use the following two main premises to develop the audit risk hypotheses: (1) auditor's prefer well-specified rules to minimize the judgment (for both management and auditors) in order to reduce audit risk (Miller and Redding 1986, Buckmaster 1988) and (2) restatements are less likely to result in a lawsuit filing for more rules-based standards, which indicates that audit risk (and ultimately litigation risk), are reduced for more rules-based standards (i.e. *RBC_EDscore* = 4 is most rules-based) as evidenced in Donelson, McInnis, and Mergenthaler (2012). I hypothesize that the negative language (used as proxy for support) and uncertainty language (used as a proxy for audit risk/litigation risk) are associated to how rules-based versus principles-based a proposed standard is:

- *H3c*: The more rules- based a proposed standard (Exposure Draft) is, the less negative the language in the Big 4's comment letters.

- *H3d*: The more rules- based a proposed standard (Exposure Draft) is, the less uncertainty-related the tone of language in the Big-4's comment letters.

Finally, the "make-work" hypothesis suggests that accounting firms are likely to support standards that increases the procedures required to be performed, which ultimately increase the audit wealth of accounting firms (W-Z 1982). As noted above, certain proposed accounting standards require complex accounting methods or extensive disclosures that are subject to audit. Incremental audit costs are thus required and additional audit fees are charged (Firth 1985). I hypothesize that the Big-4 accounting firms use less negative language (i.e. more supportive) in their comment letters for proposed standards that increase their audit effort and, ultimately, audit fees. This is driven by the potential to increase to the accounting firms' wealth. I also hypothesize that the Big-4 accounting firms express more uncertainty when there is an increase in the audit effort required by the proposed standard. The Big-4 accounting firms may need additional clarification on substantive changes required by the proposed standard in situations where there will be incremental audit work. This results in a positive association between the uncertainty language and the potential for incremental audit work. Given these assumptions, I hypothesize:

- *H3e:* The negative language in the Big-4's comment letters on the proposed standard is negatively associated to the potential incremental audit work required by the proposed standard.
- *H3f:* The uncertainty-related language in the Big-4's comment letters on the proposed standard is positively associated to the potential incremental audit work required by the proposed standard.

In the next section, I provide a description of the research methodology employed to test the hypotheses presented.

4.3 Research Methodology

To evaluate the motivations of client preference and audit risk, I use textual analysis to extract the tone and word count for the SEC-registrants, or public companies, that have submitted comment letters for each of the SFASs and ASUs in my sample. As noted in Chapter 2, I download each comment letter submitted by the various constituents for each Exposure Draft in my sample. Each constituent's comment letter is available in PDF format, which can be converted into machine-readable format for text analysis. I use an internet "add-on" that allows me to download the comment letters, in bulk, for each Exposure Draft. This allows me to simultaneously download all the PDF files found on a page.

As discussed in Chapter 2.2, I extract the comment letters specific to the Big 4 and the public companies from the sample population to extract the tone measures. I

convert the PDF files to ".txt" files to enable the content to be read and analyzed systematically. I scan each ".txt" file to ensure there are no large errors that may have occurred in conversion. Any unreadable files are eliminated from the sample. The result is 247 and 1,088 comment letters submitted by the Big-4 accounting firms and the public companies, respectively, for the proposed standards issued during the time period January 2002 through September 2015. See Table 32 for a reconciliation of the public companies included within my sample.

To determine the tone, I obtain a dictionary of "negative," "uncertain," and "litigious" words determined by Loughran and McDonald (2011). In their research, Loughran and McDonald (2011) develop various dictionaries of words to assess the tone of documents representing a financial context. As discussed in Chapter 3, given the uniqueness of this setting, I remove certain words from their dictionaries that may bias the results. I remove the following words from the uncertainty dictionary that are used as part of the codification system and naming convention for the FASB's accounting standards: exposure, exposures, intangibles, intangible, and unhedged.

I use adjusted sentiment dictionaries to extract a count of words included in the public companies comment letters that are included as part of the sentiment dictionaries. I compile a Python code to search the ".txt" files for the words in each of the dictionaries. The Python code automatically calculates the total occurrences of each word for each sentiment (in this chapter, negative and uncertain sentiments). I also compose a python code to automatically generate the total word count for each of the comment letters within my sample. I calculate a percentage of the each sentiment measure within each

comment letter submission made by the public companies in my sample using the total occurrences for each sentiment dictionary divided by the total word count. For each measure, I use a ratio to control for the varying lengths of the comment letters submitted by the public companies. See Chapter 3 for a detailed description of the determination of the tone measures for the Big-4 (*percneg_tone, percuncertain_tone, wordcount*). The method used to extract tone for the Big-4 and public companies is identical.

Next, using Audit Analytics, I identify each public company's auditor for the most recent audited financial statements when compared to the year the Exposure Draft was issued for public comment. For example, ASU 2014-08 was issued for public comment in 2013. Therefore, I identify the Big-4 accounting firm that performed the audit on the most recent audited financial statements: 2012. If there are any public companies that are audited by a non-Big 4 accounting firm, I remove these from my sample. After I identify the each public company's auditor, I find the mean tone for each of the Big-4's public clients by SFASs and ASUs (*mean_percnegtone, mean_percuncertone*). I use these mean tone measures to assess the client preference.

As detailed in Chapter 2, I leverage the methodology used by Mergenthaler (2009) to assign a rules-based continuum (RBC) score for each of the EDs in my sample (the *RBC_EDscore*). In his research, Mergenthaler uses the four criteria for rules-based standards are (1) bright-line thresholds, (2) scope exceptions, (3) high-level of detail, and (4) large amounts of implementation guidance (SEC 2003) to determine if a final standard is more rules-based versus principles-based. Using his methodology, I generate a score to determine if the Exposure Draft is more (less) rules-based. The *RBC_EDscore*

is the sum of each of the rules-based criteria. A score of zero indicates that the ED does not have any rules-based characteristics and is "most" principles-based. A score of "4" indicates that the ED has all of the rules-based characteristics and is "most" rules-based.

The "make-work" variable, *make_work*, represents the incremental audit effort that is required as a result of the proposed standard. Meier et al (1993) also describe the "make-work" concept as the "transfer of wealth from the client to the auditor resulting from proposed standards that require complicated accounting procedures and increase audit work." I evaluate each proposed standard and determine if there is a substantial change to the accounting guidance that mandates complicated accounting procedures or a complex disclosure. See Figure 7 for a list of the standards deemed to create incremental audit effort.

I use multiple regression analysis to evaluate the Big-4 accounting firms' motivations for lobbying to predict the negative and uncertain language in their comment. To test my hypotheses, I modified the W-Z (1982) and Meier at al. (1993) models as follows:

Equation 1:

$$percneg\_tone_{is} = \alpha + \beta_1\, mean\_percnegtone_{js} + \beta_2\, RBC\_EDscore_{is} + \beta_3\, make\_work_{is}$$

Equation 2:

$$percuncertain\_tone_{is} = \alpha + \beta_1 mean\_percuncerttone_{js} + \beta_2 RBC\_EDscore_{is} + \beta_3\, make\_work_{is}$$

percneg_tone$_{is}$	the negative language divided by the total words in the comment letter of Big 4 accounting firm *i* on standard *s*
percuncertain_tone$_{is}$	the uncertain language divided by the total words in the comment letter of Big 4 accounting firm *i* on standard *s*
mean_percnegtone$_{js}$	the mean percentage of negative language used by Big-4 accounting firm's clients *j* on standard *s*
mean_percuncerttone$_{js}$	the mean percentage of negative language used by Big-4 accounting firm's clients *j* on standard *s*
RBC_EDscore$_{is}$	the rules-based continuum score (0-4) for each standard *s* commented on by Big-4 accounting firm *i*. The audit risk is expected to decline as the standard becomes more rules-based
make_work$_{is}$	the measure of the incremental audit work to be incurred by the Big-4 accounting firm *i* as a result of standard *s*

I use Equation 1 to test hypotheses *H3a, H3c* and *H3e* and Equation 2 to test hypotheses *H3b, H3d,* and *H3f.*

4.4 Results

I use multiple regression analysis to estimate the parameters for the model specified in the previous section. I pool the results of each Big-4 firm's clients and generate a mean score for their tone measures. The model estimation was based on a sample of 240 comment letters submitted by the Big-4 accounting firms. This differs then the numbers of comment letters used in Chapter 3 as the public companies comment letter were not readable for SFAS 159, *Fair Value Option*. As such, the respective Big-4 comment letters were removed from the sample. In addition, there were two comment letters submitted for ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*

for three of the Big-4 firms. These letters were combined into one measure for purposes of this analysis. In Figure 5 and Figure 6, I show the top 20 words from Loughran & McDonald negative sentiment dictionary (*percneg_tone*) and the adjusted uncertainty sentiment dictionary (*percuncertain_tone*) for both the public companies and the Big-4 accounting firms.

4.4.1 Test of Client Preference

The client preference hypothesis suggests that the Big-4 accounting firms lobby on behalf of their clients. I test the relationship between the negative language used by the Big-4 accounting firms and the negative language used by the clients and expect a positive relationship. Table 34 shows that the coefficient of client preference variable is positive and statistically significant at $p < 0.001$. The client preference variable indicates that there is a positive relationship between the level of support expressed for a proposed standard between the Big-4 accounting firms and its client as hypothesized in *H3a*.

In addition, I test the relationship between the uncertainty language used by the Big-4 accounting firms and the uncertainty language used by their clients and expect a negative relationship. However, Table 35 shows that the coefficient of the client preference variable in the uncertain language model is positive and statistically significant. The client preference variable in this model indicates that there is a positive relationship between the level of uncertainty included in the Big-4 accounting firms' and their clients' comment letters for a proposed standard. This result is the opposite as hypothesized in *H3b*. My conjecture assumed that the Big-4 accounting firms are

concerned with audit risk and prefer well-specified rules. I also expect that preparers would prefer standards that allow for judgment and flexibility in accounting. However, the results suggest that the Big-4 accounting firms are lobbying similar concerns surrounding the uncertainty in the proposed statements as expressed by their clients, which is opposite as predicted in *H3b*. I find evidence in Chapter 3 and in the next section that suggests that this assumption regarding the Big-4's uncertainty language may not be associated to the level of rules-based characteristics (used as a proxy for audit risk) of the proposed standard and may, in fact, be lobbying on behalf of their clients.

4.4.2 Test of Audit Risk

The audit risk hypotheses are the same hypotheses as noted Chapter 3. I test the audit risk hypotheses as a motivation for lobbying using the negative language as a dependent variable. In Table 34, I find that the language used by the Big-4 is decreasingly negative as the *RBC_EDscore* increases. This suggests that the Big-4 accounting firms become less negative (more supportive) for standards that are rules-based as predicted in *H3c*. I find a significant and negative coefficient for *RBC_EDscore* of "2" ($p = 0.095$), "3" ($p = 0.034$), and "4" ($p = 0.010$). These results are consistent with the results of the Welch's ANOVA performed in Chapter 3, which suggests, in some instances, that the Big-4 may prefer rules-based EDs versus principles-based ED.

I also test the audit risk hypothesis using the uncertainty language as the dependent variable. There are varying results for the audit risk variable by *RBC_EDscore* as presented in Table 35. I find that there is a positive coefficient and

significant result for *RBC_EDscore* of "1" (p = 0.007) and "3" (p = 0.007). This is opposite as hypothesized in *H3d* as I expect that the uncertainty language will be decreasing as the proposed standards become more rules-based as accounting firms prefer well-specified rules that reduce audit and litigation risk. These results are consistent with the results of the Welch's ANOVA performed in Chapter 3. In the previous chapter, I find that the uncertainty mean tone is increasing as *RBC_EDscore* increases. This indicates that the Big-4 exhibit higher uncertainty when the proposed standard is more rules-based as compared to principles-based.

4.4.3 Test of "Make-Work" Effect

The "make-work" hypothesis suggests that accounting firms are likely to support standards that increase the procedures required to be performed and, ultimately, increasing their audit wealth (W-Z 1982). I test the relationship between the negative language used by the Big 4 accounting firms and the potential increase in audit work as a result of the proposed standard. Table 34 shows that the coefficient for the "make-work" variable increases as the negative tone increases; however, this result is not significant p = 0.257. This suggests that the "make-work" effect does not motivate the Big-4 accounting firms' support or opposition for the proposed standard, which is not as predicted in *H3e*.

Next, I test the relationship between the uncertainty language used by the Big-4 and the potential incremental audit work required by the proposed standard. I find evidence that suggests that the uncertainty language increases when there are potential

incremental audit fees at stake. Table 35 shows that the coefficient for the "make-work" variable increases as the uncertainty tone increase and is significant (p = 0.043). This indicates that the "make-work" effect provokes the Big 4 accounting firms to express uncertainty for the proposed standard, which is as predicted in *H3f*.

4.5 Conclusion

The purpose of this chapter is to extend the research of Chapter 3 by further analyzing the Big-4 accounting firms' motivation for lobbying. In addition to the audit risk effect as a motivation to lobby, I analyze the client preference effects and the "make-work" effect as motivations for the Big 4 accounting firms lobbying efforts. Overall, I find that the Big-4 are motivated to lobby not only to reduce their audit risk but to also lobby on behalf of their clients. This is a consistent result with the existing literature. However, to my knowledge, this is the first study that analyzes a large sample of proposed accounting standards to generate these results.

Specifically, I find that there is a positive relationship that is statistically significant between the negative language (a proxy for the level of support) expressed for a proposed standard between the Big 4 accounting firms and its client. However, I also find a positive relationship that is statistically significant between the level of uncertainty of the Big-4 and their clients. This is opposite as expected; however, provides further evidence that the Big-4 may lobby on behalf of their clients' preferences even in cases where proposed standards are more principles based. For the audit risk hypothesis, I find consistent results as compared to Chapter 3. My evidence suggests that the Big-4

accounting firms become less negative (more supportive) for standards that are rules-based. However, the uncertainty language increases as standards become more rules-based. This is opposite as predicted: that accounting firms prefer well-specified rules that reduce audit and litigation risk. This result combined with result from the client preference effect suggests that accounting firms' may lobby on behalf of their clients preference for more principles-based standards as opposed to reducing uncertainty in proposed standards that are more principles-based. Finally, for the "make-work" hypothesis, I do not find a significant result that the Big-4 support (as measured by negative tone) proposed standards that increase their incremental audit effort, which indicates that the Big-4 accounting firms' support or opposition for the proposed standard. However, I do find that the uncertainty language increases and is statistically significant, which indicates that the "make-work" effect provokes the Big-4 accounting firms to express their uncertainty in order to clarify what is required for the proposed standard that is ultimately subject to their audit procedures.

In Chapter 5 of this dissertation, I evaluate the sentiment in the Big-4's comment letters to determine if the Big-4 firms influence the FASB's standard-setting process.

5. The Big 4's Influence on the Accounting Standard-Setting Process

5.1 Introduction

As discussed in Chapter 1, the FASB's primary mission is to create and enhance the accounting and reporting standards for financial statements, specifically to provide information to users that are useful in making investment and other decisions (FASB 2013). In addition to the users of financial statements, the FASB recognizes that its other constituents' are subject to the costs and benefits of providing financial reporting information. The FASB acknowledges that it is imperative to demonstrate that it has considered its constituents' comment letters when reaching its conclusions on final accounting standards. Through its due process, the FASB encourages public participation and contends that its deliberations on constituents' feedback are objective. However, as noted in Chapter 2, there is a decline in the absolute and relative participation in the comment letter process. Lev and Rajgopal (2016) propose that financial reporting has become a compliance exercise as a result of the vast number of accounting standards that exist. If the constituents subscribe to Lev and Rajgopal's (2016) opinion, participation in the comment letter process may continue to decline and impact the spirit of due process promoted by the FASB. Without participation, there may be little, if any, opportunity to influence the FASB in the standard-setting process. Given the skepticism in the current environment, this leads to the broader question: is there evidence that the lobbying efforts by constituents' influence the FASB in its accounting standard-setting process?

