7-8-2016

Nanofabrication and Spectroscopy of Magnetic Nanostructures Using a Focused Ion Beam

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ESSAYS ON THE U.S. GAAP-IFRS CONVERGENCE PROJECT, THE NATURE OF ACCOUNTING STANDARDS, AND FINANCIAL REPORTING QUALITY

A dissertation submitted in partial fulfillment of
the requirements for the degree of
DOCTOR OF PHILOSOPHY
in
BUSINESS ADMINISTRATION
by
Assma M. Sawani

2016

To: Acting Dean Jose M. Aldrich
College of Business

This dissertation, written by Assma M. Sawani and entitled Essays on the U.S. GAAP-IFRS Convergence Process, the Nature of Accounting Standards, and Financial Reporting Quality, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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DEDICATION

I dedicate this thesis to my parents, Mustafa and Amal Sawani. Without their duaas, patience, understanding support and most of all love, the completion of this work would not have been possible.

ACKNOWLEDGMENTS

I wish to give thanks and praise first and foremost to Allah for giving me the strength and fortitude to complete this degree. I wish to thank my family in particular my parents, brother, Ali, whose support was essential to my completion of this dissertation and sister, Abrar, who tirelessly collected data with me. I wish to express my deep gratitude and thanks to Dr. Steve Lin, for his dedication, guidance and enthusiasm in helping me develop my proposal and making this dissertation possible. I would also like to thank the many professors at Florida International University's School of Accounting for their encouragement and guidance throughout the last four years as I worked toward completion of my degree. I would also like to thank my fellow graduate students in the accounting program for their comradery and support. Finally, I want to thank the KPMG Foundation for awarding me the Minority Accounting Doctoral Scholarship for the duration of my time as graduate student.

ABSTRACT OF THE DISSERTATION

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by

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In this dissertation, I examine the changes to the nature of the accounting paradigms of U.S. GAAP and International Financial Reporting Standards (IFRS) over the course of the U.S. GAAP and IFRS convergence project. I further examine whether the changes to the nature of IFRS following convergence impacts the financial reporting quality. The motivation for this study is to provide an initial review of the progress of the convergence process between U.S. GAAP and IFRS that aims to converge both sets of standards towards more principles-based paradigms. The ultimate goal of the convergence process was the development of globally recognized high quality financial reporting standards (FASB, 2002) and the development of principles-based accounting standards was identified as an essential component of such a goal. Extant literature and professional practice agree that U.S. GAAP is more rules-based whereas IFRS is more principles-based. Thus, both the International Accounting Standards Board (IASB) and the U.S. Financial Accounting Standards Board (FASB) agreed that the convergence process would be an ideal vehicle to converge both sets of standards towards more principles-based paradigm. I document that over the course of the convergence project,

the underlying accounting paradigm of U.S. GAAP has remained consistent whereas the accounting paradigm of IFRS has become more rules-based. Amendments to existing International Standards and newer standards added over the course of the convergence have moved IFRS towards a more rules-based nature which was not the intended outcome of the convergence process. I further examine if the changes in rules vs. principles-based nature of IFRS has impacted the accounting quality. Using a firm level instrument developed in Folsom et al. (2016) that measures the extent to which firms rely on principles-vs –rules-based accounting, standards I find a relation between firm reliance on principles-based standards and earnings persistence. I also find an association between firm reliance on principles-based standards and earnings ability to predict future cash flows as well as concurrent returns. More, importantly the results of my study provide initial evidence that these associations are significantly manifested in the post-convergence period.

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I. Introduction

"If one were writing a history of the American capital market, it is a fair bet that the single most important innovation shaping that market was the idea of generally accepted accounting principles. We need something similar internationally."

---Larry Summers, Former Secretary of the U.S. Treasury (1998)

Capital Markets have been interested in the development of high-quality globally accepted compatible accounting standards for a long time. The 2002 Norwalk Agreement between U.S. Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) was a major milestone in the road to globally accepted high-quality accounting standards. At the same time, the debate over whether high-quality standards should have a principles-based nature vs. rules-based nature had gained new traction. Unsurprisingly, both Boards agreed to work together to develop high-quality principles-based standards founded on a conceptual framework. By 2012, the decade long convergence process had come to an end. The conclusion of convergence process and the continued debate as to the merits of principles vs. rules-based standards provide the impetus for this dissertation.

My dissertation examines two issues related to the nature of accounting standards. In the first part, I examine the nature of International Financial Reporting Standards (IFRS)[1] and U.S. Generally Accepted Accounting Practices (U.S. GAAP) over the course of the International IASB-FASB convergence project. The development of principles-based standards was one of the objectives of convergence. Some academics propose that accounting standards lie on a spectrum ranging from purely rules-based to

[1] IAS is the name used for standards issued by the International Accounting Standards Committee (IASC) the predecessor of IASB. Throughout this paper IFRS is used to denote international standards both IFRS and IAS.

purely principles-based (Melone, 2003; Cunningham, 2007; SEC, 2003). It is commonly accepted in the accounting literature and practice that International Accounting Standards (IAS) and IFRS are situated at the more principles-based end of the spectrum whereas U.S. GAAP is at the more rules-based end of the spectrum. Many accounting studies examine specific standards within the principles-vs-rules debate, but no accounting research has examined this issue for the accounting standards as a whole body as a goal of the convergence process. Following Mergenthaler (2011), I use textual analysis to construct an instrument that measures the extent to which U.S. GAAP and IFRS standards contain rules-based characteristics. I then examine how and if the overall nature of the two sets of accounting standards changed. Understanding how and if the nature of these two sets of accounting standards changed is important to assessing the outcomes of the convergence process and can inform future efforts towards further cooperation.

In the second part of the dissertation, I examine whether the change in the nature of the IFRS due to the convergence process has affected earnings informativeness. The development of principles-based standards was a main objective of convergence. One of the main drivers for renewed interest in the virtues of principles- vs rules-based standards was the accounting scandals in the early 2000s. Proponents of principles-based standards assert that use of such standards leads to information that better reflects economic reality. For example, a 2008 industry white paper, issued by the largest global accounting firms, identified characteristics of a high quality principles-based system and outlined a framework for ensuring that IFRS *continues* to be a principles-based accounting system (DiPiazza et al., 2008). Furthermore, both regulators and standard setters have argued

that movement towards more principles-based accounting standards will provide better quality information and is the future of accounting standard setting. Despite these assertions, the evidence in the extant literature is sparse and conflicted. Folsom et al. (2016) construct a firm level measure of reliance on principles-based standards and find that for a sample of U.S. firms reliance on principles-based standards is associated with more informative and more persistent earnings. I use textual analysis to develop this measure and examine the association between usage of principles-based standards and earnings informativeness for a sample of foreign firms that cross-list in U.S. capital markets and use IFRS in the pre and post convergence era.

The remainder of this dissertation is organized as follows: Part II discusses the nature of U.S. GAAP and IFRS over the course of the convergence process. Part III discusses the nature of IFRS and earnings informativeness pre and post-convergence. The dissertation concludes with a summary and discussion.

II: Nature of Accounting Standards

II.1 Introduction

Historically, there has long been an interest in the development of high-quality globally accepted accounting standards; yet for a long time, the challenges to achieving such an 'idealistic' goal seemed insurmountable. Although IFRS have been available since the mid 70's, for the most part, these standards were not used by the majority of firms that listed in the major capital markets, in part due to their flexibility and lack of enforcement. Moreover, IFRS were perceived as poorer quality standards when compared to other more commonly used accounting standards, specifically U.S. GAAP. However, in the last 25 years, increased globalization and international trade have brought accounting standard setting and the nature of accounting standards to the forefront. By the late 90's, the increased globalization of economies, especially globalization of investments and borrowing and rapid growth in multinational enterprises, underscored the significance of having international accounting standards that were of high quality and ensured comparability of financial information across capital markets. In 2001, the International Accounting Standards Committee (IASC) gave way to a new international standard setting body, the IASB. The IASB's main objective was to develop high-quality principles-based accounting standards that would increase the comparability of financial information globally and provide useful information for capital market participants (IASB 2001). The creation of the IASB threw open the door to further international developments. In 2002, the European Union (E.U.) announced mandatory IFRS adoption for consolidated financial statements of all European companies whose debt or equity securities trade in a regulated market in Europe,

effective in 2005. In late 2002, in a joint meeting in Norwalk, Connecticut, the FASB and the IASB boldly stated their commitment to the development of high-quality, compatible accounting standards that could be used for both domestic and cross-border financial reporting. The ultimate goal being the development of one set of global high-quality accounting standards used in *all* capital markets. In what was called the Norwalk Agreement, both standard setting bodies pledged to concentrate and combine their efforts to make existing financial reporting standards converge towards fully compatible high quality accounting standards as soon as feasible (FASB,2002). Thus, the journey towards a common accounting language for financial reporting began in earnest in the early 2000s. Significantly, the IASB emphasized the 'principles-based' nature of its standards as the prominent contribution if not the most important contribution it brought to the convergence. In a 2006 speech to the ECON Committee of the European Parliament, former IASB Chairman Sir David Tweedy emphasized the importance of principles-based standards to the IASB with respect to convergence:

> ". . . those who support a more principles-based approach to accounting worry about increased complexity and do not want convergence to lead to a rulebook approach to international standards. My colleagues and I are committed to writing principles-based standards, because we believe that principles-based standards are easier to apply and actually cause more rigorous and consistent application of the standards' intent. This does not mean standards will be more lax. The contrary will be the case. A well-defined principle will allow for few exceptions and bright lines, which have been used to obfuscate financial results for too long."

Ensuring that both sets of standards converged towards more principles-based paradigm was an underlying goal of the Norwalk agreement and was specifically identified as a goal in the subsequent Memorandums of Understanding (MOU) issued in 2006 and 2008 by both boards. Unlike the original Norwalk Agreement, the 2008 MOU

provided a clear roadmap for achieving convergence that focused on joint projects identified for convergence in the 2006 MOU. In the MOU, it states, "The Boards agreed that the goal of the joint projects is to produce *common principles-based standards*, subject to the required due process" (FASB, 2008). The nature of accounting standards, specifically the pursuit of principles-based standards was both an explicit and implicit end goal of convergence. The U.S.GAAP and IFRS convergence process that began with much excitement and energy ended nearly a decade later with much less fanfare. The convergence process had many goals, prominent among them was the development of principles-based standards; therefore an objective assessment of its achievements is of interest to financial market participants, regulators, practitioners, and academics. Furthermore, the debate surrounding principles vs. rules-based standards remains a significant topic of interest. In addition, the findings from such analysis can influence how efforts towards harmonization will proceed in the future.

A number of accounting studies examine specific standards within the principles-vs-rules debate, but few studies have examined this issue for the accounting standards as a whole body as a goal of the convergence process. This is very important given that the convergence process in its current manifestation has concluded; yet, the FASB, SEC, IASB and accounting professional have all reaffirmed their dedication to the development of high quality globally accepted accounting standards. Moreover, the accounting scholars continue to argue that convergence between U.S. GAAP and IFRS is important. In their December 2015 address to the AICPA, SEC Chair Mary Jo White and Chief Accountant James Schnurr reaffirmed the importance of continued FASB and IASB collaboration on standard-setting projects in an effort to improve the quality of

financial reporting. Moreover, in his address to the AICPA, current IASB Chairman Hans Hoogervorst requested that U.S. accounting professionals "stay engaged [with the IASB]" and help in the development of high-quality standards.

I employ Perl and JAVA textual analysis software to construct the rules-based continuum score (RBC) developed in Mergenthaler (2011). Using the four rules-based characteristics identified by the SEC (2002) and FASB (2003) studies exploring how to make U.S. GAAP principles-based and supplemented by an industry white paper (DiPiazza, 2008), Mergenthaler creates an instrument that measures whether U.S. GAAP standards contain each of four rules-based characteristics. These characteristics are: (1) bright-line tests, (2) scope and legacy exceptions, (3) large volumes of implementation or interpretive guidance, and finally (4) a high level of detail. Using keywords, I search for these four characteristics and I measure the extent to which IAS, IFRS, Standard Interpretations Committee (SIC) interpretations and International Financial Reporting Interpretations Committee (IFRIC) interpretations contain the characteristics. Mergenthaler (2011) provides this measure for U.S. GAAP through 2006, but does not provide the same measure for IFRS. I develop the RBC score for IFRS thru 2014 and extend the measure for U.S.GAAP beyond 2006 given that most of the changes related to the convergence process occurred after 2006. Furthermore, I map the U.S. GAAP standards to the new FASB codification to provide an analysis of the standards and changes to both sets of standards throughout the entire official convergence period. Using the RBC measure, I find that IFRS has over time become significantly *less* principles-based. Most importantly, this movement towards the more-rules based end of the spectrum is most significant during the convergence period, specifically in the later

years. I also find that during the convergence decade there was some movement towards the principles-based end of the spectrum for U.S.GAAP but it was insignificant and the nature of U.S. GAAP remained mostly unchanged. My findings show that the convergence process moved IFRS along the spectrum towards a paradigm that includes more rules-based paradigm standards via the revisions of existing standards and introduction of new standards. For example, IAS 22 *Business Combinations,* originally issued in 1983, was a purely principles-based standard. In 2005, the standard was replaced by IFRS 3. IFRS 3 includes a statement explaining "[IFRS 3] is part of a joint effort by the IASB and FASB to improve financial reporting while promoting the international convergence of accounting standards." IFRS 3 is lengthier than IAS 22, includes two scope exceptions, and is accompanied by four IFRICs to provide additional guidance---all characteristics of rules-based standards.