Early research focuses on the influence and success of the various constituents' lobbying efforts. The results in this area are varied. As discussed in Chapter 1, Haring (1979) finds that the FASB and accounting firms' preferences for an accounting standard are positively associated, suggesting that the FASB may be influenced by accounting firms. However, he finds an inverse relationship between the FASB and preparers (managers), which implies that the preparers negatively influence the FASB's final standard. However, Brown (1981) fails to find evidence to suggest there is any association between changes made by the FASB and any of its constituents. Brown's (1981) results ultimately suggest that lobbying efforts of the stakeholders are not influential in the standard setting process. Buckmaster et al (1994) further evaluate whether the FASB's constituents are influential in the standard-setting process by separating the standards in his samples into standardization of an accounting topic, disclosure related matters, and technical amendments. Their findings also indicate that there is no measurable influence on the FASB by accounting firms or any other constituents.

With varying results on the influence of constituents in the standard-setting process, additional research is warranted. As previously noted, some of the limitations in this setting are that a majority of the research was performed in the 1980s/1990s; recent research has been scarce. Research in this area is generally case studies of one or a small number of ED for accounting standards. This is largely due to the manually intensive process associated to content analysis. Early research utilizes a simplified use of the available due process and comment letter documents, which are primarily manually coded. With automated tools available, more in-depth analysis of the text in comment

letters can be processed and investigated to evaluate influence by constituents in the FASB's process.

In this chapter, I use textual analysis to facilitate a broader analysis of whether the Big-4 accounting firms influence the FASB's standard-setting process for SFASs and ASUs issued during the period 2002-2015. Specifically, I pose the following question: do the Big-4 accounting firms' lobbying efforts influence whether the FASB's Final Standard is more principles-based or rules-based? My research focuses the extent of the Big-4's lobbying efforts and the influence their feedback has on the FASB's final standards. Based on the premise that accounting firms prefer well-specified rules to mitigate audit risk, I examine whether the Big-4's tone and comment letter length are associated to how much more rules-based a proposed standard becomes once it is finalized.

I develop a measure based on Mergenthaler's (2009) RBC score to identify how much more (or less) rules-based a Final Standard is compared to an Exposure Draft. I measure changes in the rules-based characteristics of the Exposure Draft compared to the Final Standard and develop a change in RBC score. Then, I use Loughran and McDonald's (2011) dictionaries for negative, litigious, and uncertainty to measures the tone of the comment letters. Negative tone is used as a proxy for support/opposition for a proposed standard. Uncertainty and litigious tones are used to express concerns with audit risk/litigation risk. I also use the length of the Big-4's comment letters to measure the extent of the Big-4's lobbying efforts. I test whether there is an association between the change in RBC score and the various measures of extent as a means to evaluate

influence by the Big-4 in the final outcome of the rules-based attributes of the final standards issued by the FASB.

I find that as the uncertainty language expressed by the Big-4 increases, the changes in rules-based attributes (that are ultimately reflected by the FASB in the Final Standard) also increases. This indicates that the Big-4's uncertainty tone may influence the FASB's changes in the rules-based attributes from the Exposure Draft to the Final Standard. I also find the length of the comment letters increase, the changes in rules-based attributes increase. This suggests that the Big-4 may influence the FASB's decision to include more rules-based attributes in the Final Standards (as compared to the initial proposed standard) by providing more extensive feedback. However, the level of opposition for a standard, as measured by negative tone, and risk of litigation, as measured by litigious tone, may not influence whether the FASB's includes additional rules-based criteria within the Final Standard.

Given the varying results in early research on whether the FASB's constituents influence the standard-setting process, I extend this area of research by using textual analysis to test whether the Big-4 accounting firms may influence the FASB's final standards. Textual analysis and machine-processing allow a larger volume of data to be analyzed (247 comment letters for 62 ASUs and SFASs). Finally, there is also limited research on the notion of audit risk and the impact that the perceived audit risk has on the lobbying position of the audit firm (i.e. Meier et al 1993). In my research, I identify a proxy for audit risk by assessing the changes in the rules versus principles-based characteristics of proposed accounting standards. I find evidence indicating that the

content (specifically, the uncertainty language and the length) of the Big-4's comment letters may influence the FASB in the rules-based characteristics of the Final Standard issued.

The remainder of this chapter proceeds as follows. Section 5.2 includes the development of my hypotheses. In Section 5.3, I provide a brief summary of the data used and the research methodology. In Section 5.4, I present the results. Finally in Section 5.5, I provide the conclusion of this chapter.

5.2 Hypothesis Development

Accounting firms, similar to any business, are interested in being profitable and increasing or maintaining their overall audit wealth. They strive to provide quality client service to ensure retention of its existing clientele and to attract new clientele. However, it is also imperative that accounting firms focus on minimizing and reducing their own audit risk and litigation risk. Therefore, accounting firms may prefer well-specified rules that minimize judgment (for both management and auditors) and ultimately reducing their audit risk (Miller and Redding 1986, Buckmaster 1988). Based on this premise, my research evaluates whether the Big-4 accounting firms influence the accounting-standard setting process, specifically, whether the extent of their comment letters (as measured by sentiment and total words) is associated to changes in the rules-based characteristics from Exposure Draft to Final Standard. I develop a measure that assesses the changes in the rules-based characteristics (*change_RBCscore*) from Exposure Draft to Final Standard. The *change_RBCscore* is used as a proxy for the change in audit risk. The *change_RBCscore* is calculated based on the sum of the changes in the four attributes

(bright-lines, scope exceptions, high level of detail, and implementation guidance) of rules-based standards. The *change_RBCscore* ranges from -4 (reduction of rules-based characteristics resulting in a more principles-based Final Standard) to 4 (increase in rules-based characteristics resulting in a more rules-based Final Standard). A score of a zero indicates the Final Standard did not become more or less rules-based. Section 5.3 provides the detailed procedures used to determine the *change_RBCscore*.

As discussed in Chapter 2 and 3, Mergenthaler (2009) uses the components of rules-based standards identified by the SEC in there 2003 study and develops a RBC. In his research, Mergenthaler uses the four criteria for rules-based standards are (1) bright-line thresholds, (2) scope exceptions, (3) high-level of detail, and (4) large amounts of implementation guidance (SEC 2003) to determine if a final standard is more rules-based versus principles-based. In subsequent research, Donelson, McInnis, and Mergenthaler (2012) further test the impact that rules-based versus principles-based characteristics have on an accounting firms' potential litigation risk in restatement cases. They develop two competing theories: the "protection theory" and the "roadmap theory." These theories highlight how accounting firms may be predisposed to litigation in restatements resulting from either rules-based or principles-based standards. The overall premise of the "protection theory" is that rules-based standards decrease the likelihood of lawsuits and an unfavorable outcome in a lawsuit in restatement cases. Principles-based standards allow plaintiffs to question the judgment made by auditors and to find potential fault in the judgment made (Donelson, McInnis, and Mergenthaler 2012). Their competing "roadmap theory" indicates that rules-based standard increase the likelihood of a lawsuit

and an unfavorable outcome in litigation. Their theory indicates that rules-based standards provide a direct roadmap to the misapplication of the standards and thus plaintiffs have a more compelling litigation claim (Donelson, McInnis, and Mergenthaler 2012). However, principles-based standards provide flexibility and allow for explanations of the judgment and decision made to arrive the accounting applied by an accounting firm's client. Their findings suggest that violations of rules-based standards are less likely to result in a lawsuit filing, thus supporting the protection theory (Donelson, McInnis, and Mergenthaler 2012).

Given the results of Donelson, McInnis, and Mergenthaler 2012 and that auditors prefer well-specified to minimize judgment (to reduce audit risk) (Miller and Redding 1986, Buckmaster 1988), I examine whether the sentiment and length of the Big 4's comment letters influence the changes in the rules-based characteristics when comparing the Exposure Draft to the Final Standard issued by the FASB. As a proxy for audit risk, an increase in rules-based characteristics would represent a decrease in audit risk based on the conjecture that audit firms prefer rules-based standards.

First, I hypothesize that the length of the Big-4's comment letters are associated to more changes made by the FASB to include rules-based characteristics in the Final Standard. More extensive submissions are likely to contain commentary requesting clarification or suggesting changes for the FASB to consider when finalizing the proposed standard. Given this, I hypothesize:

- *H4*: There is a positive association between the changes in the rules-based attributes of the Exposure Draft and Final Standard (*change_RBCscore*) and the length (*wordcount*) of the Big-4 accounting firms' comment letters.

H4 suggests that longer comment letters are indicative of more requests for changes in the FASB's proposed standard. I hypothesize that the longer comment letters are positively associated to an increase in the rules-based attributes given the need for more or clarifying information.

Next, I hypothesize that the various measures of tone (negative, uncertainty, and litigious) in Big-4 accounting firms' comment letters are positively associated to an increase in the rules-based attributes from the Exposure Draft to Final Standard as follows:

- *H5a*: There is a positive association between the changes in the rules-based attributes of the Exposure Draft and Final Standard (*change_RBCscore*) and the negative language (*percneg_tone*) included in the Big-4 accounting firms' comment letters.

- *H5b*: There is a positive association between the changes in the rules-based attributes of the Exposure Draft and Final Standard (*change_RBCscore*) and the

litigious language (*perclitig_tone*) included in the Big-4 accounting firms' comment letters.

- *H5c*: There is a positive association between the changes in the rules-based attributes of the Exposure Draft and Final Standard (*change_RBCscore*) and the uncertainty language (*percuncertain_tone*) included in the Big-4 accounting firms' comment letters.

The negative tone measure of the comment letters is used to proxy support for a proposed standard. Higher negative language included in the comment letter suggests more opposition (less support) for a proposed standard. I hypothesize that an increase in negative tone (or increase in opposition for a proposed standard) is associated to an increase in the rules-based attributes in the Final Standard. In addition, the uncertainty and litigious tones of the comment letters are used as a proxy for concern with audit risk and litigation risk. Given the notion that auditors prefer well-specified rules to mitigate audit risk, an increase in the uncertainty or litigious language included in the comment letters suggests an increase concern for audit risk and litigation risk. I hypothesize that higher uncertainty and litigious language is associated to an increase in the rules-based attributes in the Final Standard. I hypothesize that each of these measures of the Big-4's lobbying efforts are associated to the changes made by the FASB to increase the rules-based attributes in the Final Standard as compared to the Exposure Draft.

I use the tone measures (*percneg_tone*, *perclitig_tone*, and *percuncertain_tone*) and *wordcount (*as described in Chapter 3) as the independent variables. For the dependent variable, I develop the measure *change_RBCscore* (based on Mergenthaler 2009), which is described in Section 5.3 below.

5.3 Research Methodology

My sample consists of 62 Exposure Drafts for SFASs and ASUs, which yields 247 comment letters submitted by the Big 4 during the time period January 2002 through September 2015. As discussed in Chapter 2.2, I extract the comment letters specific to the Big 4 and the public companies from the sample population to extract the tone measures. I convert the PDF files to ".txt" files to enable the content to be read and analyzed systematically.

To determine the tone, I obtain a dictionary of "negative," "uncertain," and "litigious" words determined by Loughran and McDonald (2011). In their research, Loughran and McDonald (2011) develop various dictionaries of words to assess the tone of documents representing a financial context. As discussed in Chapter 3, given the uniqueness of this setting, I remove certain words from their dictionaries that may bias the results. I use adjusted sentiment dictionaries to extract a count of words included in the public companies comment letters that are included as part of the sentiment dictionaries. I compile a Python code to automatically calculate the total occurrences of each word for each sentiment and the total word count for each of the comment letters within my sample. Next, I calculate a percentage of the each sentiment measure within each comment letter submission made by the Big-4 accounting firms in my sample using

the total occurrences for each sentiment dictionary divided by the total word count. For each measure, I use a ratio to control for the varying lengths of the comment letters submitted by the public companies. See Chapter 3 for a detailed description of the determination of the tone measures for the Big-4 (*percneg_tone, percuncertain_tone, perclitig_tone and wordcount*). I use the total word count and tone measures generated in Chapter 3.

Next, I develop the *change_RBCscore* as a means to evaluate the Big 4's influence in the standard-setting process via submission of a comment letter. The *change_RBCscore* measures whether the Final Standard is more (less) rules-based (principles-based) as compared to the Exposure Draft. As a proxy for audit risk, an increase in rules-based characteristics represents a decrease in audit risk based on the conjecture that audit firms prefer rules-based standards.

Similar to the *RBC_EDscore*, I leverage the methodology used by Mergenthaler (2009) and compile a measure of the change in the rules-based characteristics from the proposed standard (Exposure Draft) to the Final Standard. First, I measure the rules-based attributes in each Exposure Draft and Final Standard using modified approach to Mergenthaler's (2009) RBC score (described below). Then, I compare each rules-based attribute to determine how much more (less) rules-based (principles-based) the Final Standard has become to derive a change in RBC score (*change_RBCscore*). The following describes the measurement of the *change_RBCscore*:

1) Bright-line threshold: "a bright-line is a numeric threshold that delineates which of two alternative accounting treatments is appropriate. Bright-lines are

identified using key words: (1) ‘criteri’, (2) ‘condition’, (3) ‘provision’, (4) ‘require’, (5) ‘percent’, and (6) ‘all of the following’ (except when used in terms of a list of disclosure required). Each paragraph surrounding each key word or phrase is read to confirm the presences of a bright-line threshold. Finally, the total number of bright-line thresholds in each standard is recorded” (Mergenthaler 2009). Mergenthaler’s bright-line threshold is a numerical threshold. I also have included non-numeric wording (i.e. “if all the following conditions are met”) for those circumstances that indicate that all of a list of criteria must be met for the application of a specific rule. I calculate the difference in the number of bright-line threshold in the Final Standard as compared to the Exposure Draft. If there is an increase, I score bright line threshold as “1,” if there is no change as “0”, and if there is a decrease as “-1”

2) Scope Exceptions: For scope exceptions, Mergenthaler (2009) “search[es] each standard for the following key words: (1) ‘not subject,’ (2) ‘not consider,’ (3) ‘exclu,’ (4) ‘exempt,’ (5) ‘except,’ (6) ‘scope,’ and (7) ‘does (do) not apply.’ I then read the paragraphs surrounding these words to identify scope and legacy exceptions. I count the number of scope and legacy exceptions in each standard to determine the total number of exceptions in each standard” (Mergenthaler 2009). I calculate the difference in the number of scope exceptions in the Final Standard as compared to the Exposure Draft. If there is an increase, I score the scope exceptions characteristics as “1,” if there is no change as “0”, and if there is a decrease as “-1.”

3) High-level of detail: Mergenthaler (2009) "identif[ies] standards that contain a high level of detail by performing the following procedure: (i) counting the number of words in each standard; (ii) ranking the standards by the total number of words in each standard; and (iii) classifying those standards in the upper detail decile as 'high level of detail' standards. He excludes the 'background information' and the 'basis for conclusions' as these sections do not prescribe how to account for the transaction. However, the results are not changed when I include these sections in the word count." I include the total number of words for the whole standard and do not exclude the background info or basis for conclusions. I calculate the difference in the total words from the ED to the Final Standard and divide by the ED's total word count to come up with a percentage change. Next, I establish quartiles based on the change in the level of detail from the ED to the Final Standard. I score all those standards in the Quartile 4, or the top quartile, (i.e. with the greatest changes in the level of detail or word count) as "1". All other changes are classified as zero.

4) Large amounts of implementation guidance: The evaluation of this characteristic by Mergenthaler is ex-post (since it is of the Final Standard), whereby he identifies guidance that is issued such as EITFs, SOP, FSP, etc. Given that I am evaluating the implementation guidance from the proposed standard (ED) to final standard, I am unable to use the same measure as

Mergenthaler. His measure evaluates the amount of implementation guidance issued subsequent to the final standard. However, I am interested in identifying whether the implementation guidance within the standards increases or decreases from the Exposure Draft to the Final Standard. Therefore, I evaluate the implementation guidance included within the Exposure Draft and the Final Standard. I count the specific examples listed, if there are example tables for disclosure, and if there are any flowcharts/decision trees included within the both the Exposure Draft and the Final standard. I then determine if there is a change in the level of implementation guidance given the count of examples/tables in the ED compared to the Final Standard. If there is an increase, I score the scope exceptions characteristics as "1," if there is no change as "0", and if there is a decrease as "-1."