In summary, practitioners, regulators, and academics all agree that the development of high-quality global accounting standards is necessary and that such standards will lead to more informative financial information. Moreover, there is consensus among regulators, academics, and practitioners that U.S. GAAP is largely rules-based and IFRS is largely principles-based. In the extant literature, Mergenthaler (2011) provides an instrument to measure the extent to which a standard is rules or principles-based and uses this instrument to score U.S. GAAP through 2006. He finds that U.S. GAAP is mostly rules-based but does consist of principles-based standards as well. Yet to date, the literature remains silent as to the IFRS paradigm as well as if and how the U.S. GAAP –IFRS convergence process impacted these paradigms. I aim to fill this gap and examine these issues in this section of the dissertation. Furthermore, given

that one of the goals of the convergence project was to converge towards principles-based standards, such an examination is warranted and should provide useful information to regulators, academia, and practitioners.

II.2 IFRS, U.S.GAAP and the Convergence Process

"Global investors and companies are impatient for regulators to converge on global accounting standards"----- (Morgan Stanley Dean Witter, 1999)

Accounting standards provide guidelines for measuring and reporting information in financial reports, therefore the development and application of these standards are of interest to many different stakeholders within capital markets and economies. Yet the nature of these standards, the standard setting process and the differences/similarities of standards in different jurisdictions seemed to attract little attention. The Enron and WorldCom scandals of the early 2000s as well as the more recent 2008 financial crisis brought renewed and more prominent scrutiny to accounting standards. In the aftermath of the financial scandals of the early 2000s there arose a demand that the "cumbersome rules-based" U.S. GAAP be amended or abandoned in favor of broader more principles-based standards (Schipper, 2003). The SOX Act of 2002 included a directive for the SEC to examine the "potential of changing the U.S. financial reporting system to a principles-based system" (Congress, 2002).

The creation of the IASB and the E.U.'s mandatory adoption of IFRS in 2005 made IFRS the most widely-used set of accounting standards in the world (DeFond et al. 2012). This brought renewed interest from a variety of stakeholders as to the nature,

quality and development of these standards. Moreover, the eminence of IFRS on the world stage provided some of the impetus for the 2002 Norwalk Agreement in which both the FASB and IASB formally agreed to work together to produce common high-quality accounting standards that could be used in any capital market regardless of the jurisdiction. A central theme of this convergence process was the need for principles-based accounting standards founded in a conceptual framework (FASB, 2002; 2006; 2008). Subsequent to the Norwalk Agreement and E.U. adoption of IFRS, a plethora of accounting studies examine the effect of both voluntary and mandatory IFRS adoption on accounting quality (e.g. Barth et al. 2008 for voluntary adoption vs Ahmed et al 2013 for mandatory adoption); foreign investors (e.g. Covrig et. al 2007; DeFond et al.2011; Kim and Shi, 2012) and the comparability of financial information amongst foreign firms (e.g. Yip and Yang 2012). Other studies examined the effect of IFRS adoption on comparability of financial information between foreign and U.S. firms (e.g. Henry et al.2009; Barth et al. 2012; and Wang, 2014) as well the change in accounting quality after firms switch from U.S. GAAP to IFRS (e.g. Lin et al. 2012).

However, very little has been done to investigate whether the paradigms (principles vs rules) of the two accounting systems have changed over the course of the convergence process. This may be attributable to two main reasons. First, the convergence process was still ongoing as such it would be difficult to assess its outcomes with respect to changes to the nature of U.S. GAAP and IFRS. Second, there was no viable instrument with which to measure or quantify the nature of a standard. The conclusion of the convergence process and the recent development of an instrument to measure the nature of a standard by Mergenthaler (2011) provide an opportunity to

examine nature of accounting standards and the convergence process and motivate this dissertation. The convergence process was marketed in part as the means to maintain the principles-based nature of IFRS as well as the mechanism by which U.S.GAAP would become more principles-based. This section discusses the nature of U.S. GAAP, IFRS and standard setting in addition to a brief review of the convergence process.

II.2.1 U.S. GAAP and Standard Setting

The 1934 Securities Act created the SEC and gave the Commission with the power to establish authoritative accounting standards for the financial reporting of U.S. companies. The newly formed SEC recognized the importance of accounting expertise and knowledge in developing accounting standards and decided to authorize the private sector to develop accounting standards. In total, the American Institute of Certified Public Accountants (AICPA) created two committees that took part in establishing U.S.GAAP. From 1936 to 1959, the Committee on Accounting Procedures developed standards titled Accounting Research Bulletins (ARB). In 1959, the AICPA established the Accounting Principles Board (APB). The APB's main objective was to enhance the uniformity of U.S. GAAP by eliminating many optional alternative treatments for similar transactions (Zeff, 2005). The development of the APB seemed to be an effort to maintain the principles-based paradigm as the presence of alternative treatments is a hallmark of rules-based standards (SEC, 2003). The Accounting Research Division was created to conduct research prior to the issuance of APB opinions; this research would provide support for the APB's positions. APB faced unprecedented corporate lobbying activities in the 60's and the early 70's. In light of this, accounting practitioners felt the standard-setting

process needed to be shielded from undue outside pressure (Zeff 2005; Albrecht, Stice, and Stice, 2010). In response, the AICPA established the Wheat Study Group to examine the establishment of accounting principles and the Trueblood Study Group to focus on the objective of financial statements.

The Wheat Study Group established the FASB. FASB became the first full-time accounting standard setting body in the world in 1973 and began issuing Statements of Financial Accounting Standards (SFAS) from 1974. The standard setting process was based on a conceptual framework outlined in the FASB Concept Statements. Schipper (2003) notes that "to the extent that U.S. GAAP is aimed at providing comparable, relevant and reliable financial reporting it is principles-based." There is little doubt that at its inception, FASB's accounting standards were more principles-based (Schipper, 2003; Zeff, 2005; Donelson et al., 2014) but it became more rules-based. This became problematic in the early 2000s.

The debate between principles vs rules has a long history in the law and accounting disciplines. The financial scandals at the start of the millennium made this a hot-button issue for regulators and standard setters. Section 108 of the SOX 2002 Act commissioned an SEC study examining the nature or paradigm of U.S. GAAP and how to make it more principles-based. Accounting literature defines principles-based standards as ones that are founded in a conceptual framework. These standards focus on fair presentation and the definition of the elements of accounting, especially the primacy of the definition of asset and liability. These standards also provide general guidance and demand the use of judgement and expertise (Nobes, 2004; Schipper, 2003; Tribunella, 2009). In general, principles-based standards have the following characteristics:

1. Faithful presentation of economic reality
2. Responsive to users' needs for clarity and transparency
3. Consistency with a clear Conceptual Framework
4. Based on an appropriately-defined scope that addresses a broad area of accounting
5. Written in clear, concise and plain language
6. Allows for the use of reasonable judgment

(FASB, 2002; SEC, 2003; DiPiazza et al. 2008)

Rules-based standards on the other hand, tend to be more detailed and specific. Rules-based standards contain:

1. Scope exceptions that authorize the use of other existing accounting pronouncements to account for transactions and events that would otherwise be accounted for under the standard
2. Application exceptions that deviate from the underlying principle of the standard to allow alternative accounting treatment for specific situations
3. Transition exceptions that address the transition from an old standard to a new standard.
4. Bright-line thresholds to determine if a situation falls under the exception rules.
5. Large volumes of implementation and interpretation guidelines
6. High level of details

(FASB, 2002, SEC 2003; Schipper, 2003; Nobes, 2004)

The SEC further distinguished a principles-only system (extreme end of the spectrum) as too broad based and abstract. In the accounting literature and the profession it is widely accepted that U.S.GAAP tends to be more towards the rules-based end of the spectrum but it does not lie at the extreme.

Donelson et al. (2016) note that there are no credible theories in the accounting literature to explain why U.S. GAAP became more rules-based over time, however they propose and test five theories, amongst them was the need to constrain opportunism, litigation risk, transaction complexity and age. They find empirical evidence that litigation risk, transaction complexity and constraining opportunism led to more rules-based standards in U.S. GAAP but find no evidence to support the age theory. The

changes to U.S. GAAP and the increasing complexity of the accounting issues throughout the 60's and 70's seem to anecdotally support the idea that transaction complexity, and opportunism may have moved the accounting system towards more rules-based standards.

The U.S. GAAP that arose from the FASB's rigorous due process was not perfect and had largely deviated from its principles-based beginnings but nonetheless had achieved a reputation as quality accounting standards. The year 2002 was an important year in U.S. standard setting. First, FASB unanimously voted to approve two standards; SFAS 141 *Accounting for Business Combinations*, and SFAS 142 *Accounting for Goodwill and Intangibles.* This is an important milestone because the development of these two standards began in1998 as an effort to eliminate the difference between U.S.GAAP and IFRS with respect to the treatment of goodwill; an early yet informal attempt at compatible standards. Second, in the aftermath of the accounting scandals of the previous years, the nature of accounting standards and the role they played in the financial failures rose to prominence. Both the SEC and FASB acknowledged that U.S. GAAP had deviated from its original principles-based beginnings to become more rules-based and initiated a plan to change U.S.GAAP to a more principles-based paradigm (FASB, 2003). Third, this was the year in which FASB and the IASB signed the Norwalk Agreement to converge the two sets of standards.

II.2.2 IFRS and Standard Setting

International standards developed later than U.S. GAAP and at a much more sedate pace and with markedly less rigor (IOSCO, 1998). Nobes (1983) notes that due to

the diversity of different accounting practices, meaningful comparisons of financial information were almost impossible. The increases in international trade, cross-border investment, and mergers/acquisitions that flourished in the 60's underscored the need for a shared or common accounting practice. In response to the rise of multinational business, the International Accounting Standard Committee (IASC) was created in 1973 to provide some measure of guidance for accounting standards (Zeff, 2012). The IASC was an agreement between the accountancy boards of the nations that had such boards and were major players in global capital markets. The IASC's goal was to provide basic general accounting standards that would lead to the harmonization of accounting standards across borders. Although the different domestic boards formed the IASC and made up a significant percentage of its members, the IASC was largely viewed as ineffectual by these same boards (Zeff, 2012). By 1987, the IASC had issued nearly 25 brief standards; these standards were concise, had few exceptions, were broad in scope and had little to no additional guidance---lacking almost all of the characteristics of rules-based standards. The use of these standards varied across the world but they were mostly not used in the major capital markets. Zeff (2012) identified two reasons for this situation. First, Anglo-American countries believed that their domestic standards were better quality and more suited to their own environments. Second, the tax-based accounting models used by other members did not mesh well with IAS. Throughout its existence the IASC faced challenges largely because its standards were perceived as poorer quality and it had no real authoritative power.

In 1987, the International Organization of Securities Commissions (IOSCO) agreed to consider endorsing IAS for use by its members if the IASC would reevaluate

and improve the quality of its standards. The principles-based nature of IFRS and the dedication to this paradigm became the lynchpin of the efforts to improve international standards (IASB, 1998). One of the IASC's main goals was the elimination of the 20-F reconciliation required by the SEC. Although IASC began improving the standards in earnest, the IOSCO did not endorse the revised core standards issued in 1993, and the IASC agreed to further develop its standards and reissue improved standards by 1999. In 1996, the SEC outlined the necessary attributes an international set of standards must have to be acceptable for cross-listing in U.S. markets. The most important attribute was the standards needed to be "high-quality"; the first time the term was publically used (Zeff, 2012). In 1999, SEC Chairman Turner sent a missive to the IASC outlining the attributes the restructured board *must* have for it to have authority and legitimacy. Although not stated explicitly, the gist of the letter was that the SEC wanted the new board to be modeled after FASB (Zeff, 2012). In May 2000, the IOSCO endorsed IASC's core standards for use in cross-border listings and securities offerings but the SEC remained reluctant and insisted that "while the accounting standards used must be high quality, they also must be supported by an infrastructure that ensures that the standards are rigorously interpreted and applied"(SEC, 2000). Thus to fulfill this requirement, the IASC was restructured into the IASB in 2000.

The stated objective of the IASB was to "develop a single set of high quality, understandable, enforceable accounting standards to help participants in the world's capital markets and other users make economic decisions". These accounting standards would be based on a conceptual framework and principles-based accounting paradigm (www.ifrs.org). The 41 IAS, and 24 interpretations, previously issued by the IASC,

would remain in effect until reviewed by the IASB. Although the IOSCO's endorsement of IAS was an important victory, it was somewhat pyrrhic given the SEC continued to require reconciliation. In June 2000, the E.U. Commission announced mandatory adoption of IFRS for listed companies in E.U. capital markets starting in 2005. The E.U. had long been interested in some form of unified accounting standards that were more comprehensive and developed than the Company Law Directives it currently used. Realistically, the E.U. only had two choices, either use U.S.GAAP or IFRS. According to Zeff (2012), "U.S.GAAP was out of the question both because it was an American import and because it was too voluminous and detailed [rules-based]" (p.824); without this significant resolution it is questionable if IFRS would have garnered the attention and prominence that it has in the last decade.

In 2002 the IASB signed the Norwalk Agreement (discussed in detail in the following section) agreeing to work with FASB to make their respective sets of standards more compatible. In 2005, the IASB began issuing IFRS and also issued IFRICs, which were interpretations released by a sub-committee. Great care was taken to ensure that these new standards were compatible with U.S. GAAP as part of the convergence process. By 2013, the IASB had put into effect 8 IFRS in addition to the existing IAS and had an additional 5 more standards nearing completion with expected effective dates of 2016. The IASB consistently reaffirmed their dedication to the development of high quality accounting standards. The Board also explicitly emphasized the principles-based nature of its standards as a central component necessary for high-quality.

By 2007, IFRS was the most widely-used set of accounting standards in the world. Although the U.S. standard setting process has a much longer history and more

rigorous development than does the International standard setting, they both have reached a point where there is some consensus as to the quality of both sets of standards (Barth et al. 2012). The fact that the IASB and its standard setting procedures are modeled after FASB cannot be ignored, this gives credence to the notion that U.S. GAAP and the FASB process are of high quality. Therefore, it is not surprising that although the IASB had achieved either adoption or convergence in many varied jurisdictions; U.S. adoption of IFRS would always be the jewel in the IASB's crown.