5) Overall Scoring (*change_RBCscore*): The *change_RBCscore* is calculated based on the sum of the changes in the four attributes (bright-lines, scope exceptions, high level of detail, and implementation guidance) of rules-based standards. The *change_RBCscore* ranges from -4 to 4.

   a) A *change_RBCscore* = 0 indicates no change in the Final Standard's rules-based versus principles-based characteristics from the Exposure Draft to the Final standard

   b) A *change_RBCscore* > 0 indicates the Final Standard contains more rules-based characteristics from Exposure Draft to Final Standard

c) A c*hange_RBCscore* < 0 indicates the Final Standard contains more principles-based from ED to final standard

In Figure 3, I summarize the calculation of the *change_RBCscore*. For my sample, I count the number of bright lines, scope exceptions, and implementation guidance in the Exposure Draft and compare to the count included the Final Standard. For example, I search the Exposure Draft for ASU 2014-08 *Discontinued Operations* using the criteria established and find that there are no scope exceptions in the Exposure Draft. Using the same criteria, I search the Final Standard and identify two scope exceptions. This results an increase in the number of scope exceptions. I score the increase in the scope exception characteristic as "1," which indicates that there is an increase in rules-based characteristics in scope exception characteristic. I do this for each of the other attributes: bright-lines increase from zero to two (score= "1"), there is no change in the quartiles for the level of detail (score= "0") and there is an increase in the tables, examples, and illustrations (implementation guidance) from four to eight (score = "1"). I sum the score for each rules-based attribute and derive the overall *change_RBCscore*, which is "3" for ASU 2014-08. Figure 4 provides an illustration of the calculation of the *change_RBCscore* for ASU 2014-08, *Discontinued Operations*. I compile the *change_RBCscore* for each standard in my sample.

Table 36 provides the number of comment letters for each *change_RBCscore.* Table 37 provides a transition matrix for each *RBC_EDscore* and the *change_RBCscore.* More than half of the comment letters are associated to standards (57.49%) with an

increase in the rules-based attributes from Exposure Draft to Final Standard. As the *RBC_EDscore* increases, the likelihood of increasing the rules-based characteristics in the final standards also increases. Approximately 31.58% of the comment letters in the sample are associated to a proposed standard without any changes in the rules-based attributes from Exposure Draft to Final Standard. Comment letters associated to proposed standards with a decrease in the rules-based attributes consist of 10.83% of the sample; that is, these Exposure Drafts becomes more principles-based. In total, approximately 42.51% of the sample results in zero or negative changes in the rules-based characteristics.

In the next section, I use the dependent variable, *change_RBCscore,* to discern whether the Big-4 potentially influence the changes in the rules-based attribute based on length and tone of the Big-4's comment letters. The measures for length (*wordcount*) and tone (*percneg_tone, percuncertain_tone,* and *perclitig_tone*) are the independent variables. Table 38 provides the descriptive statistics for each of the independent variables by *change_RBCscore*.

5.4 Results

To test whether there is an association between the *change_RBCscore* and the measures of tone and total word count, I use a non-parametric statistical test, the Spearman's rank-order correlation. This statistical test is a measure of the strength and direction of the association between two variables. The Spearman correlation is a measure from -1 to 1. Two variables are highly correlated when the rank of the two variables is similar (i.e. close to -1 or 1) for the observations in the sample. Conversely,

two variables are weakly correlated when the rank of the two variables is dissimilar (i.e. close to 0).

The sign of the Spearman correlation coefficient represents the direction of association the two variables. If the dependent variable (*change_RBCscore)* tends to increase (decrease) when the independent variable (*wordcount, percneg_tone, percuncertain_tone,* and *perclitig_tone*) increases, the Spearman correlation coefficient is positive (negative). For *H4* and *H5a-c*, I hypothesize that there is a positive association between the tone and length of the comment letters and the *change_RBCscore* (tone and length of the comment letters increases as the *change_RBCscore* increases). Table 39 provides the results of the Spearman rank-order correlation test. The results vary for each of the measures: *percneg_tone, percuncertain_tone, perclitig_tone,* and *wordcount*.

For the length of the Big-4's comment letters, I find that there is a statistically significant relationship, at $p < 0.10$, between *wordcount* and the *change_RBCscore.* The Spearman's rank-order correlation assesses the relationship between the length of the comment letter as measures by the total words (*wordcount*) and the changes in the rules-based attributes from Exposure Draft to Final Standard (*change_RBCscore*). The results indicate that there is a positive correlation between the *wordcount* and *change_RBCscore* (Spearman's rho (245) = 0.1188, p= 0.0622). Therefore, we can reject the null hypothesis and accept the *H4*. This results show that the more extensive the Big-4's lobbying efforts (as measured the length of the comment letters) is positively associated to the increase in rules-based attributes that are ultimately reflected in the Final Standard by the FASB. This result suggests that the Big-4's efforts may influence the FASB's

changes in the rules-based attributes from the Exposure Draft to the Final Standard. The more extensive submissions are likely to contain feedback suggesting changes and request for clarity for the FASB to consider upon finalizing the proposed standard.

Next, I evaluate the negative language used by the Big-4 in their comment letters. The Spearman's rank-order correlation for *percneg_tone* assesses the relationship between the negative tone and the changes in the rules-based attributes from Exposure Draft to Final Standard (*change_RBCscore*). The results indicate that there is a weak negative correlation between the *percneg_tone* and *change_RBCscore* (Spearman's rho (245) = -0.0622, p= 0.3307). The relationship between the negative tone and the changes in rules-based attributes is not statistically significant[15]. Therefore, *H5a* cannot be accepted and the null hypothesis cannot be rejected. This suggests that the Big 4's tone support or opposition, as measured by the negative language used in their comment letters, may not influence the changes in the rules-based attributes made by the FASB. The FASB may not be concerned with strong opposition or support, but rather be looking for feedback regarding concerns or uncertainty surrounding the costs and implementation of the proposed standards.

Similarly, the Spearman's rank-order correlation for *perclitig_tone* assesses the relationship between the litigious tone and the changes in the rules-based attributes from Exposure Draft to Final Standard (*change_RBCscore*). The results indicate that there is a

[15] I also test relationship between the *percnetneg_tone* (the net measure of the Loughran and McDonald's negative and positive tone dictionaries) and the *change_RBCscore* using the Spearman's rank-order correlation. I find a slightly different result as compared to the *percneg_tone*; however, it is not statistically significant. The results indicate a weak positive correlation between the *percnetneg_tone* and change_RBCscore (Spearman's rho (245) = -0.0417, p= 0.5141).

weak negative correlation between the *perclitig_tone* and *change_RBCscore* (Spearman's rho (245) = -0.0173, p= 0.7869). The relationship between the litigious tone and the changes in rules-based attributes is not statistically significant. Therefore, we cannot reject the null hypothesis and cannot accept *H5b*. This also suggests that the Big-4's tone concerns with potential audit risk (litigation risk), as measured by litigious tone, may not be an influence in the changes in the rules-based attributes made by the FASB.

However, there is a statistically significant relationship, at $p < 0.05$, between the alternate measure for uncertainty, *percuncertain2_tone* and the *change_RBCscore.* The Spearman's rank-order correlation assesses the relationship between the alternate uncertainty tone measure (*percuncertain2_tone*) and the changes in the rules-based attributes from Exposure Draft to Final Standard (*change_RBCscore*). The results indicate that there is a positive correlation between the *percuncertain2_tone* and *change_RBCscore* (Spearman's rho (245) = 0.1254, p= 0.0490). Therefore, we can reject the null hypothesis and accept the *H5c*[16]. The results show that the Big-4's increasing uncertainty for an Exposure Draft is positively associated to the changes in rules-based attributes that are ultimately reflected by the FASB in the Final Standard. This indicates that the Big-4's uncertainty tone may influence the FASB's changes in the rules-based attributes from the Exposure Draft to the Final Standard. As a key stakeholder, the FASB recognizes there are costs (and benefits) associated to implementation of a new standard, specifically for the auditors that are opining on the information provided in financial

[16] In Chapter 3.4.2.4, I discuss the alternate measure of uncertainty tone (*percuncertain2_tone*). I also consider whether any additional words should be included from the Loughran and McDonald dictionaries that may be indicative of audit risk from an auditor's perspective. In the audit field, any judgments that are made by clients give rise to uncertainty (and increase audit risk).

statements. A new standard may provide a new accounting method or require evaluation of judgments made by management on matters such as estimates that expose auditors to additional audit risk and litigation risk. An increase in the uncertainty associated to a proposed standard may indicate that adjustments or changes are needed to clarify the proposed standard.

I perform the Spearman rank-order correlation to test the relationship between *percuncertain_tone* and *change_RBCscore*; however, I do not find a similar result as *percuncertain2_tone*. The results indicate that there is a positive correlation between the *percuncertain_tone* and *change_RBCscore* but it is not statistically significant (Spearman's rho (245) = 0.0916, p= 0.1510). The alternative hypothesis for *H5c* is not accepted using the main uncertainty tone measure.

Overall, I find that there is a positive association to the Big-4's efforts in the FASB's comment letter process as measured by the length of their comment letters and the alternate uncertainty measure. This indicates that uncertainty expressed in their comment letters and the longer comment letters may impact the FASB's decision to include more rules-based attributes in the Final Standard when compared to the initial proposed standard. However, the level of opposition, as measured by negative tone, and litigious tone, may not influence whether the FASB's includes additional rules-based criteria within the Final Standard.

5.5 Conclusions

The purpose of this chapter is to explore whether the Big-4 accounting firms' lobbying efforts influence the Final Standard, specifically whether a standard becomes

more rules-based or principles-based. As a key stakeholder, the FASB recognizes there are costs (and benefits) associated to implementation of a new standard, specifically for the auditors that are opining on the information provided in their clients' financial statements. A new standard may provide a new accounting method or require evaluation of judgments made by management on matters such as estimates that expose auditors to additional audit risk and litigation risk.

Under the premise that accounting firms prefer well-specified rules to mitigate audit risk, using textual analysis, I examine whether the Big-4's tone and comment letter length are associated to how much more or less rules-based versus principles-based a proposed standard becomes once it is finalized. I develop a measure based on Mergenthaler's (2009) RBC score to identify how much more (less) rules-based (principles-based) a Final Standard is compared to an Exposure Draft. I use this measure as a proxy for audit risk. I then test whether there is an association between the *change_RBCscore* and the various measures of tone and extent to evaluate influence.

Overall, my evidence suggests that the Big-4's lobbying efforts influence the Final Standards to become more rules-based. Specifically, I find the Big-4's increasing use of uncertainty language for an Exposure Draft is positively associated to the changes in rules-based attributes that are ultimately reflected in the FASB's Final Standard. My results also show that as the length of the comment letters increase, the change in rules-based attributes is also increasing in the Final Standard issued by the FASB. However, evidence also suggests that the level of opposition, as measured by negative tone (a proxy for the support) and litigious tone (another proxy for audit risk/litigation risk), may not

influence whether the FASB's includes additional rules-based criteria within the Final Standard.

6. Conclusions

With the overwhelming amount of accounting standards that have been issued since the FASB's inception, my dissertation examines the standard-setting process and how lobbying by constituents has changed with the passage of time. I provide an updated analysis of overall participation and participation by constituent groups (preparers, accounting firms, trade associations, individuals and other participants) for a sample of proposed accounting standards. On an absolute basis, I find that overall participation and constituent group has decreased as compared to participation on the first 100 SFASs (Tandy and Wilburn 1992). On a relative basis, my results indicate that the preparer and accounting firm participation (for the period 2002-2015) has declined as compared to the relative participation reported by Tandy and Wilburn 1992 on the first 100 SFASs. Given the decline in participation, the FASB may need to investigate whether there is a larger issue with its standard-setting process.

The second part of my research concentrates on the extent and motivations of the Big-4 to lobby in the standard-setting process. I use textual analysis to identify how the language used by the Big-4 accounting firms may be impacted by certain attributes specific to the proposed standards. I measure the negative, uncertainty and risk-related language in the Big-4's comment letters. Using these measures, I begin to ascertain how the language used may change based on based on the type of proposed standard (substantive, amendment, or industry specific). Then, I develop a proxy for audit risk using a modified rules-based continuum ("RBC") score (Mergenthaler 2009). I hypothesize that auditors desire well-specified rules to minimize judgment to ultimately

reducing audit risk (Miller and Redding 1986, Buckmaster 1988), which suggests that accounting firms may prefer more rules-based standards. I find the Big-4 are generally less negative for more rules-based proposed standards. However, my results indicate that the Big-4 generally convey increasing uncertainty as proposed standards become more rules-based. Given this, I further investigate Big-4's other motivations to submit a comment letter. Specifically, I investigate whether the Big-4 lobby on behalf of their clients, who may prefer more principles-based standards that allow for flexibility and judgment using a multiple regression analysis. I find the Big-4's negative and uncertainty languages are positively associated to their clients, which suggests that their lobbying efforts are influenced by their client preference.

Finally, I evaluate the Big-4 accounting firms and their influence on the FASB's standard-setting process, specifically whether the Big-4 accounting firms' lobbying efforts influence the changes in the rules-based versus principles based in the final standard. I develop a RBC change score to measure how much more (or less) rules-based a Final Standard is compared to the Exposure Draft. I find as the Big-4's uncertainty language increases, the changes in rules-based attributes in the Final Standards also increases. I also find that more extensive comment letters are associated to increases in the rules-based attributes of the Final Standards. These results suggest the Big-4's comment letters may influence the FASB's decision to include more rules-based attributes in Final Standards.

Using textual analysis, my research analyzes a large sample of comment letters to identify associations between the extent and language used in the comment letters and

certain characteristics of the proposed and final standards. My results also indicate that the Big-4 influence the final standards based on the uncertainty language used in their comment letters. Overall, my dissertation provides a unique angle to investigate the motivations for the Big-4 participation in the standard-setting process.

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Figures and Tables

Figure 1- Summary for the Determination of Rules-Based Continuum Score

Rules-Based Attributes	Criteria	Score
Bright-line thresholds Evaluate the context of the guidance to see if a bright line threshold exists.	Word search of the following: Criteri, Condition, Provision, Require, Percent	Score "1" if BL thresholds exist, 0 otherwise
Scope Exceptions: Evaluate the context of the guidance to see if a scope exception exists.	Word search of the following: Not subject, Not Consider, Exclu, Exempt, Except, Scope, Does not apply	Score "1" if scope exception exist, "0" otherwise
Detail Evaluate the number of words and those within the highest quartile represent "high-level of details"	Number of words	Score "1" if in highest quartile, "0" otherwise
Implementation Guidance *Different from Mergenthaler 2010	Count of implementation guidance included in document	Score "1" if implementation guidance exists, "0" otherwise

Figure 2-Additional Word List for Dictionary *percuncertain2_tone*

assess, assesses, assessment, assessments, assessing, assessed
decide, decides, deciding, decision, decisions
decision making, decision-making
discern, discernment, discerns, discerned, discerning
estimate, estimates, estimated, estimating, estimation, estimations
evaluate, evaluated, evaluates, evaluating, evaluation, evaluations
forecast, forecasts, forecasting, forecasted
gauge, gauges, gauged
interpret, interprets, interpreting, interpreted, interpretation, interpretations
opinion, opinions, opined, opining
persuade, persuades, persuaded, persuading, persuasion, persuasive
sentiment, sentiments
subjective
thought, thoughts
view, views, viewed, viewpoint, viewing
judge, judgement, judgment, judges, judged, judging, judgmental, judgemental

Figure 3- Summary of the Calculation of the *change_RBCscore*

Rules-Based Attributes	Criteria	Score
Bright-line thresholds	Count of the BL in the ED v. Final	Score "1" if BL thresholds increase, "0" if no change, "-1" if decrease
Scope Exceptions:	Count of Scope Exceptions in the ED v. Final	Score "1" if scope exceptions increase, "0" if no change, "-1" if decrease
High-Level of Detail	Difference in the number of words in the Final v. ED and divide by word in ED	Score "1" if in top quartile, "0" otherwise
Implementation Guidance	Count of implementation guidance included in document	Score "1" if BL thresholds increase, "0" if no change, "-1" if decrease

*This table provides a summary of the calculation of the changes in rules-based attributes from Exposure Draft to Final Standard (*change_RBCscore*). The* change_RBCscore *is a measure of how much "more" ("less") rules-based (principles-based) an Exposure Draft becomes by evaluating whether the four characteristics of rules-based standards has increased (decreased) once the Exposure Draft becomes a Final Standard.*

Figure 4- Example of Calculation of change_RBCScore- ASU 2014-08, Reporting Discontinued Operations