II.2.3 U.S. GAAP- IFRS Convergence Project

The idea of comparable financial statements prepared by firms in different countries has always had great support but the reality of achieving this goal has been a great challenge. Even though international standards were available most multi-national firms believed U.S. GAAP to be of superior quality and used it. The accounting scandals at the start of the decade shook the foundation of the accounting discipline and profession, as well as investor confidence in U.S. GAAP. The standard-setting process was not immune to the resultant criticism. Section 108, of the 2002 SOX Act specifically focused on the standard- setting process. It was abundantly apparent that changes to accounting standards would be a necessary element of the post-Enron environment. At the same time the IASB was making great strides in the E.U.; however, it was still revising and developing most of its standards. The situation in the U.S. accounting landscape and the IASB drive to expand and improve its standards provided an opportunity for both sets of standards to be improved and developed together.

The IASB and FASB began informal efforts to make their standards more compatible in the late 90's. In late 2002, in a joint meeting in Norwalk, Connecticut, FASB and IASB boldly stated their commitment to the development of high-quality, compatible accounting standards that could be used for both domestic and cross-border financial reporting; compatible meaning that compliance with IFRS meant compliance with GAAP. In what was called the Norwalk Agreement, both standard setting bodies pledged to concentrate and combine their efforts to make existing financial reporting standards fully compatible as soon as possible within a feasible timeframe. U.S. GAAP had a long history and many standards that addressed complex issues that would be useful to IASB's development of its standards. The IASB provided a principles-based framework which would be useful to FASB in its efforts to make U.S.GAAP more principles-based. Both sets of standards would converge to a compatible principles-based system. Once an acceptable degree of compatibility was achieved the SEC would eliminate the reconciliation requirement. The even larger implication was that this would ultimately lead to U.S. adoption of IFRS. It seemed that finally the long awaited goal of one set of global accounting standards was within reach. In the 2002 Norwalk Agreement the Boards agreed to:

> a) Undertake a short-term project aimed at removing a variety of individual differences between U.S. GAAP and International Financial Reporting Standards (IFRSs, which include International Accounting Standards, IASs);
> b) Remove other differences between IFRSs and U.S. GAAP that will remain at January 1, 2005, through coordination of their future work programs; that is, address concurrently;
> c) Continue progress on the joint projects that they are currently undertaking; and,
> d) Encourage their respective interpretative bodies to coordinate their activities.
>
> (FASB, 2002)

The FASB-IASB met again in 2005 to reaffirm their commitment to the development of a common set of high quality standards, but observers were quick to note that in the three years since the Norwalk Agreement the little to no progress had been made and the Boards had not provided more detail as to what the convergence process meant in term of actionable goals. Thus, in late 2006 the Boards issued a *Memorandum of Understanding (MOU)* that provided for the first time a roadmap. Instead of IFRS converging to U.S. GAAP or U.S. GAAP converging to IFRS, the MOU painted a picture of both sets of accounting standards converging towards a new point----compatible high-quality standards. The 2008 MOU provided an actionable framework for achieving the short-term and long-term convergence projects. Ten short-term convergence projects were identified and slated for completion by 2009. The short-term projects identified standards with differences in specific areas that could be easily eliminated. Also for those standards that needed major improvements and those situations for which no standards existed, the Boards would work together to develop new common *principles-based* standards that improved the usefulness of financial information. These were identified as "Major Joint Projects" for which no specific completion dates were provided. The 2008 MOU also reiterated the Boards' commitment to the development of principles-based standards through joint projects (FASB, 2008). Both Boards agreed to work together to develop a single conceptual framework. As time passed it seemed that there was little forward movement on the convergence road. The 2008 MOU indicated that of the 10 short-term convergence projects identified in 2006, five had been completed, three were still ongoing and completion was anticipated by late 2008 early 2009. The remaining three short-term projects were deferred until other projects were completed. With respect

to the Major Joint Projects, the Boards had either completed a common standard or were currently working to develop a high-quality common standard. The MOU also provided an ambitious completion date of 2011 for all remaining projects.

Based on the achievements outlined in the 2008 MOU, the SEC agreed to eliminate the reconciliation requirement. The elimination of the reconciliation requirement was a significant milestone in the convergence process; this had been an IASB goal since the early 90s. To be eligible for the elimination firms needed to meet the following conditions:

> a)The financial statements must be prepared in accordance with the English language version of IFRS as published by the IASB
> b)The foreign private issuer must state in the notes to the financial statement that those financial statements are in compliance with IFRS as issued by the IASB
> c)The foreign private issuer must provide an unqualified auditor's report stating that the financial statements are in compliance with IFRS as issued by the IASB
>
> (SEC, 2008)

This was a major milestone as there has always been concern in the U.S. about the dangers of giving authority to a foreign, albeit international, standard setting body to establish standards. Specifically there was concern that the IASB was beholden to the E.U. and as such may not take into consideration the concerns and needs of the U.S. as would a domestic standards setter. However, SEC Chairman Cox did not believe this would be a problem and was one of the biggest proponents of the elimination of the reconciliation and the eventual use of IFRS in the U.S. (Katz, 2014). With this important milestone achieved, it seemed that U.S. adoption of IFRS by 2014 was highly probable. The convergence process was on track to attain its ultimate goal.

In the aftermath of the 2008 financial crisis the IASB and FASB decided to focus their convergence efforts on the improvement of accounting standards in the following areas: revenue recognition, financial instruments, leasing, and insurance contracts; all of which were identified in the 2008 MOU as areas in which the boards agreed to develop principles-based standards (FASB, 2008). Projected completion for these projects was set for 2011. However, the tides were changing and as the 2011 deadline for completing the remaining projects loomed, cracks began to appear in the convergence process; cracks related in part to the tug of war between rules-based and principles-based standards. As evidenced by FASB Chairwoman Seidman's statement in a 2012 address to the AICPA:

> " Precise guidance is necessary in the U.S., which has a more litigious culture. The U.S. financial reporting system can't function over the long run with accounting standards that provide only principles. In the United States we need clean unambiguous standards for those who must apply the standards, enforce it, and use the resulting information."
>
> (FASB, 2012)

In early 2012, both the IASB and FASB issued a joint progress report on the status of convergence work. Of the four areas of significant importance identified in 2008 for target completion by 2011, significant progress had been made only on revenue recognition. In a December 2015 address to the AICPA, IASB Chairman Hoogervorst highlighted the significance of the converged revenue recognition standard. He described it as having strong principles, "It is a standard that has confounded the sceptics who thought that the differences between the rules-based and principles-based cultures could never be reconciled" (AICPA Conference 2015). The Boards had worked toward a principles-based revenue recognition standard that would be effective in 2012; however, the release of the standard was delayed until 2016 (Cohn, 2015). With respect to leases,

financial instruments and insurance contracts the Boards had diverged. In these three areas, a major bone of contention was the IASB's insistence on a broader principles-based approach whereas the FASB felt that these complex issues needed more detailed guidance and structure to meet the needs of U.S. stakeholders. In an address to the AICPA in late 2012 Chairwoman Seidman alluded to the need for more precise clear guidance than that provided by the IASB's broad principles-based approach (Norris, 2012). She states "I don't believe our system can function over the long run with only broad principles"(Norris 2012). At the same conference, IASB Chairman Hoogervorst reiterated the IASB's commitment to high-quality principles-based standards and noted that the decade long convergence process had given FASB significant influence over IASB standards setting and yet the SEC remained reluctant to embrace IFRS. He concluded his speech by expressing concern as to the role of the U.S. in the development of IFRS stating that "the role of the U.S. and its continued influence in the IASB standard-setting should be commensurate with its commitment to IFRS" (IASB, 2012); implying that since the U.S. financial reporting environment needs rules-based standards, the FASB should have minimal influence on IASB standard setting since SEC had little to no interest in adopting IFRS.

The repercussions of dealing with the financial crisis and the changing of the guard at the SEC pushed the issue of U.S. adoption of IFRS to the background. In July 2012, after a three year delay, the SEC finally released its comprehensive study as to the adoption of IFRS. The SEC Staff Report began from the premise that U.S. GAAP is a set of "high-quality" standards and acknowledged the improvement in IFRS quality and the strengths of the IASB standard setting process. The report also highlighted the

achievements of the convergence process (SEC, 2012). Yet the report remained silent as to the eventual adoption of IFRS in the U.S. and proposed no further timeline or roadmap for convergence beyond 2012. Moreover, the report explicitly noted that U.S. GAAP contains much industry guidance and exceptions that are needed for sound financial reporting in the U.S. landscape; however, IFRS contains much broader principles across industries and less guidance and specific exceptions. The report reinforces the assertion that U.S. financial markets need specific guidance and exceptions not found in principles-based standards to function optimally. The staff report did not comment on the adoption issue but it did emphasize that within the U.S. business environment, there was no significant interest in mandatory adoption of IFRS. The report made it implicitly clear to the U.S. and global business environment that the SEC was moving away from the idea of adoption. The Wall Street Journal referred to the report as "127 pages of reasons not to adopt IFRS". The report also noted that although the convergence process had made great strides, "the extent of differences between U.S. GAAP and IFRS that exists today (2012) is greater than the Staff would have expected" (SEC 2012). Most importantly, the report signaled the end of the convergence process; immediately after the release of the report, the IASB Chair Hans Hoogervorst issued a statement saying "The era of convergence is coming to an end".

II.3 Hypothesis Development

Extant literature acknowledges that although U.S. GAAP has a long developmental history and high-quality framework as an accounting system it is too skewed towards the rules-based end of the spectrum (Nobes, 2004; Schipper; 2003, SEC

2002; FASB, 2003,Bennet et al. 2006). International standards, on the other hand, although young and still developing are positioned at the principles-based end of the spectrum (Nobes, 2004; Schipper; 2003, SEC 2002; FASB, 2003,Bennet et al. 2006). Proponents of the U.S.GAAP-IFRS convergence process suggested that the process would provide the means by which to converge both sets of standards towards the principles-based end of the spectrum (MOU, 2008). Mergenthaler (2011) uses the rules-based characteristics identified in the SEC 2002 report, FASB 2003 report and the 2008 industry white paper to develop an instrument that measures the degree to which a standard is rules-based. Because the characteristics of the rules-based standards are feasibly measurable, a standard that does not have any of the rules-based characteristics is purely principles-based. Documenting U.S. GAAP from its inception until 2006, Mergenthaler provides evidence that U.S.GAAP over time has become more rules-based but is not extremely rules-based. He also documents a slight drop in the rules-based characteristics of U.S. GAAP in the last 10 years albeit insignificant. However, whether IFRS is indeed measurably more principles-based, as claimed, remains unknown; therefore my first hypothesis is (stated in the alternative form):

H1: International accounting standards contain less rules-based characteristics overall.

Since the convergence process was suggested as a tool to make U.S.GAAP and IFRS more principles-based (Melone, 2003; DiPiazza et al., 2008), I expect both U.S.GAAP and IFRS to exhibit less rules-based characteristics post-convergence. Thus if both accounting systems converged to a new more-principles-based paradigm my second hypothesis is (stated in the alternative form):

H2 (a): U.S. GAAP and IFRS are more principles-based post convergence

An alternative outcome of the convergence project is suggested by Schipper (2003). She explains that a standard founded on specific principles can easily become detailed and complex in an effort to achieve comparability and relevance. Donelson et al. (2016) examine theories[2] to explain why U.S.GAAP has become more rules-based and find that complex accounting issues, litigation, and desire to constrain opportunistic behavior influenced the development of rules-based standards in U.S. GAAP. Moreover, given the breadth and prominence of U.S. GAAP as well as the clout of the SEC, it is reasonable to expect IFRS to converge towards rules-based U.S. GAAP in an effort to resolve conflicts and contradictions between different standards as well as facilitate consistent and comparable financial reporting. Thus my final hypothesis is (stated in the alternative form):

H2 (b): U.S. GAAP and IFRS become more rules-based

II.4 Variable Measures & Sample

To test my hypotheses, I follow Mergenthaler (2011) to examine all sources of the authoritative U.S.GAAP and IFRS. Appendices A and B provide a list of the types of the authoritative U.S. GAAP and IFRS, respectively. I obtain this information by accessing the archive of U.S. GAAP via the FASB (www.fasb.org) and IFRS via the IASB

[2] Age is often given as an explanation for U.S. GAAP's rules-based nature. Former SEC Chairman Niemeier in a 2006 address to the NY CPA Society explained that the principles-basedness of IFRS is a myth. He stated "IFRS is not more principles-based, it just younger." Donelson et al. 2014 do not find any evidence that standards become more rules-based as they age.

(www.ifrs.org) webpages. However, since the FASB codified U.S.GAAP by topic starting in 2009, I map the changes to authoritative U.S. GAAP from the codified topics to related standards[3]for 2009 to 2014. U.S.GAAP authoritative literature includes: Statements of Financial Accounting Standards (SFAS), Accounting Research Bulletins (ARBs), Accounting Principles Board opinions (APBs), Statement of Financial Accounting Concepts (SFAC) and the SEC Staff Accounting Bulletin (SAB) 101. I also include some pronouncements (EITFs, SOPs or DIGs) that have authoritative power. U.S. GAAP begins in 1953 with 24 authoritative standards and 96 at the end of 2008[4]. The 2009 FASB codification of the accounting standards organized all the different accounting authoritative standards as mentioned above into topics using a consistent structure based in the conceptual framework. Although the codification process does not change the U.S. GAAP, it did realign the standards into topical categories. The codification provides a one-to-one mapping of the new topical organization to the original numeric standard based organization. This allowed me to organize and collect the data by standards as opposed to topic; therefore, my sample size of U.S.GAAP authoritative standards at the end of 2014 is 92 standards. Table 1.1 Panel A provides the sample details for U.S. GAAP. Published International Accounting Standards are available with an effective date of 1976. My sample of International Standards begins in 1976 and ends in 2014. The authoritative IFRS include: International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). Once again, I

[3] The codified standards at www.asc.fasb.org provides interactive means of searching topics and mapping them back to the original pre-2009 standard. I used the information available on this website to map any changes to accounting standards subsequent to 2009.

[4] Although the issued Financial Accounting Standards(FAS) are greater than the 96 indicated many standards are amendments of existing standards thus, following Mergenthaler(2010) these amended standards were rolled into the existing standards thus arriving at the 96

also include certain interpretations (IFRIC or SIC) released by IASB Interpretations Committee if such interpretations have authoritative power. Table 1.1 Panel B provides the sample details for IFRS.

II.4.1 Rules-Based Continuum Score (RBC Scores)

Mergenthaler (2011) uses the rules-based characteristics identified in the SEC 2002 report, FASB 2003 study, and a white paper published by the top audit firms (DiPiazza et al., 2008) to develop an instrument that measures the extent to which a standard contains rules-based characteristics. These characteristics consist of the following: scope and legacy exceptions, bright-line thresholds, large volumes of implementation material, and a high-level of detail. Based on these characteristic, Mergenthaler develops a list of keywords to search for each characteristic.

Scope and Legacy Exceptions

Scope and legacy exceptions are identified as characteristics of rules-based standards because these exceptions lead to inconsistent accounting treatment for similar transactions (SEC, 2003; Nobes, 2004). For example, SFAS 133 (Topic 825) *Financial Instruments* contains nine scope exceptions (SEC 2003). I identify the scope and legacy exceptions in a standard by using textual analysis to search for keywords and then reading the surrounding paragraph to determine the presences of these exceptions. I then record the total number of exceptions for each standard in U.S. GAAP for each year in the sample. I use the same method for IFRS for each year in the sample. I employ the

keywords used in Mergenthaler (2011). The keywords[5] searched are: not subject, not consider*, exclusion*, exempt*, scope, and does not apply.

Bright-line thresholds

A bright-line threshold is defined as a numeric threshold used to determine the appropriate accounting treatment. The U.S. GAAP SFAS 13 *Lease Accounting* is often cited as good example of a standard that contains numeric bright-line thresholds. Following Mergenthaler, I identify the presence of bright-lines in a standard by using textual analysis to search for keywords and then reading the surrounding paragraph to determine the presence of numeric bright-line thresholds. I then record the total number of numeric bright-line thresholds for each standard in U.S.GAAP and IFRS for each year in the sample. The keywords used are: criteri*, condition*, provision*, require*, and percent*.

High-level of Details

Principles-based standards tend to be clear and concise whereas rules-based standards are more detailed and voluminous (SEC 2003; IASB 2005; DiPiazza et al. 2008). For example Cohn (2015) notes that U.S. GAAP codified by FASB consists of 17,500 pages of text whereas IFRS is less expansive at only 2,500 pages. Following Mergenthaler, I identify the level of detail in a standard by first counting the number of words in each standard in each of U.S. GAAP and IFRS. I then, within each set of

[5] The * in the keywords searched is used in textual analysis to indicate that searching for the term criteri* will return all instances of words containing the letters "criteri" in that order. Thus this search will return criteria and criterion.

standards rank the standards by total number of words. Finally I classify those standards in the upper detail decile as high-level of detail standards[6] .

Large-volumes of Implementation Guidance

Regardless of whether standards are principles- or rules-based some level of implementation guidance is necessary; however, rules-based standards tend to have much larger volumes of interpretation to accommodate the exceptions and alternative treatments often found in rules-based standards (SEC 2003; FASB 2002). Thus, a standard containing large volumes of interpretive guidance is considered more rules-based. Following Mergenthaler (2011), I measure this characteristic by counting the number of interpretive announcements related to each standard in each regime. Within each regime, I sort the standards by the number of interpretive announcements and classify those standards in the top decile as standards with large volumes of implementation guidance.

Appendices C and D provide the titles and effective years of each of U.S. GAAP and IFRS. Table 1.2 Panels A and B provide descriptive details about the sample and the four characteristics used to calculate RBC. Panel A provides the descriptive statistics for IFRS for each characteristic for the years 1976-2014. IFRS started in 1976 with 2 standards and as of 2014 it consists of 64 standards and interpretive statements. Panel A shows that for all four characteristics in IFRS the largest means can be found in the years: 2006-2014. In 2002, the year the convergence process began IFRS consisted of 64 effective standards and interpretations with a mean BL (numeric bright-lines) of 0.20, mean EXCEPT (exceptions) of 1.20, mean GUIDANCE (interpretative guidance) of

[6] Following Mergenthaler I exclude background and basis for conclusions sections in the word count as these are not considered part of the standard and these sections have only recently been added to IFRS.

0.27, and DETAIL (word count) of 3,453. The mean value for each characteristic steadily increases over the course of the convergence process. By 2014, the mean BL is 0.81, the mean EXCEPT is 2.52, mean GUIDANCE is 1.44, and DEATIL is 4,117. This would imply that the new and/or amended standards during this time tended to exhibit more rules-based characteristics. Panel B provides the descriptive statistics for the four rules-based characteristics for the U.S.GAAP[7] sample. U.S. GAAP has a much longer tenure and as such consists of 92 authoritative standards by 2014[8]. For the same convergence time-frame as IFRS, the mean BL in U.S.GAAP in 2002 is 0.32 and in 2014 it is 0.28. The mean EXCEPT in 2002 is 2.14 and in 2014 it is 2.64; the mean GUIDANCE is10.50 in 2002 and is 11.38 in 2014; and the mean DETAIL is 8,222 in 2002 and is 12,133 in 2014. Figure 1.1 and 1.2 plot the mean BL, EXCEPT, and GUIDNCE by year for IFRS and U.S. GAAP respectively. In Figure 1.1, there is an increase in the rules-based characteristics, especially EXCEPT after 2006. In Figure 1.2 GUIDANCE increased dramatically in the early 2000s, decreased slightly in 2003, and has continued to increase. Figure 1.3 combines IFRS and U.S. GAAP. The mean BL, EXCEPTION, and GUIDANCE in IFRS are below that of U.S.GAAP for most years. The mean BL in IFRS is slightly higher than in U.S.GAAP post 2008. The characteristic that exhibits the greatest difference is GUIDANCE. U.S. GAAP has much more interpretive guidance and industry specific guidance than IFRS. Figure 1.4 provides the graph for DETAIL. Once again U.S. GAAP is much more detailed and expansive than IFRS. The descriptive statistics suggest that U.S.GAAP has also experienced increases

[7] I am grateful to Dr. Richard Mergenthaler for making his data collection for U.S. GAAP publically available so that I was able to compare my verify my data with his.
[8] In September 2009 the FASB completed the Accounting Standards Codification Process that combined all authoritative accounting pronouncements into a single source by topic.

in rules-based characteristics, except for BL; however, the increases are small with the exception of DETAIL. These descriptive details indicate that using these characteristics to develop a score to measure the rules-based nature of a standard would be fruitful in understanding how these accounting systems changed.

II.4.2 Derivation of the RBC1 and RBC 2

Mergenthaler (2011) develops two instruments that measure the presence of rules-based characteristics in a standard. RBC1, the first measure, is a summation of the four indicators of rules-based characteristics described in the previous section. Therefore a "1" indicates the presence of and a "0" indicates the absence of numeric bright-line thresholds (*BLInd*), exceptions (*ExcepInd*), large-volumes of implementation guidance (*GuidanceInd*) and a high level of detail (*DetailInd*). The values for RBC1 will range from zero to four; the higher the RBC1 score for a standard the more rules-based characteristics the standard contains. RBC1 for standard *j* at time *t* is calculated:

$$RBC1_{jt} = BLInd + ExcepInd + GuidanceInd + DetailInd \qquad (1)$$

I used the $RBC1_{jt}$ score to calculate a yearly average RBC1 score for *all* the standards in each of U.S. GAAP and IFRS. The maximum RBC1 score is 4 (highly rules-based) the minimum score is zero (highly principles-based). Table 1.3 Panels A and B provides the mean and median RBC1 scores by year for U.S. GAAP and IFRS, respectively. I find that the highest mean and median RBC1 for IFRS are found in 2005 and beyond, whereas U.S. GAAP consistently reflects a median RBC1 equal to 1 from the early 90s and reflects a gradual change in the mean RBC1. This supports the inference that U.S. GAAP is more rules-based than IFRS but it still contains many standards that are principles-

based as indicated by the median RBC1 equal to 1. In short, U.S. GAAP is not at the extreme rules-based end of the spectrum.

The RBC1 measure does not provide an assessment of the standard's rules-based characteristics relative to all other standards in its respective accounting system. Mergenthaler's second measure $RBC2_{jt}$ gives greater weight to standards that have extreme characteristic values relative to other standards in year (*t*). RBC2 is derived from the mean and variance adjusted composite of the four rules-based characteristics. RBC2 for each standard is first derived from the total number of numeric bright-line thresholds, the total number of scope/legacy exceptions, the total number of interpretive guidance, and the total word count. Thus with the sums of these four characteristics the following equation yields the $RBC2_{jt}$:

$$RBC2_{jt} = \sum_{i=1}^{4} \frac{Value_{ijt} - \overline{Value_i}}{\sigma Value_i} \qquad (2)$$

I calculate $Value_{ijt}$ as the value of rules-based characteristic *i* for standard *j* at year *t*. The $\overline{Value_i}$ variable is the average value of characteristic *i* for all standards in year *t* and $\sigma Value_i$ is the standard deviation of characteristic *i* for all standards (Mergenthaler, 2011). RBC2 provides a measure that is a unique characteristic score for each standard *j* at time *t*. RBC2 is calculated for each standard and the summation provides an overall measure of the rules-basedness of a standard. RBC2 gives greater weight to standards that have extreme characteristic values; thus allowing me to identify those standards that contain more rules-based characteristics relative to all the standards in the accounting system. Table 1.3 Panels A and B provides the mean and median RBC2 by year for U.S.

GAAP and IFRS. The changes in the mean and median RBC2 for IFRS and U.S. GAAP reflect the same pattern as that found for RBC1. The median and mean RBC2 of IFRS when compared to U.S. GAAP indicate that IFRS contains less standards that are extremely rules-based yet the mean and median RBC2 are much larger post-2008. This is an indication that IFRS contains more standards that exhibit rules-based characteristics relative to other standards in IFRS. Appendix C provides a summary of each IFRS, and its RBC1 score at its first effective year and its final effective year. Appendix D provides a brief summary of each U.S.GAAP standard and it's RBC1 score at its first effective year and its final effective year[9].

II.4.3 Validation of the RBC Measure

Although the RBC measure has been applied to U.S. GAAP in Mergenthaler (2011) and Donelson et al. (2012), it has not been applied comprehensively to IFRS. To ensure that I have calculated and implemented the RBC measures correctly, I validate my RBC measures in two ways for both U.S. GAAP and IFRS. First, following Donelson et al. (2012), if the RBC score indeed captures the rules-basedness of a standard, then the correlations between the four characteristics for rules-based standards should all be significantly positively correlated. I provide these correlations for IFRS and U.S. GAAP in Table 1.4 Panels A and B. Panel A provides the correlations for U.S. GAAP. I find that standards that have high-levels of detail are more likely to have exceptions (rho= 0.42; p-value < 0.000), and more interpretive guidance (rho= 0.56; p-value < 0.000). Moreover, they are also more likely to contain numeric bright lines (BL rho=0.24, p-

[9] I am very grateful to Mergenthaler (2011) for making this data for U.S. GAAP until 2008 publically available.

value < 0.000). This agrees with and is comparable to the correlations provided in Donelson et al. (2012)[10]. Panel B provides very similar results indicating that all four characteristics are significantly positively correlated. Moreover, untabulated factor analysis indicates that I have only one significant factor; suggesting all four indicators are measuring the same aspect of the standard. Thus, I can conclude that my RBC scores for both U.S.GAAP and IFRS standards are valid measures of the rules-basedness of a standard.

I further validate my RBC measure by recreating Table 1.1 Panel B from Donelson et al. (2012) and including my RBC scores in the table as a means of comparison. The table provides the median RBC scores for U.S.GAAP standards identified in the SEC 2002 study as either rules- or principles-based. If my RBC measure is valid then the RBC for U.S. GAAP standards identified as rules-based by the SEC should have higher RBC scores than those standards identified by the SEC as being principles-based. In addition, for those standards that did not undergo significant changes post-2006, my measure should not differ significantly from that of Donelson et al. (2012). Table1.5 provides this data[11]. Overall, my RBC measures for U.S. GAAP indicate that those standards classified by the SEC as rules-based all have RBC scores of 4. They are also consistent with the Donelson et al. (2012) RBC scores. As noted in Donelson et al. (2012) the SEC's definition of a rule-based standard used to identify examples of rules-based standards focuses on the presence of "numeric bright-lines" thus because FAS 141, FAS 142, and FAS 144 do not contain such thresholds these standards were classified as

[10] Donelson et al (2012) measure for U.S. GAAP ends at 2006, whereas my sample ends in 2014.
[11] This table provides a comparison of the median RBC scores as of 2014. An untabulated comparison of the RBC scores as of 2006 with Donelson et al. 2012 yields no significant differences. Thus this strengthens the validity of the RBC measure used in this study.

principles-based by the SEC. However, the RBC scores for these standards are based on more than just the numeric bright-lines and in fact these standards have RBC scores of 3, indicating that these standards contain scope or legacy exceptions, are detailed and have interpretive guidance. Therefore, it could be argued that these standards lie more towards the rules-based end of the spectrum.