Rules-Based Attributes	ED	Final	Score
Bright-line thresholds	1 BL	2 BL	1
Scope Exceptions:	0 Scope Exceptions	2 Scope Exceptions	1
High-Level of Detail	12,582 words	23,718 words	1
Implementation Guidance	4 Tables, Examples, Illustrations	8 Tables, Examples, Illustrations	1
Change_RBCScore			**4**

*This table provides an example of the calculation of the changes in rules-based attributes from Exposure Draft to Final Standard (*change_RBCscore*) for ASU 2014-08. The* change_RBCscore *is a measure of how much "more" ("less") rules-based (principles-based) an Exposure Draft becomes by evaluating whether the four characteristics of rules-based standards has increased (decreased) once the Exposure Draft becomes a Final Standard. For this standard, there is an increase in the number of bright-line thresholds, scope exceptions, and implementation guidance from the Exposure Draft to the Final standard. There is also an 88.5% increase in the detail (or total words), which falls into the top quartile; therefore, the change for high-level of detail is scored a "1". The overall* change_RBCscore *is a "4."*

Figure 5- Top 20 Uncertainty Words for Public Companies and Big-4 Accounting Firms

	public companies		Big- 4 accounting firms	
1	may, might	5387	may, might	2894
2	risk, risks, riskier, riskiness, risking, risky	3796	could	1171
3	could	2883	risk, risks	983
4	variable, variables, variances, variants, variation, variations, varied, varies, vary, varying, variability	2089	suggest, suggested, suggesting, suggests	689
5	assumptions, assumed, assume, assumes, assuming, assumption	1599	variable, variability, variables, variably, variances, variation, variations, varied, varies, vary, varying	623
6	contingent, contingencies, contingency, contingently	1543	assumptions, assume, assumed, assumes, assuming, assumptions	526
7	suggest , suggested, suggesting, suggests	1125	appears, appear	426
8	uncertainty, uncertain, uncertainties, uncertainly	979	unclear	381
9	probability, probable, probabilities, probably	958	contingent, contingencies, contingency, contingently	380
10	possible, possibilities, possibility, possibly	906	presumption, presumably, presume, presumed, presumes, presumptions	358
11	clarification, clarifications	664	possible, possibilities, possibility, possibly	351
12	revised	663	revised, revise	304
13	appears, appear	585	uncertainty, uncertain, uncertainties	292
14	confusion, confuses, confusing	543	clarification, clarifications	242
15	approximately, approximate, approximates, approximating, approximation, approximations	402	confusion, confuses, confusing	194
16	reconsider, reconsidered, reconsidering, reconsiders	344	probable, probabilities, probability, probably	186
17	unclear	312	differ, differed, differing, differs	171
18	volatility, volatile, volatilities	312	indefinite, indefinitely	148
19	indefinite, indefinitely	270	seems	130
20	seems	262	doubt	108

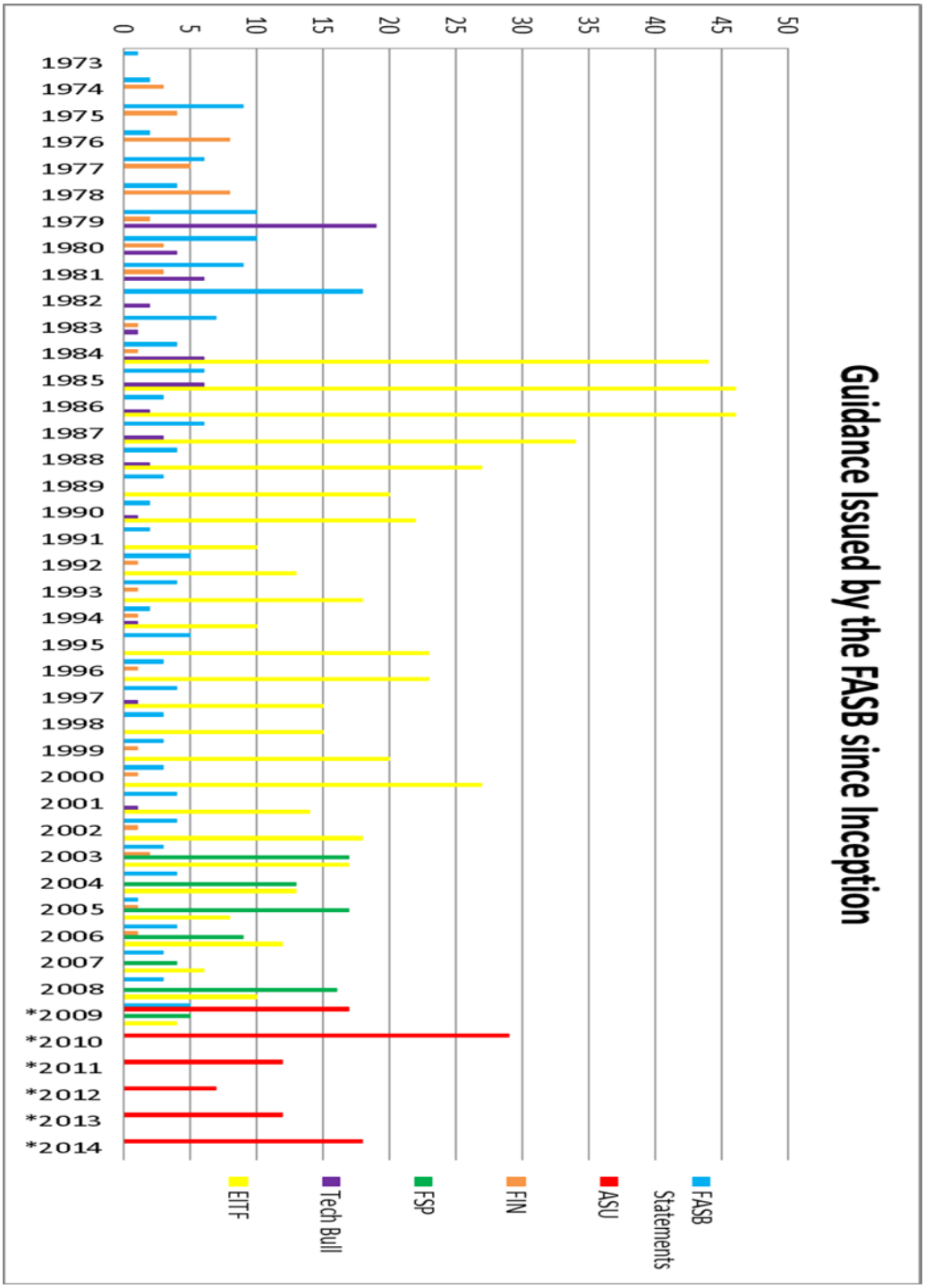
Figure 6- Top 20 Negative Words for Public Companies and Big-4 Accounting Firms

	public companies		Big- 4 accounting firms	
1	question, questions, questionable, questioned, questioning	5375	question, questions, questionable, questioned, questioning	2060
2	loss, losses	2716	loss, losses	1050
3	concerns, concerned, concern	2701	concerns, concern, concerned	1007
4	disclose, disclosed, discloses, disclosing	1538	impairment, impair, impaired, impairments	624
5	impairment, impair, impaired, impairing, impairments, impairs	1266	disclose, disclosed, discloses, disclosing	539
6	difficult, difficulties, difficultly, difficulty	1162	inconsistent, inconsistencies, inconsistency, inconsistently	345
7	onerous	1151	liquidation, liquidate, liquidated, liquidates, liquidating, liquidations	342
8	inconsistent, inconsistencies, inconsistency, inconsistently,	929	difficult, difficulties, difficulty	330
9	burden, burdened, burdening, burdens, burdensome	675	confusion, confuse, confused, confused, confusing	229
10	confusion, confuse, confused, confusing, confusingly	667	default, defaulted, defaulting, defaults	198
11	disagree, disagreed, disagreeing, disagreement, disagreements, disagrees	590	onerous	192
12	discontinued, discontinue, discontinues, discontinuing	475	challenges, challenge, challenged, challenging	186
13	delay, delayed, delaying, delays	469	discontinued, discontinue	184
14	default, defaulted, defaulting, defaults	427	restructuring, restructure, restructured, restructurings	142
15	misleading, misleads, misled	394	disagree, disagreed, disagreement, disagreements, disagrees	139
16	lack, lacking, lacks	362	corrections, corrected, correcting, correction, corrects	131
17	unnecessary, unnecessarily	347	lack, lacks, lacking	109
18	costly	344	doubt	108
19	volatility, volatile	308	unnecessary, unnecessarily	100
20	troubled, trouble	302	troubled	85

Figure 7- Listing of Standards Included in Sample that Increase the Big-4 Audit Work ("Make-Work")

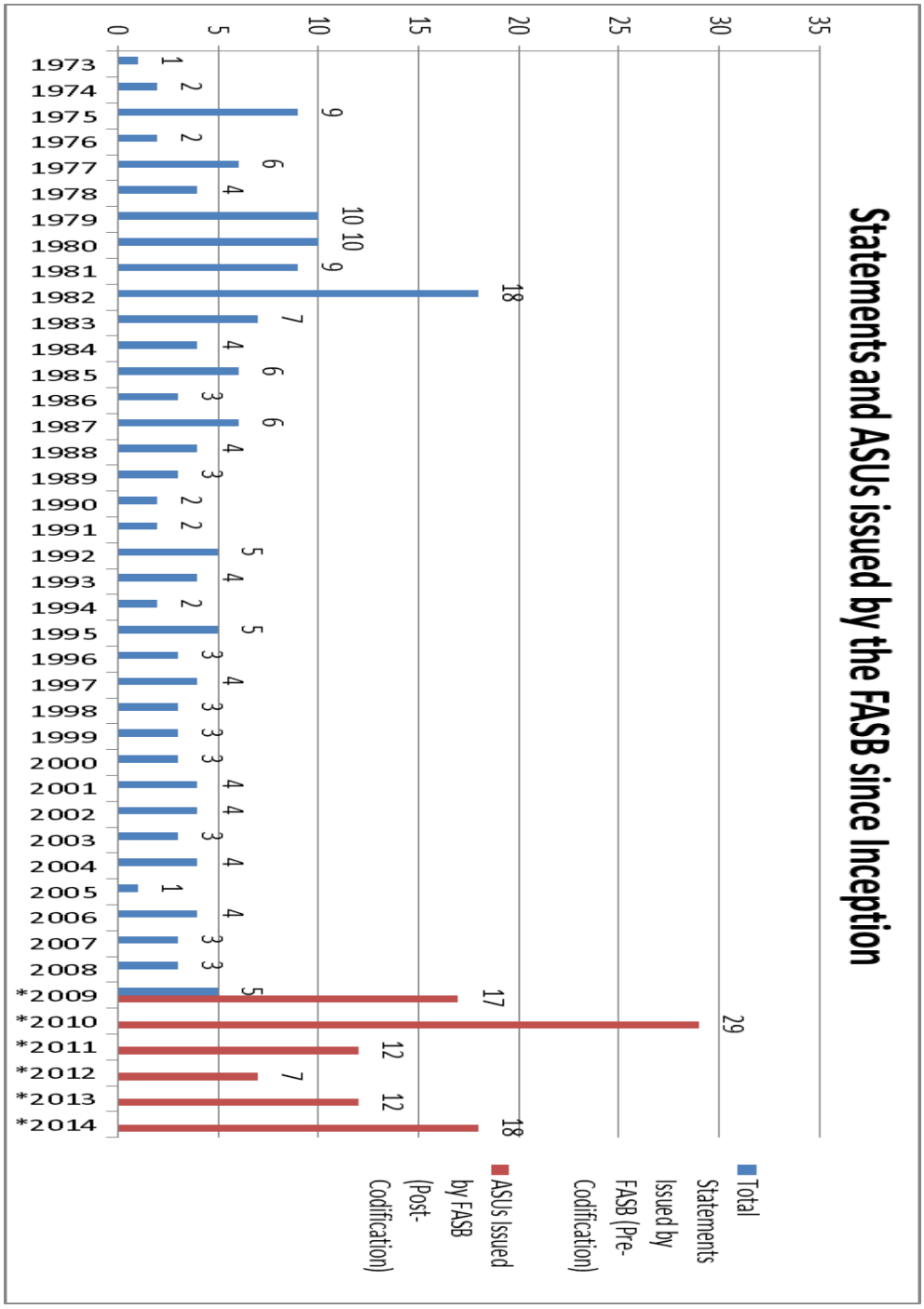
	Standard	Codification Topic	Codification Subtopic
1	asu2011-08	Assets	Intangibles- Goodwill and Other
2	asu2011-11	Presentation	Balance Sheet
3	asu2012-02	Assets	Intangibles- Goodwill and Other
4	asu2013-08	Industry	Financial Services
5	asu2014-02	Assets	Intangibles- Goodwill and Other
6	asu2014-09a	Revenue	Revenue Recognition
7	asu2014-15	Presentation	Presentation of Financial Statements
8	asu2014-18	Broad Transactions	Business Combinations
9	fas141r	Broad Transactions	Business Combinations
10	fas157	Broad Transactions	Fair Value Measurement
11	fas158	Expenses	Compensation

Table 1- Guidance Issued by the FASB since Inception



The graph provides the total number of SFASs (FASB Statements), ASUs (Accounting Standard Updates), FIN (FASB Interpretations), FSP (FASB Staff Positions), Tech Bull (FASB Technical Bulletins, EITFs (Emerging Issues Task Force) issued by the FASB since its inception in 1973.

Table 2- Statements and ASUs Issued by the FASB since Inception



The graph provides the total number of SFASs (FASB Statements) and ASUs issued by the FASB since its inception in 1973. ASUs also include EITF and SEC updates, which explain the spike in ASUs post-codification. This is not comparative to the SFASs.

Table 3- Reconciliation of Sample Selection

Total Exposure Drafts Available Online (as of 9/2015)	273	
Exposure Drafts not Finalized/Issued by the FASB (Confirmed	-9	
ASU That Are Consensus of EITF	-43	
EITF	-5	
FSP	-92	*
FIN	-5	
DIG	-4	
Invitation to Comment, Discussion Papers, Preliminary Views	-19	
Concept Statements	-2	
IASB- Workplan for IFRS: Conceptual Framework	-1	
Comment Letters Not Available on FASB Website (FAS 145/147)	-2	
Remove FAS 123R (incomplete comment letter listing)	-1	
Two comment periods for Rev Rec Standard (ASU 2014-09)	-1	
SFAS/ASUs Closed for Comment Need to be Reconciled to Final Statements	-26	*
Total Sample Size	**63**	

The FASB provides a listing of the Exposure Drafts that have been issued beginning in 2002 until the current period. The above reconciliation provides the items excluded from the ultimate sample used in this research. I specifically exclude standards that have not been finalized by the FASB, that are not SFASs or ASUs, and to remove any Exposure Drafts that are incomplete. I also do not include ASUs that are consensus of the EITF or that are SEC updates.

Table 4- Detail Listing of Sample Selection by Statement, Codification and Codification Subtopic

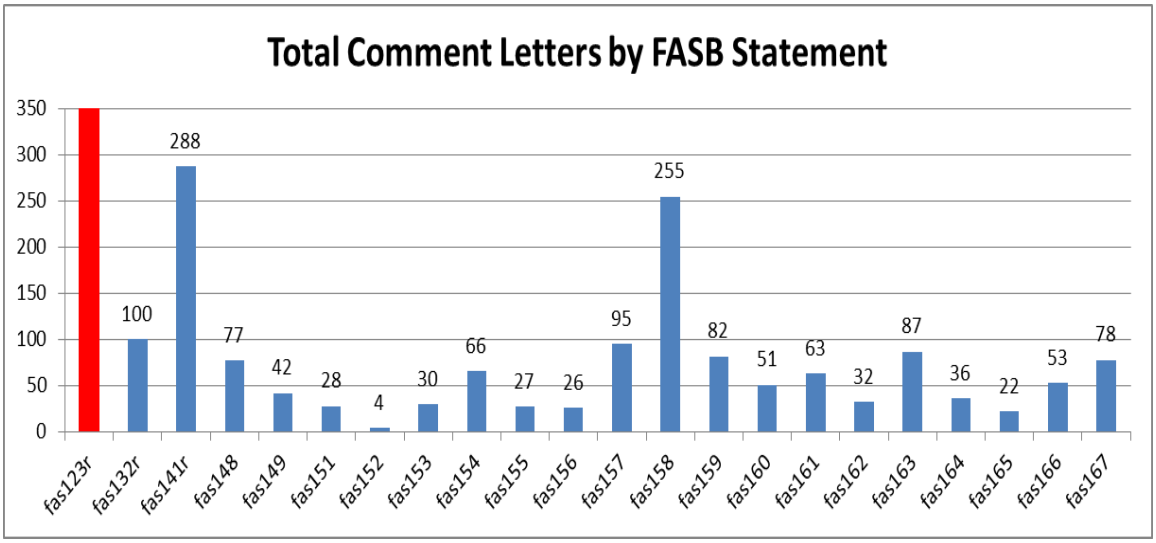
	Statement	Codification Topic	Codification Subtopic
1	asu2009-01	General Principles	GAAP
2	asu2010-02	Broad Transactions	Consolidation
3	asu2010-06	Broad Transactions	Fair Value Measurement
4	asu2010-08	Master Glossary	Technical Corrections
5	asu2010-09	Broad Transactions	Subsequent Events
6	asu2010-10	Broad Transactions	Consolidation
7	asu2010-11	Broad Transactions	Derivatives and Hedging
8	asu2010-20	Assets	Receivables
9	asu2011-01	Assets	Receivables
10	asu2011-02	Assets	Receivables
11	asu2011-03	Broad Transactions	Transfers and Servicing
12	asu2011-04	Broad Transactions	Fair Value Measurement
13	asu2011-05	Presentation	Comprehensive Income
14	asu2011-08	Assets	Intangibles- Goodwill and Other
15	asu2011-09	Expenses	Compensation
16	asu2011-11	Presentation	Balance Sheet
17	asu2011-12	Presentation	Comprehensive Income
18	asu2012-02	Assets	Intangibles- Goodwill and Other
19	asu2012-04	Master Glossary	Technical Corrections
20	asu2013-01	Presentation	Balance Sheet
21	asu2013-02	Presentation	Comprehensive Income
22	asu2013-03	Broad Transactions	Financial Instruments
23	asu2013-07	Presentation	Presentation of Financial Statements
24	asu2013-08	Industry	Financial Services
25	asu2013-09	Broad Transactions	Fair Value Measurement
26	asu2013-12	Master Glossary	Definition
27	asu2014-02	Assets	Intangibles- Goodwill and Other
28	asu2014-03	Broad Transactions	Derivatives and Hedging
29	asu2014-06	Master Glossary	Technical Corrections
30	asu2014-07	Broad Transactions	Consolidation
31	asu2014-08	Presentation	Presentation of Financial Statements
32	asu2014-09	Revenue	Revenue Recognition
33	asu2014-10	Industry	Development Stage
34	asu2014-11	Broad Transactions	Transfers and Servicing
35	asu2014-15	Presentation	Presentation of Financial Statements
36	asu2014-18	Broad Transactions	Business Combinations

37	asu2015-01	Presentation	Income Statement
38	asu2015-03	Broad Transactions	Interest
39	asu2015-04	Expenses	Compensation
40	asu2015-05	Assets	Intangibles- Goodwill and Other
41	asu2015-11	Assets	Inventory
42	asu2015-14	Revenue	Revenue from Contracts with Customers
43	fas123r	Expenses	Compensation
44	fas132r	Expenses	Compensation
45	fas141r	Broad Transactions	Business Combinations
46	fas148	Expenses	Compensation
47	fas149	Broad Transactions	Derivatives and Hedging
48	fas151	Assets	Inventory
49	fas152	Assets/Industry	Property, Plant, and Equipment/Real Estate- Retail Land
50	fas153	Broad Transactions	Nonmonetary Transactions
51	fas154	Presentation	Accounting Changes and Corrections
52	fas155	Broad Transactions	Derivatives and Hedging/Transfers and Servicing
53	fas156	Broad Transactions	Transfers and Servicing
54	fas157	Broad Transactions	Fair Value Measurement
55	fas158	Expenses	Compensation
56	fas159	Broad Transactions	Financial Instruments
57	fas160	Broad Transactions	Consolidation
58	fas161	Broad Transactions	Derivatives and Hedging
59	fas162	General Principles	GAAP
60	fas163	Industry	Financial Services
61	fas164	Assets	Intangibles- Goodwill and Other
62	fas165	Broad Transactions	Subsequent Events
63	fas166	Broad Transactions	Transfers and Servicing
64	fas167	Broad Transactions	Consolidation

**SFAS were mapped to a codification topic for comparison purposes. Source for mapping: FASB website*

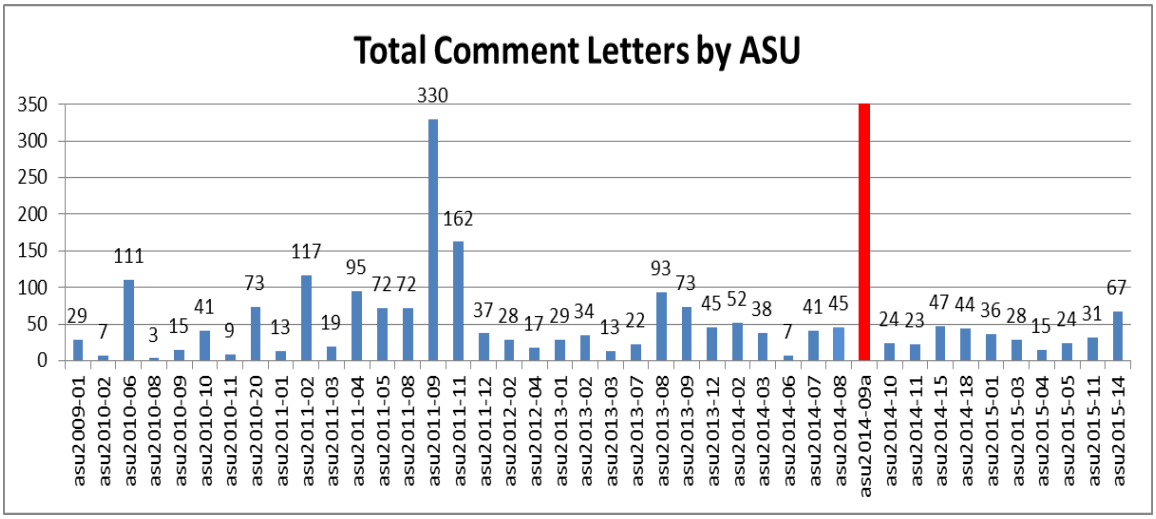
The above table lists the SFAS and ASUs included in my sample. In 2009, the FASB implemented is codification system, which cross-references the existing standards by balance sheet, income statements, and other transaction topic. For those standards that were issued pre-codification, the existing codification has been mapped for reference purposes. This information is provided to provide information regarding the nature of the topics covered by the standards included in the sample.

Table 5- Total Comment Letters by FASB Statement



This table includes the total number of comment letters for the SFASs issued from the time period January 2002-September 2015. Approximately 14,239 comment letters were submitted for FAS 123R, Share-based Payment; however, only 6,536 were listed on the FASB website.

Table 6- Total Comment Letters by ASU



This table includes the total number of comment letters for the ASUs issued from the time period January 2002-September 2015. The comment letters for ASU 2014-9a-d were submitted together by constituents. The total amount of comment letters submitted were 1,333 for ASU 2014-9, Revenue Recognition (Topic 605): Revenue from Contracts with Customers.

Table 7- Standards with the Most and Least Comment Letter Participation

Panel A- Top Ten Comment Letter Participation

This table represents the Top Ten Exposure Drafts and their respective comment letter participation for my sample. Included in this table are the FASB's Topic and Subtopic of the Codification system and the final standard's name.

Statement	ED Issuance Date	Final Issuance Date	Comment Letters	Topic	Subtopic	Statement Name
fas123r	Mar-04	Dec-04	14239	Expenses	Compensation	Share-based Payments
asu2014-09a	**	May-14	1332	Revenue	Revenue Recognition	Revenue from Contracts with Customers
asu2011-09	Sep-10	Sep-11	330	Expenses	Compensation	Retirement Benefits—Multiemployer Plans (Subtopic 715-80): Disclosures about an Employer's Participation in a Multiemployer Plan
fas141r	Jun-05	Dec-07	288	Broad Transactions	Business Combinations	Business Combinations
fas158	Mar-06	Sep-06	255	Expenses	Compensation	Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans—an amendment of FASB Statements No. 87, 88, 106, and 132(R)
asu2011-11	Jan-11	Dec-11	162	Presentation	Balance Sheet	Disclosures about Offsetting Assets and Liabilities
asu2011-02	Oct-10	Apr-11	117	Assets	Receivables	A Creditor's Determination of Whether a Restructuring Is a Troubled Debt Restructuring
asu2010-06	Aug-09	Jan-10	111	Broad Transactions	Fair Value Measurement	Improving Disclosures about Fair Value Measurements
fas132r	Sep-03	Dec-03	100	Expenses	Compensation	Employers' Disclosures about Pensions and Other Postretirement Benefits—an amendment of FASB Statements No. 87, 88, and 106
asu2011-04	Jun-10	May-11	95	Broad Transactions	Fair Value Measurement	Fair Value Measurements and Disclosures (Topic 820): Amendments for Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs
fas157	Jun-04	Sep-06	95	Broad Transactions	Fair Value Measurement	Fair Value Measurement

* Approximately 14,239 comment letters were submitted for FAS 123R, Share-based Payment; however, only 6,536 were listed on the FASB website.

** The Exposure Drafts for ASU 2014-9a-d were issued separately by the FASB; however, the comment letters were submitted together by constituents. In addition, there were two drafts of this ED and the total amount of comment letters listed is for both Exposure Drafts. The total amount of comment letters submitted were listed as 1,333 in ASU 2014-9, Revenue Recognition (Topic 605): Revenue from Contracts with Customers, however, only 1,332 were included on the FASB website. I use 1332 as the amount of comment letters received by the FASB.

Panel B- Lowest Ten on Participation

This table represents the Lowest Ten Exposure Drafts and their respective comment letter participation for my sample. Included in this table are the FASB's Topic and Subtopic of the Codification system and the final standard's name.

Statement	ED Issuance Date	Final Issuance Date	Comment Letters	Topic	Subtopic	Statement Name
asu2010-08	Mar-09	Feb-10	3	Master Glossary	Technical Corrections	Technical Corrections to Various Topics
fas152	Feb-03	Dec-04	4	Assets/Industry	Property, Plant, and Equipment/Real Estate- Retail Land	Accounting for Real Estate Time-Sharing Transactions—an amendment of FASB Statements No. 66 and 67
asu2010-02	Aug-09	Jan-10	7	Broad Transactions	Consolidation	Consolidation (Topic 810): Accounting and Reporting for Decreases in Ownership of a Subsidiary—a Scope Clarification
asu2014-06	May-13	Mar-14	7	Master Glossary	Technical Corrections	Technical Corrections and Improvements Related to Glossary Terms
asu2010-11	Oct-09	Mar-10	9	Broad Transactions	Derivatives and Hedging	Derivatives and Hedging (Topic 815): Scope Exception Related to Embedded Credit Derivatives
asu2011-01	Dec-10	Jan-11	13	Assets	Receivables	Deferral of the Effective Date of Disclosures about Troubled Debt Restructurings in Update No. 2010-20
asu2013-03	Jan-13	Feb-13	13	Broad Transactions	Financial Instruments	Financial Instruments (Topic 825): Clarifying the Scope and Applicability of a Particular Disclosure to Nonpublic Entities
asu2010-09	Dec-09	Feb-10	15	Broad Transactions	Subsequent Events	Subsequent Events (Topic 855): Amendments to Certain Recognition and Disclosure Requirements
asu2015-04	Oct-14	Apr-15	15	Expenses	Compensation	Retirement Benefits (Topic 715): Practical Expedient for the Measurement Date of an Employer's Defined Benefit Obligation and Plan Assets
asu2012-04	Oct-11	Oct-12	17	Master Glossary	Technical Corrections	Technical Corrections and Improvements

Table 8- Participation by Constituent Group

fasb_standard	preparers	individuals	trade_assoc	accting_firm	other	totalpart	Absolute Participation				
asu2009_01	0	21	3	5	0	29	0.00%	72.41%	10.34%	17.24%	0.00%
asu2010_02	0	0	1	6	0	7	0.00%	0.00%	14.29%	85.71%	0.00%
asu2010_06	70	5	26	7	3	111	63.06%	4.50%	23.42%	6.31%	2.70%
asu2010_08	0	0	0	3	0	3	0.00%	0.00%	0.00%	100.00%	0.00%
asu2010_09	2	1	3	9	0	15	13.33%	6.67%	20.00%	60.00%	0.00%
asu2010_10	25	0	6	9	1	41	60.98%	0.00%	14.63%	21.95%	2.44%
asu2010_11	3	0	2	4	0	9	33.33%	0.00%	22.22%	44.44%	0.00%
asu2010_20	43	4	15	9	2	73	58.90%	5.48%	20.55%	12.33%	2.74%
asu2011_01	7	0	2	4	0	13	53.85%	0.00%	15.38%	30.77%	0.00%
asu2011_02	95	1	11	8	2	117	81.20%	0.85%	9.40%	6.84%	1.71%
asu2011_03	9	1	4	5	0	19	47.37%	5.26%	21.05%	26.32%	0.00%
asu2011_04	46	11	26	8	4	95	48.42%	11.58%	27.37%	8.42%	4.21%
asu2011_05	33	10	14	9	6	72	45.83%	13.89%	19.44%	12.50%	8.33%
asu2011_08	46	3	15	8	0	72	63.89%	4.17%	20.83%	11.11%	0.00%
asu2011_09	128	91	62	37	12	330	38.79%	27.58%	18.79%	11.21%	3.64%
asu2011_11	59	6	74	7	16	162	36.42%	3.70%	45.68%	4.32%	9.88%
asu2011_12	21	3	4	7	2	37	56.76%	8.11%	10.81%	18.92%	5.41%
asu2012_02	9	3	8	8	0	28	32.14%	10.71%	28.57%	28.57%	0.00%
asu2012_04	6	2	3	6	0	17	35.29%	11.76%	17.65%	35.29%	0.00%
asu2013_01	16	2	6	5	0	29	55.17%	6.90%	20.69%	17.24%	0.00%
asu2013_02	10	4	10	8	2	34	29.41%	11.76%	29.41%	23.53%	5.88%
asu2013_03	2	0	5	6	0	13	15.38%	0.00%	38.46%	46.15%	0.00%
asu2013_07	2	1	8	11	0	22	9.09%	4.55%	36.36%	50.00%	0.00%
asu2013_08	51	1	21	11	9	93	54.84%	1.08%	22.58%	11.83%	9.68%
asu2013_09	49	5	4	14	1	73	67.12%	6.85%	5.48%	19.18%	1.37%
asu2013_12	21	1	13	9	1	45	46.67%	2.22%	28.89%	20.00%	2.22%
asu2014_02	12	2	20	16	2	52	23.08%	3.85%	38.46%	30.77%	3.85%
asu2014_03	4	2	15	15	2	38	10.53%	5.26%	39.47%	39.47%	5.26%
asu2014_06	0	0	1	5	1	7	0.00%	0.00%	14.29%	71.43%	14.29%
asu2014_07	5	1	13	22	0	41	12.20%	2.44%	31.71%	53.66%	0.00%
asu2014_08	24	2	11	8	0	45	53.33%	4.44%	24.44%	17.78%	0.00%
asu2014_09_1	336	188	127	51	271	973	34.53%	19.32%	13.05%	5.24%	27.85%
asu2014_09_2	176	14	121	23	25	359	49.03%	3.90%	33.70%	6.41%	6.96%
asu2014_10	1	1	11	11	0	24	4.17%	4.17%	45.83%	45.83%	0.00%
asu2014_11	10	3	7	3	0	23	43.48%	13.04%	30.43%	13.04%	0.00%
asu2014_15	8	2	20	16	1	47	17.02%	4.26%	42.55%	34.04%	2.13%
asu2014_18	8	1	17	16	2	44	18.18%	2.27%	38.64%	36.36%	4.55%
asu2015_01	1	11	13	10	1	36	2.78%	30.56%	36.11%	27.78%	2.78%
asu2015_03	8	1	8	9	2	28	28.57%	3.57%	28.57%	32.14%	7.14%
asu2015_04	1	1	5	8	0	15	6.67%	6.67%	33.33%	53.33%	0.00%
asu2015_05	8	0	8	8	0	24	33.33%	0.00%	33.33%	33.33%	0.00%
asu2015_11	6	3	13	9	0	31	19.35%	9.68%	41.94%	29.03%	0.00%
asu2015_14	39	1	16	10	1	67	58.21%	1.49%	23.88%	14.93%	1.49%
fas132r	70	5	11	7	7	100	70.00%	5.00%	11.00%	7.00%	7.00%
fas141r	154	19	90	8	17	288	53.47%	6.60%	31.25%	2.78%	5.90%
fas148	35	12	21	6	3	77	45.45%	15.58%	27.27%	7.79%	3.90%
fas149	27	0	8	5	2	42	64.29%	0.00%	19.05%	11.90%	4.76%
fas151	9	4	8	6	1	28	32.14%	14.29%	28.57%	21.43%	3.57%
fas152	0	0	1	3	0	4	0.00%	0.00%	25.00%	75.00%	0.00%
fas153	12	1	9	5	3	30	40.00%	3.33%	30.00%	16.67%	10.00%
fas154	17	32	9	6	2	66	25.76%	48.48%	13.64%	9.09%	3.03%
fas155	15	0	6	5	1	27	55.56%	0.00%	22.22%	18.52%	3.70%
fas156	15	0	4	5	2	26	57.69%	0.00%	15.38%	19.23%	7.69%
fas157	39	12	33	7	4	95	41.05%	12.63%	34.74%	7.37%	4.21%
fas158	171	27	42	7	8	255	67.06%	10.59%	16.47%	2.75%	3.14%
fas159	46	4	25	5	2	82	56.10%	4.88%	30.49%	6.10%	2.44%
fas160	24	8	9	7	3	51	47.06%	15.69%	17.65%	13.73%	5.88%
fas161	40	3	10	7	3	63	63.49%	4.76%	15.87%	11.11%	4.76%
fas162	3	8	10	7	4	32	9.38%	25.00%	31.25%	21.88%	12.50%
fas163	23	50	8	4	2	87	26.44%	57.47%	9.20%	4.60%	2.30%
fas164	18	4	8	6	0	36	50.00%	11.11%	22.22%	16.67%	0.00%
fas165	2	4	9	7	0	22	9.09%	18.18%	40.91%	31.82%	0.00%
fas166	27	4	11	6	5	53	50.94%	7.55%	20.75%	11.32%	9.43%
fas167	43	6	16	7	6	78	55.13%	7.69%	20.51%	8.97%	7.69%
Total	**2190**	**612**	**1120**	**589**	**444**	**4955**					
Mean	**34.76190**	**9.71429**	**17.77778**	**9.34921**	**7.04762**	**78.65079**	**37.81%**	**9.58%**	**25.01%**	**25.40%**	**3.78%**
Standard deviation	**70.34677**	**28.19942**	**33.58256**	**9.708923**	**37.16156**	**171.8536661**	**22.74%**	**13.39%**	**10.64%**	**20.70%**	**5.31%**