The table also provides a comparison of the RBC scores of IFRS standards and U.S. standards. Accepted convention hails IFRS as principles-based. Thus, if this is indeed true and the RBC score is a valid measure of rules-basedness, then IFRS should have lower RBC scores. In Table 1.5, the IFRS RBC scores in general tend to be less than those for U.S.GAAP. However, not all the standards in IFRS are principles-based. For example, IAS 39 has a RBC of 4, indicating a rules-based standard. Also, the RBC scores for some standards in this study differ from those in the Doneslon et al. (2012) study due to the changes to both IFRS and U.S. GAAP in the post 2006 period.

Together, the correlation analysis in Table 1.4 and the comparison in Table 1.5 give me confidence that the RBC score in this study is applied correctly and is a valid measure of the rules-basedness of a standard.

II.5 Results

This section reports graphical, main statistical tests, and additional test analyses.

II.5.1 Graphical Analyses

Figure 1.5 graphs the average RBC1 and RBC2 scores for IFRS across time. The greater the RBC1 score, the more rules-based the accounting system. The greater the RBC2 score, the more rules-based standards within the accounting system relative to all

the standards that make up the system. The graphical analysis starts with 1976 since it is the first year that published IFRS were available for data collection and textual analysis. I find that the average RBC1 score for IFRS has increased overtime, with the greatest increase in the post convergence period (from 2005 to 2014). Figure 1.5 provides evidence that the RBC1 score was around zero in 1976 and experiences a marked increase around 2005/2006. In 2014, the RBC1 score has reached nearly 1.5. This same pattern is reflected in the RBC 2 score. The RBC 2 score shows a marked increase in 1977/78 due to the rapid issuance of four lengthier additional standards. The RBC 2 increases along a similar path to that of the RBC1. Figure 1.5 provides graphical evidence that IFRS includes more rules-based standards than it did at its beginning and that individual standards have become more rules-based relative to other standards. Ehrlich and Posner (1974) theorize that accounting systems become more rules-based over-time due to the inevitable resolution of underlying issues originally addressed in vague principles-based language; this may provide a potential explanation as to why convergence moved IFRS along the spectrum towards more rules-based standards. Results show that the greatest increases in both RBC scores for IFRS are found during the convergence period. Figure 1.6 provides a graph of the changes in IFRS RBC1 overtime. I find the most drastic change is found in 2003/04 to 2005/06. During this time the IFRS were developed by IASB as well as the introduction of interpretative statements (IFRIC) modelled after the interpretive statements in U.S. GAAP.

Figure 1.7 decomposes the changes in IFRS into three main categories: changes to existing standards, new standards, and replacement standards. I find that nearly 77% of the overall change in RBC score is due to new standards. A new standard is a standard

that addresses an accounting reporting and/or disclosure issue that was not addressed in any previous standards. A replacement standard is one that replaces an existing standard. Figure 1.7 indicates that the new standards contributed greatly to the increase in RBC score over the convergence period. The changes to existing standards account for 17% of the change in RBC score and replacement standards only account for 6% of the overall change in RBC score. The fact that the majority of the change in overall RBC score is due to new standards and not changes to existing standards is of great significance. It provides evidence that IFRS have become more rules-based through the addition of new standards. Further analysis shows that the issuance of new more rules-based standards especially during the convergence period has driven the results instead of changes to existing standards over time as one would expect if the age theory applied.[12]

Figure 1.8, 1.9, and 1.10 provide the graphical analysis for U.S. GAAP. In Figure 1.8, I find that RBC1 and RBC 2 of U.S. GAAP also have an increasing trend with very slight decreases in recent years. More importantly, the U.S. GAAP RBC scores do not exhibit the dramatic changes IFRS does during the convergence years. Figure 1.9 depicts the changes in RBC score for U.S. GAAP over-time with the highest increase in RBC occurring around 2001. Figure 1.10 provides the decomposition of the changes in RBC1 overtime due to changes to existing standards, issuance of new standards, and changes due to replacement standards. For U.S. GAAP, nearly 43% of the change in RBC is due to changes in existing standards, 40% due to introduction of new standards and about 17% due to replacement standards. This agrees to the findings in Donelson et al. (2016)

[12] Doneslon et al. (2016) examine age theory as possible explanation as to why U.S. GAAP became rules-based. They do not find any empirical evidence to support this theory.

who note that although this would seem to support the age theory most of the changes to existing standards are done in the initial years immediately after the introduction of the standards. Donelson et al. (2016) find that when the definition of changes to existing standards excludes changes in the three years after the initial introduction year of the standard, the change in RBC attributable to existing standards drops 22%[13].

The previous graphs provide support for Hypothesis 1 that IFRS are more principles-based standards overall. However, the data does not provide support for Hypothesis 2(a). The graphs indicate that U.S.GAAP is still rules-based with minor movement towards more principles-based standards. In contrast, IFRS has become markedly *less* principles-based providing support for Hypothesis 2(b).

Figure 1.11 provides a comparison of the average RBC1 overtime for U.S. GAAP and IFRS; Figure 1.12 does the same for RBC 2. These graphs do not paint a picture of the two accounting systems converging towards a more principles-based system but they instead provide a clear indication that both sets of standards are similarly converging towards a system that includes more rules-based standards. In fact, all of the presented figures taken as a whole provide a clear indication that over the convergence timeline IFRS had been converged to U.S. GAAP. This is a very interesting finding given that the convergence process was supposed to move both sets of standards towards a more principles-based paradigm. Instead it seems that U.S.GAAP has maintained the status quo and IFRS includes more rules-based standards.

[13] I find similar results when I amend the definition of existing standards to exclude changes in the immediate years after initial introduction. However, because this study is focused on examining changes to accounting standards I report the graphical analysis and statistics based on changes in every year.

II.5.2 Statistical Analysis

Table 1.6 Panel A provides the results for the mean difference tests for the four rules-based characteristics used to construct RBC1 and RBC 2 for U.S. GAAP for the years 2002, 2005, and 2009. The year 2002 is used to capture the pre-convergence paradigm of the accounting system, 2005 is when the initial changes, such as introduction of IFRICs and short-term convergence projects came into effect as well as a half-way point in the convergence process before the elimination of the 20-F filing, and 2009 is used because it is the final year in which IFRS issued standards that would take effect within the convergence period (by 2012). For the Detail (word count) characteristic in U.S. GAAP there is no significant difference in the mean value between 2002 and 2005 and 2009. Although the average word count is increasing from 8,222 in 2002 to 11,638 in 2009 the change is insignificant (p-value > 0.10). The mean number of exceptions (EXCEPT) increases from 2.14 in 2002 to 2.17 in 2005 and then to 2.49 in 2009; yet again this change is insignificant. Interestingly, the average number of numeric bright-lines (BL) drops from 0.32 in 2002 to 0.27 in 2009 yet this change is insignificant. Finally, the mean number of interpretive guidance (GUIDANCE) increases between 2002 and 2005 but drops from 11.47 in 2005 to 10.9 in 2009. Overall, the difference in means test for the four rules-based characteristics for U.S. GAAP shows that although the mean values of these characteristics for U.S. GAAP changed from 2002 to 2005 to 2009 none of these changes were statistically significant. This finding supports Hypothesis 2(b). This is also reflected in the insignificant results for the change in RBC1 and RBC 2 scores. This confirms the findings of graphical analysis that shows that although the RBC scores changed during these years these changes were insignificant.

Panel B provides the difference in means test and standard deviations for IFRS for the years 2002, 2005 and 2009. The average word count (DETAIL) increases slightly from 2002 (3,453) to 2005 (4,314) and decreases in 2009 (3,662). The mean number of exceptions changes from 2002 (1.02) to 2005 (1.67) to 2009 (2.32). The difference is significant at less than 1% level with respect to the years 2002 to 2009. This means that the average number of scope and legacy exceptions found in IFRS increased significantly from 2002 (pre-convergence) to 2009 (post-convergence). The mean number of numeric bright-lines increased significantly from 2002 (0.20) to 2005 (0.37) to increase further in 2009 (0.74). Finally, the difference in the mean number of interruptive guidance that accompanies a standard (GUIDANCE) is significant for all three years. From 2002 to 2009, the mean increases 0.95 (p-value < 0.01) and increases 0.57 (p-value < 0.01) from 2005 to 2009. This coincides with IASB's development and issuance in 2005 of IFRICS, which mirrored the U.S. GAAP interpretive releases. This evidence suggests that IFRS require and are accompanied by more interpretations in the post-convergence period.[14] I also find that the difference in mean RBC1 score is significant (p-value < 0.05) for 2002 to 2005 and for 2002 to 2009 whereas the RBC 2 is only significant for 2002 to 2009. This indicates that more rules-based standards have been added to IFRS; making it less principles-based than before convergence.

Panel C provides the difference in means test for each of the rules-based characteristics for U.S. GAAP and IFRS. I find that the average word count (DETAIL) and GUIDANCE characteristics are much higher for U.S. GAAP and the differences are

[14] Anecdotal evidence implies that the IASB is aware of the impact of additional guidance on principles-based standards as Sir Tweedy alluded to this issue in his March 2011 address to the U.S. Chamber of Commerce titled "The Future of Financial Reporting: Convergence or Not?

significant (p-value < 0.00) for all three years. The difference in the EXCEPT characteristics is highly significant (p-value < 0.00) in 2002 and significant (p-value < 0.05) in 2005, but in 2009, there is no significant difference between IFRS and U.S. Indicating, that while they differed significantly in the pre/early convergence periods by 2009 the two systems did not differ with respect to the EXCEPT characteristic. The BL differs significantly between U.S. GAAP and IFRS in 2009 (p-value <0.01). The difference in RBC1 between the two sets of standards is not significant in any of the years. The mean RBC2 for IFRS is less than that for U.S. GAAP in all three years, indicating that IFRS contains less rules-based standards overall however the difference is only marginally significant in 2002. This indicates that perhaps the two accounting paradigms lie closer together on the spectrum than extant literature suggests.

II.5.3 Additional Analysis

As an additional robustness test, I run ANOVA tests for U.S. GAAP and IFRS for the years 2002, 2005 and 2009. Table 1.7 presents the ANOVA results for U.S. GAAP. I find that for each of the rules-based characteristics the ANOVA test does not reflect a statistically significant difference between the year groups. Table 1.8 presents the ANOVA results for IFRS. I find no statistically significant difference between the three year groups for the Detail characteristics. However, for Exceptions, BL, and Guidance I do find a statistically significant difference between the year groups. For these three characteristics, I further use Tukey's HSD test and find that Exceptions and BL differ significantly in 2002 and 2009. For the Guidance group all three years differ significantly. These additional tests provide further evidence that over the course of the

convergence process IFRS underwent significant changes to its paradigm while the U.S. GAAP paradigm did not significantly change.

II.6 Summary and Future Research

This essay examines how the nature of IFRS and U.S. GAAP changed over the course of the convergence process. Extant literature holds that the nature of accounting standards is best characterized as a spectrum or continuum at which one extreme is rules-based and the other is principles-based (Cunningham, 2007). U.S.GAAP is primarily rules-based and IFRS is primarily principles-based yet neither system is situated at the extremes. The development of principles-based standards was a goal of the U.S. GAAP and IFRS convergence process. Through joint efforts both accounting systems were supposed to converge to a more principles-based new paradigm. Indeed it was suggested that convergence with IFRS would help U.S. GAAP become more principles-based (FASB, 2002). Mergenthaler (2011) is the first study, to my knowledge, to empirically measure the nature of accounting standards. He develops an instrument based on the definition of rules-based standards (RBC) provided in the extant literature (SEC, 2003, FASB 2002) to measure the extent to which individual authoritative standards in U.S. GAAP are rules-based or principles-based. I follow the same process to measure the nature of IFRS starting at its first effective year until its final effective year of 2014. I examine the changes to the rules-based characteristics that make-up the RBC score as well as the changes in RBC score for both sets of accounting standards over the course of the convergence process. I find that the although the two accounting systems are not as divergent as suggested with respect to rules-to-principle continuum, IFRS is more

principles-based than U.S. GAAP pre-convergence. However, contrary to my hypotheses, I find that the two accounting systems did not converge to a more principles-based paradigm. Instead, I find evidence that suggests the nature of U.S. GAAP does not reflect statistically significant change over the course of convergence. As a result, I am unable to conclude that the convergence process has shifted U.S.GAAP towards more principles-based paradigm. Surprisingly, I find supporting evidence that the nature of IFRS did significantly change over the convergence process. More importantly, the evidence suggests that IFRS have been converged to U.S. GAAP and become less principles-based.

The results of this study should be of great relevance and interest to standards setters and scholars. My findings provide an initial assessment of the convergence process with respect to its impact on principles- or rules-based nature of accounting systems. Such research can be useful to standards setters in developing and assessing the objectives of future convergence or "condorsement"[15]. One limitation of this study is that the RBC score is still a nascent instrument and would benefit from further validation in other settings. Also the RBC is a function of its keywords used to search the standards which limits it applicability to IFRS in languages other than English. Future research could examine use the RBC score to examine how the nature of standards influences or affect common financial ratios.

[15] This is a term introduced in late 2011 by Paul Beswick, Deputy Chief Accountant at the SEC. He explained that while other jurisdictions were either endorsing or converging to IFRS, the U.S. would follow a "condorsement" approach. Condorsement would mean U.S.GAAP would continue to exist; the Boards would finish remaining joint projects but would not start work on any new projects. Finally the FASB would continue to work with the IASB in a similar on issues of mutual interest to both Boards.