Table 9- Summary of Participation by Constituent Group

	Number of Comment Letters			
Constituent Group	**2002-2015**		**1973-1988**	
Preparers	2,190	44.20%	8,981	67.18%
Individuals	612	12.35%	795	5.95%
Trade Associations	1,120	22.60%	1,455	10.88%
Accounting Firms	589	11.89%	1,447	10.82%
Other	444	8.96%	691	5.17%
Total Participation	**4,955**		**13,369**	

The data from 1973-1988 is from Tandy and Wilburn 1992's analysis of the first 100 SFAS issued. The first 100 SFAS statements were issued from the time period December 1973 through December 1988. The data presented in this table aggregates their categories for Industry, Banking and Securities firms as Preparers for comparison purposes. This table also shows their analysis of Academe, Government, and Law as "Other" for comparison purposes. The data from 2002-2015 includes the data in the sample noted in Table 4.

Table 10-Descriptive Statistics of Comment Letter Participation by Constituent Group

Constituent Group	Obs	Mean	Std. Dev.	Min	Max
Preparers	63	34.7619	70.34677	0	512
Individuals	63	9.714286	28.19942	0	202
Trade_assoc	63	17.77778	33.58256	0	248
Accting_firm	63	9.349206	9.708923	3	74
Other	63	7.047619	37.16156	0	296

The above table aggregates preparers or accounting firms and provides the mean, standard deviation, and minimum and maximum of comment letter participation.

Table 11-Categorization of Standards as Substantive, Amendment, or Industry

Statement	Topic	Subtopic	Statement Name	type_standard	Comment Period (in months)
asu2009-01	General Principles	GAAP	Generally Accepted Accounting Principles (Topic 105): Amendments based on SFAS No. 168- the FASB Accounting Standard Codification and the Hierarchy of GAAP	2	1.5
asu2010-02	Broad Transactions	Consolidation	Consolidation (Topic 810): Accounting and Reporting for Decreases in Ownership of a Subsidiary—a Scope Clarification	2	1
asu2010-06	Broad Transactions	Fair Value Measurement	Improving Disclosures about Fair Value Measurements	2	1.5
asu2010-08	Master Glossary	Technical Corrections	Technical Corrections to Various Topics	2	2
asu2010-09	Broad Transactions	Subsequent Events	Subsequent Events (Topic 855): Amendments to Certain Recognition and Disclosure Requirements	2	1
asu2010-10	Broad Transactions	Consolidation	Consolidation (Topic 810): Amendments for Certain Investment Funds	3	1
asu2010-11	Broad Transactions	Derivatives and Hedging	Derivatives and Hedging (Topic 815): Scope Exception Related to Embedded Credit Derivatives	2	1
asu2010-20	Assets	Receivables	Receivables (Topic 310): Disclosures about the Credit Quality of Financing Receivables and the Allowance for Credit Losses	3	2
asu2011-01	Assets	Receivables	Deferral of the Effective Date of Disclosures about Troubled Debt Restructurings in Update No. 2010-20	3	0.5
asu2011-02	Assets	Receivables	A Creditor's Determination of Whether a Restructuring Is a Troubled Debt Restructuring	3	2
asu2011-03	Broad Transactions	Transfers and Servicing	Transfers and Servicing (Topic 860): Reconsideration of Effective Control for Repurchase Agreements	2	2
asu2011-04	Broad Transactions	Fair Value Measurement	Fair Value Measurements and Disclosures (Topic 820): Amendments for Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs	1	3
asu2011-05	Presentation	Comprehensive Income	Comprehensive Income (Topic 220): Presentation of Comprehensive Income	1	4
asu2011-08	Assets	Intangibles- Goodwill and Other	Intangibles—Goodwill and Other (Topic 350): Testing Goodwill for Impairment	2	2
asu2011-09	Expenses	Compensation	Retirement Benefits—Multiemployer Plans (Subtopic 715-80): Disclosures about an Employer's Participation in a Multiemployer Plan	2	2
asu2011-11	Presentation	Balance Sheet	Disclosures about Offsetting Assets and Liabilities	1	3
asu2011-12	Presentation	Comprehensive Income	Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05	2	0.5
asu2012-02	Assets	Intangibles- Goodwill and Other	Intangibles—Goodwill and Other (Topic 350): Testing Indefinite-Lived Intangible Assets for Impairment	1	3
asu2012-04	Master Glossary	Technical Corrections	Technical Corrections and Improvements	2	2
asu2013-01	Presentation	Balance Sheet	Balance Sheet (Topic 210): Clarifying the Scope of Disclosures about Offsetting Assets and Liabilities	2	1
asu2013-02	Presentation	Comprehensive Income	Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income	2	2
asu2013-03	Broad Transactions	Financial Instruments	Financial Instruments (Topic 825): Clarifying the Scope and Applicability of a Particular Disclosure to Nonpublic Entities	3	0.5
asu2013-07	Presentation	Presentation of Financial Statements	Presentation of Financial Statements (Topic 205): Liquidation Basis of Accounting	1	3
asu2013-08	Industry	Financial Services	Financial Services—Investment Companies (Topic 946): Amendments to the Scope, Measurement, and Disclosure Requirements	3	4
asu2013-09	Broad Transactions	Fair Value Measurement	Fair Value Measurement (Topic 820): Deferral of the Effective Date of Certain Disclosures for Nonpublic Employee Benefit Plans in Update No. 2011-04	3	1
asu2013-12	Master Glossary	Definition	Definition of a Public Business Entity: An Addition to the Master Glossary	2	1.5
asu2014-02	Assets	Intangibles- Goodwill and Other	Intangibles—Goodwill and Other (Topic 350): Accounting for Goodwill, a consensus of the Private Company Council	3	1.5
asu2014-03	Broad Transactions	Derivatives and Hedging	Derivatives and Hedging (Topic 815): Accounting for Certain Receive-Variable, Pay-Fixed Interest Rate Swaps—Simplified Hedge Accounting Approach, a consensus of the Private Company Council	3	1.5
asu2014-06	Master Glossary	Technical Corrections	Technical Corrections and Improvements Related to Glossary Terms	2	3
asu2014-07	Broad Transactions	Consolidation	Consolidation (Topic 810): Applying Variable Interest Entities Guidance to Common Control Leasing Arrangements, a consensus of the Private Company Council	3	2

asu2014-08	Presentation	Presentation of Financial Statements	Presentation of Financial Statements (Topic 205) and Property, Plant, and Equipment (Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity	1	5
asu2014-09a	Revenue	Revenue Recognition	Revenue from Contracts with Customers	1	9
asu2014-10	Industry	Development Stage	Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation	2	1.5
asu2014-11	Broad Transactions	Transfers and Servicing	Transfers and Servicing (Topic 860): Repurchase-to-Maturity Transactions, Repurchase Financings, and Disclosures	1	2.5
asu2014-15	Presentation	Presentation of Financial Statements	Presentation of Financial Statements— Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern	1	3
asu2014-18	Broad Transactions	Business Combinations	Business Combinations (Topic 805): Accounting for Identifiable Intangible Assets in a Business Combination (a consensus of the Private Company Council)	3	1.5
asu2015-01	Presentation	Income Statement	Income Statement—Extraordinary and Unusual Items Subtopic 225-20): Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items	1	2.5
asu2015-03	Broad Transactions	Interest	Interest—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs	2	2
asu2015-04	Expenses	Compensation	Retirement Benefits (Topic 715): Practical Expedient for the Measurement Date of an Employer's Defined Benefit Obligation and Plan Assets	2	2
asu2015-05	Assets	Intangibles- Goodwill and Other	Intangibles—Goodwill and Other— Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement	3	3
asu2015-11	Assets	Inventory	Inventory (Topic 330): Simplifying the Measurement of Inventory	1	2.5
asu2015-14	Revenue	Revenue from Contracts with Customers	Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date	2	1
fas132r	Expenses	Compensation	Employers' Disclosures about Pensions and Other Postretirement Benefits—an amendment of FASB Statements No. 87, 88, and 106	2	1.5
fas141r	Broad Transactions	Business Combinations	Business Combinations	1	4
fas148	Expenses	Compensation	Accounting for Stock-Based Compensation—Transition and Disclosure	2	1
fas149	Broad Transactions	Derivatives and Hedging	Amendment of Statement 133 on Derivative Instruments and Hedging Activities	2	2
fas151	Assets	Inventory	Inventory Costs, an amendment of ARB No. 43, Chapter 4	1	4
fas152	Assets/Industry	Property, Plant, and Equipment/Real Estate-Retail Land	Accounting for Real Estate Time-Sharing Transactions—an amendment of FASB Statements No. 66 and 67	3	2
fas153	Broad Transactions	Nonmonetary Transactions	Exchanges of Nonmonetary Assets, an amendment of APB Opinion No. 29	1	4
fas154	Presentation	Accounting Changes and Corrections	Accounting Changes and Error Corrections, a replacement of APB Opinion No. 20 and FASB Statement No. 3	1	4
fas155	Broad Transactions	Derivatives and Hedging/Transfers and Servicing	Accounting for Certain Hybrid Financial Instruments—an amendment of FASB Statements No. 133 and 140	2	2
fas156	Broad Transactions	Transfers and Servicing	Accounting for Servicing of Financial Assets, an amendment of FASB Statement No. 140	2	2
fas157	Broad Transactions	Fair Value Measurement	Fair Value Measurement	1	2.5
fas158	Expenses	Compensation	Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans—an amendment of FASB Statements No. 87, 88, 106, and 132(R)	2	2
fas159	Broad Transactions	Financial Instruments	The Fair Value Option for Financial Assets and Financial Liabilities, Including an amendment of FASB Statement No. 115	2	2
fas160	Broad Transactions	Consolidation	Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51	1	4
fas161	Broad Transactions	Derivatives and Hedging	Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133	1	3
fas162	General Principles	GAAP	The Hierarchy of Generally Accepted Accounting Principles	2	2
fas163	Industry	Financial Services	Accounting for Financial Guarantee Insurance Contracts—an interpretation of FASB Statement No. 60	3	2
fas164	Assets	Intangibles- Goodwill and Other	Not-for-Profit Entities: Mergers and Acquisitions, Including an amendment of FASB Statement No. 142	3	4
fas165	Broad Transactions	Subsequent Events	Subsequent Events	2	2
fas166	Broad Transactions	Transfers and Servicing	Accounting for Transfers of Financial Assets, an amendment of FASB Statement No. 140	2	2
fas167	Broad Transactions	Consolidation	Amendments to FASB Interpretation No. 46(R)	2	2

Table 12-Comment Letter Participation by Standard Type (Mean)

type_standard	frequency	percentage	preparers	individuals	trade_assoc	accting_firm	Other
substantive (1)	18	28.57%	55.83333	18.5	33.88889	11.61111	19.83333
amendment (2)	30	47.62%	27.83333	6.933333	11.86667	7.633333	2.133333
industry (3)	15	23.81%	23.33333	4.733333	10.26667	10.06667	1.533333
Total	63	100.00%	34.7619	9.714286	17.77778	9.349206	7.047619

The above table provides the mean comment letter responses for each constituent group by standard type. Mean participation is highest for each constituent group for substantive changes made to the accounting standards.

Table 13- Correlation Matrix of Participation Levels by Constituent Group

	preparers	individuals	trade_assoc	accting_firm	other
preparers	1				
individuals	0.8777 0.0000*	1			
trade_assoc	0.9412 0.0000*	0.8749 0.0000*	1		
accting_firm	0.807 0.0000*	0.8714 0.0000*	0.8414 0.0000*	1	
other	0.8998 0.0000*	0.8898 0.0000*	0.9138 0.0000*	0.8614 0.0000*	1

*significant at $p < 0.0001$

The above table provides the correlation matrix for the constituent groups. The table shows that there is statistically significant correlation among each of the constituent groups at $p<0.0001$. Public accounting firms' participation was least correlated with the preparer group and had the least correlated with all groups.

Table 14- Categorization of *RBC_EDscore* and *change_RBCscore* by Statement

	Statement	Codification Topic	Codification Subtopic	*RBC_EDscore*	*change_RBCscore*
1	asu2009-01	General Principles	GAAP	1	0
2	asu2010-02	Broad Transactions	Consolidation	1	1
3	asu2010-06	Broad Transactions	Fair Value Measurement	2	2
4	asu2010-08	Master Glossary	Technical Corrections	0	2
5	asu2010-09	Broad Transactions	Subsequent Events	0	0
6	asu2010-10	Broad Transactions	Consolidation	1	1
7	asu2010-11	Broad Transactions	Derivatives and Hedging	2	2
8	asu2010-20	Assets	Receivables	2	3
9	asu2011-01	Assets	Receivables	0	0
10	asu2011-02	Assets	Receivables	1	0
11	asu2011-03	Broad Transactions	Transfers and Servicing	0	0
12	asu2011-04	Broad Transactions	Fair Value Measurement	4	-2
13	asu2011-05	Presentation	Comprehensive Income	1	2
14	asu2011-08	Assets	Intangibles- Goodwill and Other	2	1
15	asu2011-09	Expenses	Compensation	1	1
16	asu2011-11	Presentation	Balance Sheet	2	2
17	asu2011-12	Presentation	Comprehensive Income	1	0
18	asu2012-02	Assets	Intangibles- Goodwill and Other	2	0
19	asu2012_04	Master Glossary	Technical Corrections	2	-1
20	asu2013-01	Presentation	Balance Sheet	0	2
21	asu2013-02	Presentation	Comprehensive Income	2	1
22	asu2013-03	Broad Transactions	Financial Instruments	1	0
23	asu2013-07	Presentation	Presentation of Financial Statements	1	0
24	asu2013-08	Industry	Financial Services	1	-1
25	asu2013-09	Broad Transactions	Fair Value Measurement	0	1
26	asu2013-12	Master Glossary	Definition	1	0
27	asu2014-02	Assets	Intangibles- Goodwill and Other	3	1
28	asu2014-03	Broad Transactions	Derivatives and Hedging	2	-1
29	asu2014-06	Master Glossary	Technical Corrections	1	0
30	asu2014-07	Broad Transactions	Consolidation	2	2
31	asu2014-08	Presentation	Presentation of Financial Statements	2	4
32	asu2014-09a	Revenue	Revenue Recognition	4	3
33	asu2014-10	Industry	Development Stage	0	2
34	asu2014-15	Presentation	Presentation of Financial Statements	2	-1
35	asu2014-18	Broad Transactions	Business Combinations	2	-1

	Statement	Codification Topic	Codification Subtopic	*RBC_EDscore*	*change_RBCscore*
36	asu2015-01	Presentation	Income Statement	0	2
37	asu2015-03	Broad Transactions	Interest	1	0
38	asu2015-04	Expenses	Compensation	0	2
39	asu2015-05	Assets	Intangibles- Goodwill and Other	0	0
40	asu2015-11	Assets	Inventory	1	1
41	asu2015-14	Revenue	Revenue from Contracts with Customers	0	0
42	fas132r	Expenses	Compensation	3	0
43	fas141r	Broad Transactions	Business Combinations	3	-1
44	fas148	Expenses	Compensation	1	1
45	fas149	Broad Transactions	Derivatives and Hedging	1	0
46	fas151	Assets	Inventory	0	0
47	fas152	Assets/Industry	Property, Plant, and Equipment/ Real Estate- Retail Land	1	0
48	fas153	Broad Transactions	Nonmonetary Transactions	1	0
49	fas154	Presentation	Accounting Changes and Corrections	1	3
50	fas155	Broad Transactions	Derivatives and Hedging/ Transfers and Servicing	2	1
51	fas156	Broad Transactions	Transfers and Servicing	1	1
52	fas157	Broad Transactions	Fair Value Measurement	3	2
53	fas158	Expenses	Compensation	3	1
54	fas159	Broad Transactions	Financial Instruments	1	3
55	fas160	Broad Transactions	Consolidation	3	2
56	fas161	Broad Transactions	Derivatives and Hedging	1	1
57	fas162	General Principles	GAAP	2	0
58	fas163	Industry	Financial Services	2	1
59	fas164	Assets	Intangibles- Goodwill and Other	3	2
60	fas165	Broad Transactions	Subsequent Events	1	1
61	fas166	Broad Transactions	Transfers and Servicing	1	1
62	fas167	Broad Transactions	Consolidation	3	2

The above table provides the RBC_EDscore and the change_RBCscore for the proposed standards included in the sample. The calculation of the RBC_EDscore is described in Chapter 2. The determination of the change_RBC score is described in Chapter 5.

Table 15-Comment Letter Participation of Constituent Groups by RBC_EDscore (Mean)

RBC_EDscore	n	preparers	individuals	trade_assoc	accting_ firms	other	total part
0	12	11.833	2.250	6.667	7.750	0.333	28.833
1	24	25.542	8.042	11.542	8.167	2.417	55.708
2	17	20.353	5.647	15.294	9.000	2.059	52.353
3	8	66.375	10.375	28.625	8.125	5.875	119.375
4	2	279.000	106.500	137.000	41.000	150.000	713.500
Total	**63**	**34.762**	**9.714**	**17.778**	**9.349**	**7.048**	**78.651**

The above table provides the mean level of comment letter responses by RBC_EDscore.

Table 16-Results of Univariate Analysis of Variance by RBC_EDscore

Constituent Group	F-statistics (4,58)	p-value	
Preparers	12.14	0.0000	*
Individuals	9.69	0.0000	*
Trade_assoc	12.16	0.0000	*
Big_4	8.25	0.0000	*
Nonbig_4	7.58	0.0001	*
Other	14.20	0.0000	*

This table provides the results of the one-way ANOVA for each constituent group. The results demonstrate that there are significant differences in the mean responses for each specific constituent group across the various RBC_EDscore. Table 17 provides detailed analysis of each constituent group by RBC_EDscore.

Table 17- Tukey Post-Hoc Analysis of Each Constituent Group by RBC_EDscore

This table provides the Tukey post-hoc analysis for each constituent group by comparing the mean level of participation by RBC_EDscore. The results indicates that the most-rules based standards (RBC_EDscore =4) elicit higher mean responses are compared to the other RBC_EDscore. The Contrast column provides the difference in the mean participation for each pairwise comparison. For example, the preparers' mean participation for the proposed standard with RBC_EDscore of "0" increases by 13.7063 as the RBC_EDscore increases to "1."

preparers

edscore_rbc	Contrast	Std. Err.	Tukey t	Tukey P>t	
1 vs 0	13.7083	19.0077	0.7200	0.9510	
2 vs 0	8.5196	20.2702	0.4200	0.9930	
3 vs 0	54.5417	24.5388	2.2200	0.1860	
4 vs 0	267.1667	41.0613	6.5100	0.0000	*
2 vs 1	-5.1887	17.0426	-0.3000	0.9980	
3 vs 1	40.8333	21.9482	1.8600	0.3500	
4 vs 1	253.4583	39.5676	6.4100	0.0000	*
3 vs 2	46.0221	23.0502	2.0000	0.2810	
4 vs 2	258.6471	40.1894	6.4400	0.0000	*
4 vs 3	212.6250	42.5025	5.0000	0.0000	*

Big_4

edscore_rbc	Contrast	Std. Err.	Tukey t	Tukey P>t	
1 vs 0	0.1667	0.1848	0.9	0.8950	
2 vs 0	0.1324	0.1971	0.67	0.9620	
3 vs 0	0.2500	0.2386	1.05	0.8320	
4 vs 0	2.2500	0.3992	5.64	0.0000	*
2 vs 1	-0.0343	0.1657	-0.21	1.0000	
3 vs 1	0.0833	0.2134	0.39	0.9950	
4 vs 1	2.0833	0.3847	5.42	0.0000	*
3 vs 2	0.1176	0.2241	0.52	0.9840	
4 vs 2	2.1176	0.3908	5.42	0.0000	*
4 vs 3	2.0000	0.4133	4.84	0.0000	*

individuals

edscore_rbc	Contrast	Std. Err.	Tukey t	Tukey P>t	
1 vs 0	5.7917	7.9800	0.73	0.9500	
2 vs 0	3.3971	8.5100	0.4	0.9950	
3 vs 0	8.1250	10.3021	0.79	0.9330	
4 vs 0	104.2500	17.2387	6.05	0.0000	*
2 vs 1	-2.3946	7.1550	-0.33	0.9970	
3 vs 1	2.3333	9.2145	0.25	0.9990	
4 vs 1	98.4583	16.6116	5.93	0.0000	*
3 vs 2	4.7279	9.6771	0.49	0.9880	
4 vs 2	100.8529	16.8727	5.98	0.0000	*
4 vs 3	96.1250	17.8438	5.39	0.0000	*

nonBig_4

edscore_rbc	Contrast	Std. Err.	Tukey t	Tukey P>t	
1 vs 0	0.2500	2.7398	0.09	1.0000	
2 vs 0	1.1176	2.9218	0.38	0.9950	
3 vs 0	0.1250	3.5371	0.04	1.0000	
4 vs 0	31.0000	5.9187	5.24	0.0000	*
2 vs 1	0.8676	2.4566	0.35	0.9970	
3 vs 1	-0.1250	3.1637	-0.04	1.0000	
4 vs 1	30.7500	5.7034	5.39	0.0000	*
3 vs 2	-0.9926	3.3226	-0.3	0.9980	
4 vs 2	29.8824	5.7931	5.16	0.0000	*
4 vs 3	30.8750	6.1265	5.04	0.0000	*

trade_assoc

edscore_rbc	Contrast	Std. Err.	Tukey t	Tukey P>t	
1 vs 0	4.8750	9.0537	0.54	0.9830	
2 vs 0	8.6275	9.6551	0.89	0.8980	
3 vs 0	21.9583	11.6883	1.88	0.3400	
4 vs 0	130.3333	19.5583	6.66	0.0000	*
2 vs 1	3.7525	8.1177	0.46	0.9900	
3 vs 1	17.0833	10.4543	1.63	0.4820	
4 vs 1	125.4583	18.8468	6.66	0.0000	*
3 vs 2	13.3309	10.9793	1.21	0.7430	
4 vs 2	121.7059	19.1430	6.36	0.0000	*
4 vs 3	108.3750	20.2447	5.35	0.0000	*

other

edscore_rbc	Contrast	Std. Err.	Tukey t	Tukey P>t	
1 vs 0	2.0833	9.6557	0.22	1.0000	
2 vs 0	1.7255	10.2971	0.17	1.0000	
3 vs 0	5.5417	12.4655	0.44	0.9920	
4 vs 0	149.6667	20.8588	7.18	0.0000	*
2 vs 1	-0.3578	8.6575	-0.04	1.0000	
3 vs 1	3.4583	11.1495	0.31	0.9980	
4 vs 1	147.5833	20.1000	7.34	0.0000	*
3 vs 2	3.8162	11.7093	0.33	0.9970	
4 vs 2	147.9412	20.4159	7.25	0.0000	*
4 vs 3	144.1250	21.5909	6.68	0.0000	*

**Significant at p<0.0001*

Table 18- Descriptive Statistics for Big-4 *wordcount*

Means, Standard Deviations and Frequencies of wordcount							
	edscore_RBC						
type_standard	**0**	**1**	**2**	**3**	**4**	**Total**	
1	851.75	2276.65	3160.63	8801.08	11056.54	4987.43	*Mean*
	571.42	1335.68	1410.02	5345.24	5165.28	4919.65	*Std Dev*
	8	23	16	12	13	72	*n*
2	1117.32	2595.22	2417.19	4685.25	-	2416.34	*Mean*
	626.04	2085.33	1267.83	2331.74	-	1939.84	*Std Dev*
	28	51	27	12	0	118	*n*
3	451.40	2583.42	3812.00	3556.75	.	2777.07	*Mean*
	304.22	3182.54	2109.47	3077.69	.	2722.54	*Std Dev*
	10	19	20	8	0	57	*n*
Total	926.37	2514.02	3048.79	5946.56	11056.54	3249.05	*Mean*
	615.04	2188.70	1698.11	4410.25	5165.28	3425.08	*Std Dev*
	46	93	63	32	13	247	*n*

Table 19-Games and Howell Post-Hoc Analysis for Big-4 *wordcount*

			Games and Howell		
type_standard	**Diff.**	**Std.Err**	**t**	**adj. P>|t|**	
2 vs 1	-2571.092	606.6649	-4.24	0.0000	*****
3 vs 1	-2210.36	682.7824	-3.24	0.0040	***
3 vs 2	360.7312	402.4036	0.9	0.6440	

***significant at p<0.01

*****significant at p<0.0001

This table provides the pairwise comparison of the mean percneg_tone for each RBC_EDscore. The "difference" column provides the difference between the mean wordcount for each comparison. For example, when comparing the type_standard of "1" (mean = 4987.43) to "2" (mean = 2416.34) there is a decrease in the mean wordcount of 2571.09 words. This indicates that the negative tone decreases as the RBC_EDscore increases for this comparison.

Table 20-Descriptive Statistics for Big-4 *percneg_tone*

Means, Standard Deviations and Frequencies of percneg_tone							
	RBC_EDscore						
type_standard	**0**	**1**	**2**	**3**	**4**	**Total**	
1	0.01661	0.01878	0.02561	0.01158	0.01259	0.01774	*Mean*
	0.00584	0.01185	0.00994	0.00390	0.00236	0.00984	*Std Dev*
	8	23	16	12	13	72	*n*
2	0.01389	0.01160	0.01255	0.01332	-	0.01249	*Mean*
	0.00467	0.00471	0.00614	0.00233	-	0.00497	*Std Dev*
	24	51	31	12	0	118	*n*
3	0.02903	0.02033	0.01510	0.02311	-	0.02041	*Mean*
	0.02214	0.02042	0.00389	0.00786	-	0.01581	*Std Dev*
	10	19	20	8	0	57	*n*
Total	0.01801	0.01516	0.01643	0.01511	0.01259	0.01585	*Mean*
	0.01287	0.01196	0.00848	0.00662	0.00236	0.01039	*Std Dev*
	42	93	67	32	13	247	*n*

Table 21- Games and Howell Post-Hoc Analysis for Big-4 *percneg_tone*

			Games and Howell		
RBC_EDscore	**Diff.**	**Std.Err**	**t**	**adj. P>|t|**	
1 vs 0	-0.00285	0.00234	-1.22	0.7400	
2 vs 0	-0.00158	0.00224	-0.71	0.9540	
3 vs 0	-0.00290	0.00230	-1.26	0.7170	
4 vs 0	-0.00542	0.00209	-2.59	0.0870	*
2 vs 1	0.00127	0.00162	0.79	0.9340	
3 vs 1	-0.00005	0.00171	-0.03	1.0000	
4 vs 1	-0.00257	0.00140	-1.83	0.3610	
3 vs 2	-0.00132	0.00156	-0.84	0.9160	
4 vs 2	-0.00384	0.00123	-3.13	0.0210	**
4 vs 3	-0.00252	0.00134	-1.88	0.3420	

*significant at p<0.10

**significant at p<0.05

This table provides the pairwise comparison of the mean percneg_tone for each RBC_EDscore. The "difference" column provides the difference between the mean tones for each comparison. For example, when comparing the RBC_EDscore of "0" (mean = 1.801%) to "1" (mean = 1.516%) there is a decrease in the mean of 0.285%. This indicates that the negative tone decreases as the RBC_EDscore increases for this comparison.

Table 22- Descriptive Statistics for Big-4 *perclitig_tone*

Means, Standard Deviations and Frequencies of perclitig_tone							
	RBC_EDscore						
type_standard	**0**	**1**	**2**	**3**	**4**	**Total**	
1	0.00112	0.00178	0.00492	0.00247	0.00882	0.00379	*Mean*
	0.00117	0.00172	0.00679	0.00239	0.00697	0.00522	*Std Dev*
	8	23	16	12	13	72	*n*
2	0.00631	0.00618	0.00468	0.00453	.	0.00565	*Mean*
	0.00670	0.00845	0.00627	0.00307	.	0.00713	*Std Dev*
	24	51	31	12	0	118	*n*
3	0.00574	0.00277	0.01095	0.00405	.	0.00634	*Mean*
	0.01430	0.00265	0.01475	0.00626	.	0.01125	*Std Dev*
	10	19	20	8	0	57	*n*
Total	0.00519	0.00440	0.00661	0.00364	0.00882	0.00527	*Mean*
	0.00862	0.00670	0.00996	0.00389	0.00697	0.00786	*Std Dev*
	42	93	67	32	13	247	*n*

Table 23- Games and Howell Post-Hoc Analysis for Big-4 *perclitig_tone*

			Games and Howell	
RBC_EDscore	**Diff.**	**Std.Err**	**t**	**adj. P>|t|**
1 vs 0	-0.00079	0.00150	-0.53	0.9840
2 vs 0	0.00142	0.00180	0.79	0.9330
3 vs 0	-0.00155	0.00150	-1.03	0.8390
4 vs 0	0.00363	0.00235	1.55	0.5440
2 vs 1	0.00221	0.00140	1.58	0.5140
3 vs 1	-0.00076	0.00098	-0.78	0.9370
4 vs 1	0.00442	0.00206	2.15	0.2490
3 vs 2	-0.00297	0.00140	-2.13	0.2180
4 vs 2	0.00221	0.00228	0.97	0.8670
4 vs 3	0.00518	0.00205	2.52	0.1370

There are no significant results in the group comparisons by RBC_EDscore.

This table provides the pairwise comparison of the mean perclitig_tone for each RBC_EDscore. The "difference" column provides the difference between the mean tones for each comparison. See Table 18 for an example of the calculation of difference.