III: THE IMPACT OF CONVERGENCE PROJECT ON EARNINGS INFORMATIVENESS

III.1 Introduction

The second part of my dissertation investigates the association between the nature of IFRS[16] and earnings persistence and informativeness. More specifically, I examine the relation between the nature of IFRS and earnings persistence and informativeness over the course of the IFRS – U.S. GAAP convergence project. This study contributes to the debate around rules- vs. principles-based systems, which hinges on whether one system or the other better reflects economic reality and thus facilitates better quality financial reporting. It is often asserted that rules-based standards lead to transaction structuring and circumvention of the "spirit" of the law. The scandalous accounting failures in the early 2000s arose in part due to this phenomenon[17]. In direct response to this, the SEC and FASB came out as proponents of principles-based accounting standards. Unsurprisingly, the IASB emphasized IFRS's principles-based nature as an important feature in achieving high-quality financial reporting. Indeed, FASB, under the auspice of the SEC, and the IASB made the pursuit of principles-based standards a goal of the convergence process[18] due to the Boards' conviction that such standards faithfully represent economic reality (FASB, 2002). However previous studies (e.g. Barth et al., 2012) document that accounting numbers under U.S. GAAP are more value relevant, as

[16] IFRS is used throughout this dissertation to refer to International standards issued by the IASB both IAS and IFRS.

[17] Frits Bolkestein, European Internal Market Commissioner at the time, blamed U.S. GAAP's many "rules" for the financial failures, implying that this type of scandal would not have occurred under a principles-based system. He likened U.S. GAAP to a "cookery book" that provides a recipe for an end result. (Guerrera, 2002).

[18] The 2008 Memorandum of Understanding explicitly states that the purpose of the joint projects between IASB and FASB was the creation of common principles-based standards.

one of the indicators of financial reporting quality, than those under IFRS, which appear to be inconsistent with the notion that more principles-based standards should provide higher quality financial statements. I feel that more research is needed to better understand the effect of the nature of accounting standards on financial reporting quality.

Many studies have examined how the adoption of IFRS has impacted financial reporting quality yet these studies for the most part do not consider how the underlying nature of IFRS has changed following IFRS-U.S. GAAP convergence and its effect on financial reporting quality. More recent studies have explored the nature of U.S. GAAP standards and U.S. firms' financial reporting quality, but prior research on the role of principles-based IFRS in financial reporting quality remains limited. A particular challenge in such research has been how to effectively measure the "principles" or "rules" *basedness* of a standard.

Notably, Mergenthaler (2011) uses SEC and FASB publications as well as industry white papers to develop a measure of the rules-based characteristics of accounting standards, i.e. the rules-based continuum score (RBC). Donelson et al. (2012) provide further validation for the RBC measure in their study examining the nature of U.S. GAAP standards and litigation in U.S. capital markets. Folsom et al. (2016) develop the RBC into a firm level instrument, PSCORE, which captures the extent to which a firm relies on principles-based standards. Using the rules-based continuum score, Mergenthaler (2011) finds that rules-based standards are positively associated with the dollar magnitude of earnings management. Folsom et al. (2016) use the PSCORE to examine the association between principles-based U.S. GAAP standards and earnings

attributes for U.S. firms. However, there is a gap in the extant literature with respect to the nature of IFRS and earnings attributes. I fill this gap in two vital ways. First, I examine and compare the association between the nature of IFRS and accounting quality for IFRS firms that cross-list in the U.S. in both the pre- and post- convergence periods. I focus on those firms that cross-listed in the U.S. markets and prepare their financial statements using IFRS because these firms use English for their financial statements and are more relevant for U.S. investors. Moreover, by using a sample of IFRS firms that list in the U.S., I am able to minimize the effects of differences in legal and regulatory environments of the different countries where these firms operate and provide initial evidence of how changes in the accounting paradigm or nature of IFRS may affect accounting quality.

Second, I examine a sample of firms that existed in both the pre and post convergence periods to provide insights as to if and how the increasing inclusion of rules-based standards in IFRS over the convergence process, as found in the first part of this dissertation, has impacted financial reporting quality, as characterized by earnings persistence and informativeness. This is both an intriguing and important issue to explore given that the pursuit of principles-based standards was an explicit goal of the process.[19] Moreover, it also appears that the issue of principles-based standards played a role in the IASB and FASB/SEC's change in direction with respect to convergence.[20] To my

[19] The 2008 MOU states that IASB and FASB agree that "the goal of joint projects is to produce common principles-based standards".

[20] In various public addresses both FASB and SEC chairpersons have reiterated their commitment to working with the IASB to achieve high quality common standards (FRC, 2015; SEC, 2016) but such standards need to meet the demands of the U.S. financial system, which FASB Chairwoman Seidman in an AICPA speech emphasized needs rules-based accounting and cannot function long-term on principles-based standards (AICPA, 2012).

knowledge, this is the first study to examine the changes to the nature or paradigm of IFRS over the course of the convergence process and the potential effect on the quality of financial reports.

Furthermore, even though the U.S. GAAP and IFRS convergence project has concluded there remains much interest in the continued development of globally accepted common standards. Research that examines the possible associations between the nature (i.e. rules or principles) of standards and accounting quality is of great value to the SEC, FASB, and IASB as they continue to determine whether rules or principles or a blend of both best serves the needs of the financial markets.

In the pre/early convergence period, IFRS were situated at the principles-based end of the spectrum. However the convergence process added many new standards that were found to be more rules-based; as such IFRS in the post-convergence period have become less principles-based. Using a sample of foreign firms that cross-list in U.S. capital markets from 2000-2004 and 2008 to 2012[21], I find that in the late/post convergence years, on average, firms that use more principles-based standards have greater earnings informativeness and persistence than those that use more rules-based standards. Interestingly, I do not find any such difference in association for the pre/early convergence years even though IFRS were arguably more skewed towards the principles-

[21] The convergence process was initiated in late 2002. However, by 2005 there was no roadmap or progress other than minor changes to terminology. The most significant changes in 2005 were due to the IASB issuing IFRICS and the first few IFRS which is reflected in the change in RBC graphs in the first part of the dissertation. Therefore, I characterize 2000-2004 as pre-convergence. The 2006 MOU provided a roadmap of the join-projects and in 2007 the SEC found that enough progress had been made to eliminate the 20F reconciliation requirement. The 2008 MOU provided an update on the progress of the remaining projects. Based on this evidence the active convergence period where the new IFRS were effective begins in 2008. Therefore, I use 2008-2012 as the post convergence period.

based end of the spectrum during that time. Further analysis shows that the above finding is primarily driven by firms that cross-listed in both the pre/early and post-convergence period and firms that rely more on principles-based standards. This study contributes to the existing literature by examining the role of the nature of accounting standards in financial reporting quality.

The remainder of this essay is organized as follows: Section 2 provides a literature review and extant background research. Section 3 details the research design and derivation of the PSCORE measure. Section 4 describes the sample selection procedures and data employed in this study. Section 5 provides the results. I conclude in Section 6 and offer suggestions for future research.

III.2 Literature Review

III.2.1 Nature of Accounting Standards and Management Discretion

Central to the discussion of the differences and relative merits of principles- and rules-based standards has been the question of whether one paradigm facilitates better financial reporting quality. Both FASB and the SEC assert that rules-based standards are susceptible to accounting engineering---efforts to circumvent the accounting objectives inherent in the standard. This leads to financial reporting that "is not representationally faithful to the underlying substance of transaction and events". The SEC suggests that principles-based[22] standards on the other hand, provide a better framework for the

[22] The SEC 2003 study distinguishes between accounting systems that are principles only and those that are principles-based. The study uses the term "objectives orientated" to refer to accounting systems that are principles-based. Principles-only standards are too vague and provide insufficient guidance to be operational. A good example of this is the earliest IFRS standards. However, an objectives-orientated

exercise of judgement and ultimately result in "more meaningful and informative financial statements" (Guerrera, 2002; SEC 2003, FASB, 2002; Benston et al. 2006). According to the literature, principles-based standards are broadly generic and do not adopt specific stances with respect to transactions (FASB 2002; Schipper, 2003; Carmona and Trombetta, 2008). This definition makes it hard to quantify the qualities that make a standard principles-based. However, rules-based standards do tend to have more distinct characteristics, such as numeric bright-lines, that make it easier to quantify them. The difficulty with objectively measuring the principles-basedness or rules-basedness of standards used by firms has meant that much of the research stream in this area has by necessity been experimental with few archival studies.

Proponents of principles-based standards claim that such standards demand more accountability and judgement from both managers and auditors (Ng, 2004). Carmona and Trombetta (2008) suggest rules-based standards force uniformity on firms and this uniformity diminishes the information that can be gleaned from observing firms accounting policy choices. Moreover, rules-based standards can provide management with a roadmap to follow the letter of the law but not the spirit of the law (Schipper, 2003; SEC 2003; Ng, 2004). Some experimental studies find that the usage of principles-based standards guides prepares to issue higher quality financial reports (Jamal and Tan, 2010; Agoglia et al. 2011). Imhoff and Thomas (1988) find evidence that managers structure leases to meet the rules of U.S.GAAP lease accounting; giving credence to the claim that rules-based standards are more susceptible to manipulation. However, other experimental case studies have found that auditors are more willing to accept income-

system is founded in principles but provide some level of guidance. IFRS are characterized as objectives-orientated or principles-based.

increasing accounting (Trompter, 1994) and aggressive accounting (Ng and Tan, 2002) from managers when the decision is based on a principles-based standard. Herz (2003) finds that the broad guidelines of principles-based standards can provide management with more opportunities to manipulate financial reporting and reduce the comparability of financial statements. A field study (Cuccia et al. 1995) and survey study (Nelson et al. 2002) conclude that principles-based standards are unlikely to diminish opportunistic accounting. Other studies argue that complex accounting situations, for example fair-value accounting, require additional guidance and rules to ensure that preparers and users of financial information understand the proper accounting and to prevent loopholes (Holland and Jackson 2004; Benston et al. 2006). Overall, the findings from experimental studies are conflicted; with some suggesting principles-based standards are better, others suggest rules-based standards are better and some conclude there is no significant difference between the two paradigms as both can be employed by preparers to manipulate earnings (Psaros and Trotman, 2004).

III.2.2 Nature of Accounting Standards and Earnings Informativeness

There are few archival studies that examine the association between the nature of accounting standards and financial reporting quality. For example, Henderson and O'Brien (2014) study the use of professional judgment to apply a principles-based lease accounting standard and a rules-based lease accounting standard across four jurisdictions. They find that, for the two lease-intensive industries examined, requiring principles-based accounting over rules-based accounting is not associated with increased use of capital lease treatment. Mergenthaler (2011) devises a standard level measure of the rules- or

principles-basedness of standards and finds an association between rules-based standards and earnings management for a sample of U.S. firms subject to SEC action. Folsom et al. (2016) transform Mergenthaler's standard level measure into a firm level measure. They use common earnings persistence models (e.g. Kormendi and Lipe, 1987; Riedl and Srinivasan, 2010) and find that firm earnings are more informative and persistent when the firm's standards are more principles-based. They also find that firms that use more principles-based standards report earnings that are more highly correlated with future cash flows. They conclude that discretion allowed to managers under principles-based standards, better communicates the earnings information to the market. This finding is somewhat different from Henderson and O'Brien (2014) who conclude that financial reporting is insensitive to nature of accounting standards.

The results in the first part of this dissertation show that while IFRS remains mostly principles-based, it includes significantly more rules-based standards post-convergence than it did pre-convergence. If principles-based standards facilitate earnings informativeness, I would expect higher earnings informativeness in the pre or early convergence period. But, the extant literature provides very limited evidence on whether principles or rules-based standards affect earnings informativeness. Given the lack of consensus in the extant literature, I make no predictions as to the results of my study. This study generally follows Folsom et al. (2016) to investigate whether IFRS-U.S. GAAP convergence has changed the earnings informativeness of firms that cross list in the U.S. market and report financial statements using IFRS. Details of the research design are discussed in the next section.

III.3 Research Design

III.3.1 Firm-level measure of reliance on principles-based standards

I do the following two steps to construct a firm-level measure of reliance on principles-based standards. First, following Folsom et al. (2016), I use the RBC1 scores for IFRS, as developed in part one of this dissertation, to construct the PSCORE measure. The RBC[23] score is based on the four rules-based characteristics identified by the SEC (2003), FASB (2002) and practitioners (DiPiazza et al., 2008). In brief, these characteristics include large volumes of interpretive and implementation guidance, presence of numeric bright-lines, presence of scope and legacy exceptions, and higher levels of detail or verbosity. The RBC1 score is therefore used to capture the nature of individual standards with the minimum score of zero, indicating that the standard lies at the principles-based end of the spectrum, and the maximum score of 4, indicating a highly rules-based standard.

Second, I estimate a firm's reliance on principles-based standards by first adapting the keywords used in Folsom et al. (2016) to relate to specific IFRS, IAS, and other specific Statements of Interpretations Committee (SIC) and International Financial Reporting Interpretations Committee (IFRICs) that provide authoritative guidance.[24] Folsom et al. (2016)'s list of keywords was reviewed by the national office of a Big Four auditing firm thus providing assurance as to the appropriateness of the search keywords. Table 2.1 provides the search keywords used for each of the authoritative IAS, IFRS,

[23] The development of the RBC score is discussed in great detail in the first part of this dissertation.
[24] The overwhelming majority of the SIC and IFRIC provide further guidance for existing IAS and IFRS, in these cases these interpretations were rolled into the IFRS and IAS they refer to. A smaller number of these interruptive releases provide additional authoritative rules, for these releases I provided separate search terms.

SIC, and IFRIC in this study. Using textual analysis, I search the annual 20-F SEC filings using the keywords listed in Table 2.1. For example, the search terms related to *IAS 23 Borrowing Costs* include the following terms: "interest within 3 words of capitalize"[25] and "cost of borrowing". Appendix E provides an example of the results of searching "interest within 3 words of capitalize" for a sample firm. Using a textual analysis program, I am able to count the frequency of the key terms that are mentioned in the SEC filing for each standard for each firm. The relative importance of the standard to the firm is calculated as follows:

$$REL\_IMP_{its} = \frac{(firm\_count_{its} - avg\_firm\_count_{ts})}{std\_dev(firm\_count_{ts})} \quad (1)$$

The relative importance score (REL_IMP_{its}) is a standardized keyword count that represents the relative importance of standard (s) at time (t) for firm (i). It is the difference between $firm\_count_{its}$, the key word count for standard(s) at time (t) for firm (i), and the average firm count of standard (s) in year (t). This difference is then divided by the standard deviation of the firm count for standard (s) in year (t). Furthermore, to make sure that all the weights are positive and to make sure that the standards that a firm does not rely upon are not assigned a weight, I add back the minimum standardized score ($REL\_IMP_{its)}$ for standard (s) at year (t). According to Folsom et al. (2016), this calculation provides a measure of the importance of each standard to a firm relative to that of other firms which is paramount because certain search terms may be mentioned more often than others and the standardization process removes the impact of more

[25] This keyword search will only count instances of the word interest if it is within three words of capitalized. This eliminates the inclusion of other instances of the word interest that do not relate to IAS 23.

prevalent words. Also, the calculation provides a standardized weight that shows the importance of the standard to the firm compared to other firms. This is important to this study since the tests for earnings informativeness are cross-sectional, therefore the measure should also address the cross-sectional differences in importance of standards across firms.

The REL_IMP_{its} is then combined with the RBC1 scores for each standard at time (t) calculated in Part 1 of this dissertation to yield the measure of firm's reliance on principles-based standards (PSCORE). The calculation is as follows:

$$PSCORE_{it} = -1 * \sum_{s=1}^{s} (REL\_IMP_{its} * RBC1_{ts}) \qquad (2)$$

The REL_IMP measure for each standard is multiplied by the RBC1 for that standard for that year and summed for all standards used by the firm in year (t). Folsom et al. (2016) multiply the weighted score by negative one such that higher values indicate increased reliance on principles-based standards whereas lower values indicate greater reliance on rules-based standards. Since the PSCORE measure is based on the RBC1 and the standard count, I test the validity of my measure by regressing the change in PSCORE on the change in its two components. In Table 2.2, I find that the change in REL_IMP (standardized word count) and change in RBC1 are both significant in explaining the change in PSCORE. Moreover, Model 2 shows roughly 63% of the change in PSCORE is explained by the change in RBC1 and Model 3 shows that about 33% is explained by the change in the importance of that standard to a firm relative to its importance to other

firms. The results in Table 2.3 provide further validation for the PSCORE measure[26]. Table 2.3 shows the correlations between the word count for selected standards and the dollar magnitude of related financial statement line items. The world count for *IAS 36 Impairment of Assets*, for example, is significantly positively (p-value < 0.00) correlated with the line item goodwill impairment, indicating that greater the magnitude of goodwill impairment, the more likely the firm relied on *IAS 36* in the financial statements. I find similar positive significant associations for *IAS 17 Lease Accounting and* the leases line item; *IAS 38 Intangible Assets* and the goodwill line item; *IAS 19 Employee Benefits* and pension expense line item; and IFRS 2 *Share-based Payments* and the stock compensation line item. These tests provide confidence that the PSCORE is an adequate measure of the firm level of reliance on standards.

III.3.2 Research Design and Test Models

My first tests examine if the reliance on principles-based standards impacts earnings informativeness. Models of earnings persistence are often used in the literature as measures of earnings informativeness, therefore I follow the extant literature (Li, 2008; Dechow et al. 2010; Folsom et al. 2016) and implement the following model:

$$EARN_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it} \quad (3)$$

[26] In general its seems unlikely that the number of times a firms mentions a standard would change significantly from year to year however the count is made up of key words and the standard's name. In untabulated results I searched for just the standards name and found no significant fluctuations from year to year. In further untabluated results I found that increased references to a standard from year t-1 to t were correlated with changes and amendments to the standard.

EARN is earnings before extraordinary items for firm (i) at year (t) scaled by average total assets. PSCORE is the firm level measure of reliance on principles-based standards (the greater the PSCORE the greater the firm's reliance on principles-based standards). CONTROLS is a vector of common control variables employed in these models. Table 2.4 provides variable definitions. If principles-based standards are associated with increased earnings persistence, I expect the coefficient on $\boldsymbol{\alpha_3}$ to be positive. Conversely, if principles-based standards are not associated with increased earnings persistence, the coefficient should be zero or even negative.

Within the accounting research stream, earnings persistence studies examine the assumption that earnings that are more persistent and sustainable are better predictors of future cash flows. Indeed, as part of the IASB and FASB's Joint Project on the Conceptual Framework and Financial Statement Presentation, both Boards published a paper discussing the need for financial statements to cohesively present the economic situation as well as disaggregate information so that it is useful in predicting future cash flows (IASB 2008; 2010). Recently, the IASB, now working on the Conceptual Framework and Financial Statement Presentation projects separately from the FASB, re-emphasized that the objective of financial reporting is to "provide information about an entity's assets, liabilities, equity, income and expenses that is useful to users of financial information in assessing the prospects for future net cash inflows to the entity and in assessing management's stewardship of the entity's resources" (IASB, 2015). Much of the extant accounting literature (Bowen et al. 1986; Atwood et al. 2010; Folsom et al. 2016) has found that current earnings are a good predictor of future cash flows.

Therefore, with my second model, I examine the relation between current earnings and future cash flows:

$$CFO_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it} \quad (4)$$

CFO is the annual cash flow from operations. The EARN and PSCORE variables are defined the same as in equation (3). If principles-based standards increase the informativeness of current earnings to predict future cash flows, the $\boldsymbol{\alpha_3}$ coefficient should be positive. Conversely, if such standards decrease the informativeness of current earnings in relation to future cash flows, I would expect the coefficient to be negative.

My third and final model examines the role principles-based standards plays in current earnings' ability to predict market adjusted returns. The relationship between accounting earnings and returns is a common measure of earnings informativeness (Dechow, 2010). I use the following model:

$$RET_{it} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-10} CONTROLS + \alpha_{11-17} EARN_{it} * CONTROLS + \varepsilon_{it} \quad (5)$$

RET is the 12-month cumulative market-adjusted return for fiscal year for firm (i) at year (t), EARN is earnings before extraordinary items scaled by beginning market value of equity and all other variables are the same as for the previous models. If principles based standards better capture the underlying economic situation (i.e. increase earnings

informativeness), as suggested by CFOs surveyed in Dichev et al. (2013), I expect the α_3 coefficient to be positive.

III.3.3 Control Variables

The control variables in this study were selected based on a review of the extant literature (Dechow et al. 2010; Folsom et al. 2016) and are defined in Table 2.4. I attempt to control for the underlying complexity of firm reporting and operating functions by employing three different controls. I use firm size (SIZE), log of totals sales, as one control. In general, larger firms tend to have more capital and technological resources to engage in complex economic transactions. I also control for the number of operating/reporting segments (BUSSEG) and the number of geographic segments (GEOSEG) as another measure of complexity. I control for the firm indebtedness (LEVERAGE) and growth (BMT) as well. Finally, I control for industry clustering (2-digit SIC codes), year fixed effects, and firm fixed effects.

III.4 Sample Selection and Descriptive Statistics

The firms used in this study consist of Non-U.S. firms that use IFRS[27] and file a 20-F form with the SEC. The sample time periods are 2000-2004 and 2008-2012. Although the Norwalk Agreement was signed in 2002 a detailed roadmap of what convergence meant and its goals was not provided until late 2006 and subsequently updated in 2008; therefore I treat 2000-2004 as pre-convergence or early convergence

[27] The sample only includes firms that use IAS/IFRS as published by the IASB in English.

years[28]. I include 2008-2012 because these are the years in which the majority of the new IFRS and convergence changes became effective. I begin with 1,217 firm years and subtract 176 firm years that do not have the required data items in COMPUSTAT and another 135 firm years for which I could not calculate a PSCORE. The final sample consists of 906 firm years. For the returns model, I eliminate an additional 58 firms due to unavailable returns data in CRSP. Table 2.5 Panel A provides the firm year sample selection details. Panel B provides the distribution of the sample for each year in the study.

The number of firms in the pre-convergence era that cross-list in the U.S. and use IFRS English language standards is much smaller than that in the post convergence era because the mandatory IFRS adoption by the EU in 2005 (Chen et al. 2014), and the elimination of the 20-F reconciliation led to increased usage of IFRS for cross-listing. Panels C and D provide the summaries of the sample by country and industry, respectively. My sample of firms comes from nine different industries; about 39% are in manufacturing and 30% in transportation. The sample of firms comes from nearly 42 different countries. Although the firms are from many different countries, they are mainly from the UK (13%), China (9%) and Brazil (8%); overall 42% of the sample firms are from EU countries.

Table 2.6 Panel A provides descriptive statistics for the full sample. I report the mean, standard deviation, median, first and third quintile. The mean (median) PSCORE

[28] In the 2006 MOU the Boards acknowledged that numerous minor terminology changes and the introduction of 2 IFRS had occurred since 2002 but it is only in the 2006 MOU that they detail the joint-projects the will work on as part of convergence. A central aspect of the joint-projects was ensuring these standards were principles-based. Therefore, I treat the post-2006 period as post-convergence and the pre-2006 as pre or "early" convergence.

for the full sample is -36.680 (-30.460) and the standard deviation is 27.84 which implies sufficient variation in the PSCOREs of the firms in the sample. With respect to the other variables, I find that on average these firms have about 3 operating segments and 4 geographic segments. The mean (median) BTM is 0.75 (0.55), SIZE is 3.68 (3.840), LEVERAGE is 1.05 (0.23), and CFO_t is 0.09 (0.08). The mean current EARN is 0.03 while the future EARN is slightly lower at 0.02. Table 2.6 Panel B provides the descriptive statistics for the pre-convergence period (2000-2004) and Panel C provides the statistics for the post-convergence period (2008-2012). In Panel B I find that the mean PSCORE in the pre-convergence period, -35.89, is less than that in the post-convergence period, -36.63; the standard deviation in the post-convergence period, 27.45, is greater than the PSCORE standard deviation in the pre-convergence period, 21.47. Untabulated results, of the average PSCORE for each year in the study, show that the smallest average PSCOREs (i.e. rules-based standards) are all in the 2008-2012 time period. Also, the firms in the post-convergence period tend to be slightly larger than those in the pre-convergence period; the mean CFO, EARN, BTM, and LEVERAGE in the pre-convergence period are slightly greater than the mean in the post-convergence period.

Table 2.7 Panel A provides the mean and median for the full sample period based on PSCORE quintile group. Panel's B and C do so for the pre-convergence and post-convergence period, respectfully. The first quintile (Q1) consists of firms that use more rules-based standards with mean PSCORE of -80.9829 whereas, quintile five (Q5) consists of firms that rely more on principles-based standards with a mean PSCORE of -8.8528. It is noteworthy that I find a wider range in the mean PSCORE for quintiles in

the post-convergence period, which lends credence to the claim that IFRS, although still largely principles-based, now includes more rules-based standards than before. In Panel A, I find that firms that rely more on principles-based standards tend to be larger in SIZE, 3.71 (Q5) than firms that rely more on rules-based standards (Q1) and have higher mean CFO of 0.089 to 0.075. These firms have lower BTM of 0.614 to 0.76 and slightly higher LEV of 1.16 to 1.01.Within the pre-convergence sample, Panel B, firms that rely more on principles-based (Q5) standards do not differ much in SIZE from those that rely on rules-based standards but these firms have mean BUSSEG of 4.1 and GEOSEG of 3.5 which are greater than those of the rules-based firms (3.3 and 3.1, respectively). Firms that rely more on principles-based standards have a mean EARN of 0.096, CFO of 0.139, BTM of 1.07, and LEV 0.932, which are all greater than those of firms that rely more on rules-based standards except for LEVERAGE. For the post-convergence sample, Panel C shows that the mean EARN of firms in Q1 is larger than that of firms in Q5 but mean CFO is smaller. The mean SIZE and LEVERAGE of firms in Q5 are higher than those of firms in Q1, although the mean BTM is larger for firms in Q1. Finally, firms that rely more on principles-based standards (Q5) tend to have less GEOSEG than firms that rely more on rules-based standards (3.23 vs. 3.92). Table 2.7 Panel D provides the results of the difference in means tests divided between the pre/early convergence and the late/post convergence periods for the full sample, Q1 (rules-based), and Q5 (principles-based). For the full sample, the mean PSCORE does not statistically differ between pre and post. However for Q1, the post-convergence mean PSCORE is significantly lower (more rules-based) than in the pre/early convergence periods (p-value < 0.00). For Q5, the post-convergence period mean PSCORE is significantly (p-value < 0.05) greater than in the

pre/early convergence period. Finally, Table 2.8 provides the correlations for the variables in the study. PSCORE exhibits some positive correlation with SIZE and negative correlation with BTM (p-value = 0.01).

III.5 Results

III.5.1 Earnings persistence Equation (3)

I control for year, firm fixed and industry effects in all regressions. I test two specifications of each equation. In model (1), I only include control variables interacted with EARN and in model (2), I include both the interactions and the control variables. Table 2.9 Panel A reports the empirical results for the earnings persistence model for the full sample, equation (3). I find that as expected for this model, $EARN_t$ is significantly positively associated with future earnings (t-stat= 3.39, p-value =0.00). Interestingly, I find that the interaction of EARN and PSCORE is positive and marginally significant with (t-stat= 1.58, p-value= 0.07). The fact that α_3 is positive implies that firms that have a higher PSCORE, i.e. rely more on principles-based standards, have more persistent earnings. Moreover, I find that larger firms and growth firms tend to have greater earnings persistence. I also find that firms that are highly-leveraged tend to have significantly less persistent earnings. Overall, the results in Table 2.9 Panel A provide some evidence that firms that rely on principles-based standards have greater earnings persistence.