Table 24- Descriptive Statistics for Big-4 *percuncertain_tone*

Means, Standard Deviations and Frequencies of percuncertain_tone							
	RBC_EDscore						
type_standard	**0**	**1**	**2**	**3**	**4**	**Total**	
1	0.01255	0.01083	0.02029	0.01046	0.01985	0.01469	*Mean*
	0.00549	0.00553	0.00962	0.00313	0.00346	0.00747	*Std Dev*
	8	23	16	12	13	72	*n*
2	0.00927	0.01048	0.01459	0.01341	-	0.01161	*Mean*
	0.00502	0.00508	0.00786	0.00412	-	0.00615	*Std Dev*
	24	51	31	12	0	118	*n*
3	0.01188	0.01189	0.01325	0.01231	-	0.01243	*Mean*
	0.00531	0.00595	0.00515	0.00406	-	0.00523	*Std Dev*
	10	19	20	8	0	57	*n*
Total	0.01052	0.01086	0.01555	0.01203	0.01985	0.01270	*Mean*
	0.00526	0.00535	0.00802	0.00386	0.00346	0.00649	*Std Dev*
	42	93	67	32	13	247	*n*

Table 25- Games and Howell Post-Hoc Analysis for Big-4 *percuncertain_tone*

			Games and Howell		
RBC_EDscore	**Diff.**	**Std.Err**	**t**	**adj. P>|t|**	
1 vs 0	0.00034	0.00098	0.35	0.9970	
2 vs 0	0.00503	0.00127	3.96	0.0010	****
3 vs 0	0.00151	0.00106	1.43	0.6130	
4 vs 0	0.00933	0.00126	7.43	0.0000	*****
2 vs 1	0.00469	0.00113	4.17	0.0010	****
3 vs 1	0.00117	0.00088	1.33	0.6730	
4 vs 1	0.00899	0.00111	8.11	0.0000	*****
3 vs 2	-0.00352	0.00119	-2.95	0.0320	**
4 vs 2	0.00430	0.00137	3.13	0.0250	**
4 vs 3	0.00782	0.00118	6.64	0.0000	*****

***significant at p<0.05*
*****significant at p<0.001*
******significant at p<0.0001*

This table provides the pairwise comparison of the mean percuncertain_tone for each RBC_EDscore. The "difference" column provides the difference between the mean tones for each comparison. See Table 18 for an example of the calculation of difference.

Table 26-Descriptive Statistics for Big-4 *percuncertain2_tone*

Means, Standard Deviations and Frequencies of percuncertain2_tone							
	RBC_EDscore						
type_standard	**0**	**1**	**2**	**3**	**4**	**Total**	
1	0.01574	0.01592	0.02881	0.01784	0.02469	0.02067	*Mean*
	0.00719	0.00599	0.01473	0.01164	0.00342	0.01069	*Std Dev*
	8	23	16	12	13	72	*n*
2	0.01401	0.01913	0.02029	0.01935	.	0.01841	*Mean*
	0.00581	0.03775	0.01052	0.01075	.	0.02569	*Std Dev*
	24	51	31	12	0	118	*n*
3	0.01311	0.01634	0.01718	0.01960	.	0.01652	*Mean*
	0.00471	0.00706	0.00550	0.00551	.	0.00610	*Std Dev*
	10	19	20	8	0	57	*n*
Total	0.01412	0.01776	0.02139	0.01884	0.02469	0.01863	*Mean*
	0.00578	0.02820	0.01130	0.00983	0.00342	0.01891	*Std Dev*
	42	93	67	32	13	247	*n*

Table 27- Games and Howell Post-Hoc Analysis for Big-4 *percuncertain2_tone*

			Games and Howell		
RBC_EDscore	**Diff.**	**Std.Err**	**t**	**adj. P>|t|**	
1 vs 0	0.00364	0.00306	1.19	0.7570	
2 vs 0	0.00727	0.00164	4.42	0.0000	*****
3 vs 0	0.00472	0.00195	2.42	0.1290	
4 vs 0	0.01057	0.00130	8.11	0.0000	*****
2 vs 1	0.00363	0.00323	1.12	0.7940	
3 vs 1	0.00108	0.00340	0.32	0.9980	
4 vs 1	0.00693	0.00307	2.25	0.1690	
3 vs 2	-0.00255	0.00222	-1.15	0.7800	
4 vs 2	0.00330	0.00168	1.97	0.2940	
4 vs 3	0.00585	0.00198	2.95	0.0390	**

***significant at p<0.05*

******significant at p<0.0001*

This table provides the pairwise comparison of the mean percuncertain2_tone for each RBC_EDscore. The "difference" column provides the difference between the mean tones for each comparison. See Table 18 for an example of the calculation of difference.

Table 28- Games and Howell Post-Hoc Analysis for Big-4 *percneg_tone* for Substantive-Type EDs (type_standard = 1)

			Games and Howell		
RBC_EDscore	**Diff.**	**Std.Err**	**t**	**adj. P>|t|**	
1 vs 0	0.00217	0.00322	0.68	0.9600	
2 vs 0	0.00900	0.00323	2.79	0.0740	*
3 vs 0	-0.00503	0.00235	-2.14	0.2690	
4 vs 0	-0.00402	0.00216	-1.86	0.4050	
2 vs 1	0.00683	0.00350	1.95	0.3110	
3 vs 1	-0.00720	0.00272	-2.65	0.0860	*
4 vs 1	-0.00619	0.00256	-2.42	0.1420	
3 vs 2	-0.01403	0.00273	-5.14	0.0000	*****
4 vs 2	-0.01302	0.00257	-5.07	0.0010	****
4 vs 3	0.00101	0.00130	0.78	0.9340	

**significant at p<0.10*
*****significant at p<0.001*
******significant at p<0.0001*

This table provides the pairwise comparison of the mean percuncertain2_tone for each RBC_EDscore. The "difference" column provides the difference between the mean tones for each comparison. See Table 18 for an example of the calculation of difference.

Table 29- Games and Howell Post-Hoc Analysis for Big-4 *perclitig_tone* for Substantive-Type EDs (type_standard = 1)

			Games and Howell		
RBC_EDscore	**Diff.**	**Std.Err**	**t**	**adj. P>|t|**	
1 vs 0	0.00066	0.00055	1.21	0.7450	
2 vs 0	0.00381	0.00175	2.18	0.2350	
3 vs 0	0.00135	0.00081	1.68	0.4700	
4 vs 0	0.00770	0.00198	3.89	0.0130	**
2 vs 1	0.00314	0.00174	1.81	0.4010	
3 vs 1	0.00069	0.00078	0.89	0.8980	
4 vs 1	0.00704	0.00197	3.58	0.0240	**
3 vs 2	-0.00245	0.00183	-1.34	0.6720	
4 vs 2	0.00389	0.00257	1.51	0.5630	
4 vs 3	0.00635	0.00205	3.09	0.0500	**

**significant at p<0.05*

This table provides the pairwise comparison of the mean percuncertain2_tone for each RBC_EDscore. The "difference" column provides the difference between the mean tones for each comparison. See Table 18 for an example of the calculation of difference.

Table 30- Games and Howell Post-Hoc Analysis for Big-4 *percuncertain_tone* for Substantive-Type EDs (type_standard = 1)

RBC_EDscore	Diff.	Std.Err	Games and Howell t	adj. P>|t|	
1 vs 0	-0.00172	0.00226	-0.76	0.9370	
2 vs 0	0.00774	0.00309	2.5	0.1270	
3 vs 0	-0.00209	0.00214	-0.98	0.8590	
4 vs 0	0.00730	0.00216	3.37	0.0420	**
2 vs 1	0.00946	0.00267	3.55	0.0140	**
3 vs 1	-0.00037	0.00146	-0.25	0.9990	
4 vs 1	0.00902	0.00150	6.01	0.0000	*****
3 vs 2	-0.00983	0.00257	-3.83	0.0090	***
4 vs 2	-0.00044	0.00259	-0.17	1.0000	
4 vs 3	0.00939	0.00132	7.13	0.0000	*****

***significant at p<0.05*
****significant at p<0.01*
******significant at p<0.0001*

This table provides the pairwise comparison of the mean percuncertain2_tone for each RBC_EDscore. The "difference" column provides the difference between the mean tones for each comparison. See Table 21 for an example of the calculation of difference.

Table 31- Kruskal-Wallis Equality of Ranks Test for Big-4 Tone and *wordcount* Measures

		percneg_tone		perclitig_tone		percuncertain_tone		wordcount	
make_work	**Obs**	**Rank Sum**	**Mean Rank Sum**	**Rank Sum**	**Mean Rank Sum**	**Rank Sum**	**Mean Rank Sum**	**Rank Sum**	**Mean Rank Sum**
0	192	22275.5	116.02	22417	116.7552	21569.5	112.3411	20431	106.4115
1	48	6644.5	138.43	6503	135.4792	7350.5	153.1354	8489	176.8542

chi-squared	4.001	2.793	13.258	39.533
p-value	0.0455**	0.0947*	0.0003****	0.0001*****

*Significant at p<0.10
**Significant at p<0.05
****Significant at p<0.001
*****Significant at p<0.0001

The Kruskal-Wallis is a rank-based nonparametric test that evaluates the rank sum of two groups. This table shows the difference in the rank sum of those proposed standards that require incremental audit effort ("1"), or work, and those that do not ("0"). The Mean Rank sum is calculated by dividing the rank sum by the number of observations in each group. For example, for percneg_tone the mean rank increases when the proposed standard requires incremental audit work, indicating that the negative tone is higher when there is more work or audit effort required.

Table 32- Reconciliation of Public Company Preparers Included in Regression Analysis

Total number of public company preparers	1191
Less: ASU 2014-08	-8
Less: SFAS 159	-33
Less: Public companies with non-Big 4 auditors	-23
Less: Unreadable PDF files	-39
Adjusted number of public company preparers	**1088**

The above table provides a reconciliation of the total public company preparers included in the overall sample of 63 SFASs and ASUs in Chapter 2. Certain files were unreadable and were excluded from the analysis of the client preference variable as noted above.

Table 33- Mean *wordcount*, *percneg_tone*, and *percuncertain_tone* for Sample of Public Company Preparers

RBC_EDscore	wordcount	percneg_tone	percuncertain_tone
0	678.27710	0.01401	0.00734
1	1629.25900	0.01607	0.01017
2	1588.45000	0.01993	0.01214
3	2116.53700	0.01612	0.01243
4	2866.26300	0.01370	0.01414
Total	**1968.95200**	**0.01607**	**0.01184**

The above table provides the mean wordcount, percneg_tone, and percuncertain_tone by RBC_EDscore for the sample of 1088 public companies used to analyze the client preference variable.

Table 34- Results of Regression Analysis for Equation 1 (Big-4 *percneg_tone*)

Dependent Variable	Obs	Parms	RMSE	"R-sq"	F	P
percneg_tone	239	7	0.009146	0.187	8.896334	0

Equation 1	Predicted Sign	Coef.	Std. Err.	t	P>|t|		[95% Conf.	Interval]
mean_percnegtone (client)	+	0.4043	0.0600	6.7400	0.0000	***	0.2861	0.5225
RBC_EDscore								
1	-	-0.0024	0.0017	-1.4200	0.1580		-0.0058	0.0009
2	-	-0.0032	0.0019	-1.6800	0.0950	*	-0.0070	0.0006
3	-	-0.0049	0.0023	-2.1300	0.0340	**	-0.0095	-0.0004
4	-	-0.0083	0.0032	-2.5900	0.0100	***	-0.0146	-0.0020
1.make_work	-	0.0020	0.0017	1.1400	0.2570		-0.0015	0.0054
_cons		0.0137	0.0015	9.3500	0.0000		0.0109	0.0166

*Significant at p < 0.10

**Significant at p < 0.05

***Significant at p < 0.01

****Significant at p < 0.0001

Table 35- Results of Regression Analysis for Equation 2 (Big-4 *percuncertain_tone*)

Dependent Variable	Obs	Parms	RMSE	"R-sq"	F	P
percuncertain_tone	239	7	0.005821	0.2304	11.57405	0

Equation 2	Predicted Sign	Coef.	Std. Err.	t	P>|t|		[95% Conf.	Interval]
mean_percuncerttone (client)	-	0.2536	0.0584	4.3400	0.0000	***	0.1385	0.3686
RBC_ EDscore								
1	-	-0.0007	0.0011	-0.6600	0.5110		-0.0029	0.0014
2	-	0.0026	0.0012	2.0800	0.0380	**	0.0001	0.0050
3	-	-0.0019	0.0015	-1.2800	0.2020		-0.0049	0.0010
4	-	0.0042	0.0021	1.9800	0.0490	**	0.0000	0.0085
1.make_work	+	0.0022	0.0011	2.0400	0.0430	**	0.0001	0.0044
_cons		0.0101	0.0009	10.9800	0.0000		0.0083	0.0119

**Significant at p < 0.05
****Significant at p < 0.0001

Table 36- Big-4 Comment Letters by *change_RBCscore*

Number of Comment Letters by *changescore_RBC*			
changescore_RBC	**Freq.**	**Percent**	**Cumulative Percent**
(-2)	4	1.62	1.62
(-1)	23	9.31	10.93
0	78	31.58	42.51
1	66	26.72	69.23
2	51	20.65	89.88
3	21	8.50	98.38
4	4	1.62	100.00
Total	247	100.00	

This table provides the number of comment letters by change_RBCscore (frequency) and the percentage of comment letters within the sample for each change score. The change_RBCscore measures how much more(less) rules-based (principles-based) or the change in the rules-based attributes of the Final Standard as compared to the Exposure Draft.

Table 37- Transition Matrix of *RBC_EDscore* and *change_RBCscore*

		changescore_RBC							
		-2	**-1**	**0**	**1**	**2**	**3**	**4**	**Total**
RBC_EDscore	**0**	0.00%	0.00%	52.17%	6.52%	41.30%	0.00%	0.00%	100.00%
	1	0.00%	4.30%	45.16%	37.63%	4.30%	8.60%	0.00%	100.00%
	2	0.00%	23.81%	12.70%	25.40%	25.40%	6.35%	6.35%	100.00%
	3	0.00%	12.50%	12.50%	37.50%	27.50%	0.00%	0.00%	100.00%
	4	30.77%	0.00%	0.00%	0.00%	0.00%	69.23%	0.00%	100.00%
Total		**1.62%**	**9.31%**	**31.58%**	**26.72%**	**20.65%**	**8.50%**	**1.62%**	**100.00%**

This table provides the percentage of comment letter for each change_RBCscore by original RBC_EDscore. For example, there are 52.17% of the comment letters associated to the Exposure Drafts with a RBC_EDscore of "0" and a change_RBCscore of "0." For the overall sample, there are 31.58% of the comment letters associated to the Exposure Drafts with a change_RBCscore of "0."

Table 38- Descriptive Statistics for *wordcount* and Tone Measures by *change_RBCscore* (mean) for the Big-4 Accounting Firms

changescore _RBC	frequency	percneg_tone	perclitig_tone	percuncertain _tone	percuncertain2 _tone	wordcount
-2	4	0.01077	0.00175	0.02126	0.02574	6711.00
-1	23	0.01826	0.00648	0.01433	0.02115	5746.91
0	78	0.01868	0.00491	0.01108	0.01543	1673.45
1	66	0.01343	0.00602	0.01231	0.02102	3087.97
2	51	0.01375	0.00404	0.01350	0.01860	2750.06
3	21	0.01406	0.00749	0.01509	0.01985	7523.67
4	4	0.02793	0.00031	0.00971	0.01426	2727.00
Total	247	0.01585	0.00527	0.01270	0.01863	3249.05

Table 39- Results of Spearman Rank-Order Correlation for Big-4 Tone and *wordcount* Measures

	Observations	Predicted Sign	Spearman's rho	Prob > |t|	
percneg_tone	247	+	-0.0622	0.3307	
perclitig_tone	247	+	-0.0173	0.7869	
percuncertain_tone	247	+	0.0916	0.1510	
percuncertain2_tone	247	+	0.1254	0.0490	**
wordcount	247	+	0.1188	0.0622	*

*significant at p<0.10
**significant at p<0.05

This table provides the results for the Spearman Rank-Order Correlation test of the association between tone and the length of the Big 4's comment letters and the change_RBCscore. Spearman's rho ranges from -1 to 1. A positive (negative) Spearman's rho indicates that there is a positive association between the tone/length measures.