To provide a more nuanced analysis and greater insights, Table 2.9 Panel B and C provides the earnings persistence analysis for the pre-convergence period and post-convergence period, separately. In Panel B, I find that for both Model 1 and Model 2, the

interaction variable, $EARN_t$*PSCORE, is negatively associated with earnings persistence although it is insignificant. However, I find that $EARN_t$ is significantly positively associated with the earnings persistence in both specifications (t-stat= 1.77, p-value= 0.02) in Model 1 and Model 2 (t-stat=1.92 p-value= 0.02). With respect to my control variables, I find that the interaction of $EARN_t$ and LEVERAGE is significantly negatively (t-stat= -1.87, p-value =0.03) associated with persistence in Model 2 and slightly less so in Model 1; whereas the interaction with BUSSEG (t-stat= 2.39, p-value= 0.03) is significantly positively associated with earnings persistence in both models. However, the results are quite different in Panel C, for the post-convergence firms. I find that α_3, the interaction of EARN and PSCORE, is both positive and significant (t-stat= 4.51, p-value = 0.00) in Model 1 and in Model 2 (t-stat= 3.81, p-value = 0.00). This supports the notion that in the post-convergence period firms that rely more on principles-based standards have more persistent earnings. As expected, the $EARN_t$ is significantly positively associated with future earnings in Model 1 (t-stat =11.75, p = 0.00) and Model 2(t-stat = 10.02, p = 0.00). With respect to the control variables, I find that both the interaction of BTM and EARN (t-stat= -4.27, p-value= 0.00) and the interaction of EARN and LEVERAGE (t-stat= -5.4, p= 0.00) are significantly negatively associated with earnings persistence.

Table 2.10 provides the results of the empirical model examining the association between current earnings and future earnings for those firms that existed in both the pre and post-convergence time periods. A total of 18 firms (140 firm years) from the full sample cross-listed in U.S. markets for at least 2 years in both pre and post-convergence eras. The original equation (3) is amended to include a dummy variable equal to 1 for the

post-convergence period and 0 for the pre-convergence period. The coefficient of interest in this case is $\alpha_{6,}$ the interaction of current earnings, PSCORE, and the dummy for the post convergence period. While controlling for both firm and industry fixed effects, I find that the interaction between $EARN_t$ and PSCORE is significantly negatively associated with earnings persistence. However, the coefficient (α_6) in Model 2, for the interaction of current earnings with PSCORE and post-convergence, is significantly positively (t-stat= 4.30, p-value = 0.00) associated with earnings persistence. This evidence coupled with the findings presented in Table 2.9 Panel C suggests that specifically for firms that existed in both the pre and post-convergence period, greater reliance on principles-based standards in the post-convergence period is positively associated with earnings persistence. For the control variables I find in both models that the interaction of leverage and current earnings is negatively significant (t-stat= -9.15, p-value= 0.00). In Model 2, the interaction of BTM and current earnings is positively significant (t-stat= 4.05, p-value= 0.00) and BTM is negatively significant (t-stat=-3.55, p-value= 0.00).

Overall, the findings presented in Table 2.9 Panels A-C, provide evidence that IFRS firms that use more principles-based standards appear to reflect greater earnings persistence. Furthermore, Table 2.10 presents evidence that this effect is found only in the post-convergence period for IFRS firms present in both time periods.

III.5.2 Earnings Informativeness Equation (4)

I provide the results of the association between current earnings and future cash flows in Table 2.11 Panels A thru C. The full sample results are presented in Panel A. I

find, as expected, that current earnings in both specifications of the model is significantly positively associated with future cash flow (t-stat=4.63, 4.82; p-value =0.01). For the main variable of interest, the interaction term PSCORE*EARN, I find a significant positive association with future cash flow (t-stat= 2.77, 2.33; p-value = 0.00) in both models. This suggests that within the full sample, firms that rely more on principles-based standards to prepare financial information reflect earnings that better predict future cash flows. Also, in both specifications of the model, I find that control variables BTM and LEVERAGE are significantly negatively associated with future cash flows, whereas BUSSEG (number of operating segments) is positively associated with future cash flows.

Panels B and C provide the test results for the pre-convergence and post-convergence samples, respectively. Panel B, shows that although the PSCORE*EARN coefficient is positive; it is not significant in either of the model specifications. In the Model 2 specification, I find that SIZE is positive and LEVERAGE is negative and significant at conventional levels. However, Panel C, the post convergence sample, shows different results. EARN is significantly positively associated with future cash flow with a coefficient ranging from 1.91 to 2.03 in both specifications of the model. The interaction of PSCORE*EARN is significantly positively associated with future cash flow (t-stat= 2.78, p-value= 0.00) for Model 2 and Model 1(t-stat= 2.88, p-value= 0.00). The significantly positive association implies that in the post-convergence period, firms that rely more on principles-based standards yield earnings that are more predictive of future cash flows.

Table 2.12 provides the results of the test for firms that existed in both the pre- and post-convergence periods. The interaction term PSCORE*EARN is highly

positively significantly associated with future cash flows in Model 2(t-stat= 4.46, p-value=0.00) and Model 1 (t-stat=3.53, p-value= 0.00). This evidence suggests that for firms that existed in both the pre and post periods, it is *only* in the post-convergence period that reliance on principles-based standards is associated with earnings informativeness.

III.5.3 Current Earnings and Concurrent Annual Returns Equation (5)

Table 2.13 Panels A through C provide the results of the association between current earnings and concurrent annual returns. In Panel A, I find that for the full sample, the interaction between EARN and PSCORE is positive yet insignificant in both models. In Panel B, I find that in the pre-convergence period, the interaction is positive but only marginally significant (t-stat = 1.80, p-value= 0.07) in Model 2. In Panel C, the interaction between PSCORE and EARN is positive and significant in Model 2 (t-stat= 2.78, p-value= 0.00). This indicates that in the post-convergence period, firms that prepare their financial statements with greater reliance on principles-based standards report earnings that reflect more of the total news communicated in returns. Thus, this evidence suggests that firms that use more principles-based standards may have more informative earnings.

To provide more nuanced analysis, Table 2.14 displays the results of the returns regression for firms that existed in both periods. I modify equation (5) to include a dummy variable equal to 1 to indicate the post-convergence period. In Model 1, I find that the interaction of PSCORE, POSTCONVG and EARN is positively significant (t-

stat= 2.12, p-value= 0.047) and in model 2, it is highly positively significant (t-stat= 3.54, p-value= 0.00). This suggest that for firms that existed in both periods in this study, reliance on principles-based standards leads to more informative earnings in the post-convergence period.

Overall, the results reported above indicate that principles-based IFRS are positively associated with greater earnings informativeness for foreign firms cross-listed in the U.S. However, this association is significant only in the post-convergence period. This finding seems to imply that the changes to the nature of IFRS as an accounting system between the pre-and post-convergence period appear to have improved financial reporting quality.

III.5.4 Additional Tests

I repeat my analysis for earnings persistence examining only the top and lowest PSCORE deciles. The cutoff for the top decile PSCORE is -10.8 and the decile for the lowest PSCORE is -66.78. The lowest and highest PSCORE deciles contain a total of 90 individual firms and 182 firm years. The results of this additional test are presented in Table 2.15. I find that the coefficient on the interaction of EARN and PSCORE is both positive and significant (t-stat= 3.22, p-value =0.01). This indicates that the positive significant association between use of principles-based standards and earnings informativeness is present when examining a sample of firms with extreme PSCORES; however, in separate untabulated regressions of the top and lowest decile I do not find any significant results within each decile.

I further run tests on the 19 firms (121 firm years) that existed in at least 2 consecutive years (t and t-1) within the full sample to examine if the change in PSCORE is associated with changes in the earnings informativeness. These findings are reported in Table 2.16. I find consistent evidence with that presented in my main tests that the interaction term of change in PSCORE and change in current earnings is positively significantly associated with change in future earnings (t-stat= 2.61, p-value= 0.01). This implies that for firms that existed in both sample periods an increase in PSCORE (higher PSCORE means greater reliance on principles-based standards) is associated with better earnings informativeness. In untabulated results, I also find that for the 4 firms that existed in all the pre- and post-periods and experienced the greatest decrease in PSCORE (i.e. more rules-based standards); the coefficient on the interaction of change in PSCORE and change in current earnings was negative. This indicates that increased reliance on rules-based standards may be negatively associated with earnings persistence although this finding is statistically insignificant. This result needs to be interpreted with caution due to very small sample size.

III.6 Summary and Future Research

This essay examines how firm reliance on principles-based IFRS standards affects earnings informativeness and persistence in the pre and post convergence periods. I use a sample of IFRS firms that cross-list in the U.S. to examine whether reliance on principles-based standards is related to earnings persistence and informativenss and whether this association is present in the pre and post-convergence eras. I further

examine if this relationship is specific to the pre or post-convergence time period. Following Folsom et al. (2016), I develop the firm level measure of reliance on IFRS (i.e. PSCORE) by applying the keywords used in that study to the IASB standards. I use textual analysis software to count the frequency of keywords for each standard for each firm's SEC filing and then standardized the measure by determining how much a firm relies on individual standards (REL_IMP_{its}). Standards that are mentioned more in a firm's 20-F compared to other firms are given greater weight, which indicates a greater reliance on the standard. I then multiply the REL_IMP_{its} by the corresponding standard's rules-based score (RBC) for that year and sum the individual standards score for all the standards used by a firm that year to arrive at the PSCORE. This is multiplied by negative one such that higher values of the PSCORE indicate increased reliance on principles-based standards.

Overall, I find that earnings are more persistent for firms that rely more on principles-based standards in preparing financial statements. I also find that current earnings are more strongly associated with future cash flow and returns for firms with higher PSCOREs. More importantly, when I examine pre-convergence IFRS firms, I find that reliance on principles-based standards is positively yet insignificantly associated with future earnings, cash flow and return. However, for IFRS firms in the post-convergence period, I find that reliance on principles-based standards is positively associated with greater earnings persistence and informativeness. Similarly, tests of sample firms that existed in both the pre and post-convergence periods provide evidence that the positive influence of reliance on principles-based standards on earnings

informativeness is only present in the post-convergence period. This is interesting given the evidence the IFRS accounting system as a whole was more principles-based pre-convergence and has moved along the continuum towards more "rules" during the convergence process. This evidence supports the inference that principles-based standards allow managers greater discretion to better communicate information to interested parties. Yet, these findings also imply that the optimal combination of both rules-based and principles-based standards in the post-convergence period may have improved earnings informativeness.

Although, I attempt to control for complexity in my empirical tests this remains a limitation of this study since it is impossible to completely isolate the nature of a standards from the complexity of the underlying transactions it addresses. Future research could attempt to incorporate complexity into either the firm level or standard level instruments. Moreover, this study only uses IFRS firms that cross-list in the U.S. to mitigate the effect of different legal and regulatory environments but limits the applicability of my findings to wider international context.

This study provides fruitful opportunities for future research. First, the PSCORE measure could be utilized to examine the role principles-based standards plays in financial statement comparability and how this changed over the convergence process. Findings from such research would provide further means of assessing the convergence process. Moreover, research exploring whether reliance on principles-based standards is associated with analyst forecast accuracy would further illuminate the association with earnings informativeness. Another research opportunity could examine principles-based

standards and different cultural and regulatory environments. Such research would contribute greatly to the debate as to the role of principles-based standards in depicting economic reality.

IV. Summary and Conclusion

The nature of accounting standards and the drive for high-quality globally accepted accounting standards are two issues of great importance to the SEC, FASB, IASB, practitioners and academia. The 2002 Norwalk Agreement to Converge U.S. GAAP and IFRS began the first formal efforts to converge the two sets of standards towards the establishment of high-quality globally accepted compatible standards.

As part of the convergence process, both the FASB and IASB agreed to develop high-quality principles-based standards. Principles-based standards are based on a conceptual framework, provide general broad guidance, and require the exercise of judgment. Rules-based standards tend to be more detailed, contain rules (bright-lines) and exceptions, and require much interpretive guidance. IFRS is based on a mostly principles-based paradigm whereas U.S. GAAP is much more rules-based (Schipper 2002, Nobes, 2004, SEC 2003, FASB, 2002). The rules-based nature of U.S. GAAP was blamed in part for the financial scandals at the start of the decade. This lead to renewed debate as to the merits of principles vs. rules and both the SEC and FASB commissioned studies to explore how to make U.S. GAAP more principles-based. Both studies concluded that U.S. GAAP had become too rules-based and that principles-based standards *could* lead to more meaningful and informative financial statements (SEC,

2003; FASB, 2002). At the same time, IFRS was seeking to expand its usage in global markets especially in U.S. capital markets. The convergence process provided an opportunity for both Boards to develop high-quality standards compatible standards. Integral to this process was the commitment to principles-based standards.

The first part of my dissertation investigates the nature of both U.S. GAAP and IFRS and if each has changed over the convergence process. One goal of the convergence process was the development of principles-based paradigms (FASB, 2008). I use textual analysis to create the RBC (Mergenthaler, 2011), an instrument that measures the extent to which a standard contains rules-based characteristics. I hypothesize that at the onset of the convergence process, IFRS was mostly principles-based. I also hypothesize that U.S. GAAP and IFRS become more principles-based over the course of the convergence process. I find that IFRS was mostly principles-based pre-convergence. I also find IFRS includes more rules-based standards in the post-convergence period than it did previously. This dissertation provides evidence that IFRS in 2009 is significantly more detailed, contains more exceptions, more bright-lines and more interpretive guidance than it did in 2002. This has moved IFRS along the spectrum to converge towards the more rules-based U.S. GAAP. I also find that U.S. GAAP's nature has not significantly changed over the course of convergence. These findings suggest that IFRS has converged to U.S. GAAP and adopted more rules-based standards.

The second part of this dissertation examines association between the nature of IFRS and accounting quality. The friction between principles-based and rules-based standards is not new or unique to accounting. Proponents of principles-based standards

argue that they more effectively reflect economic reality and that rules-based standards are susceptible to manipulation. The extant literature is inconclusive in this respect. Some studies have found that principles-based standards allow preparers to issue more informative financial reports (Folsom et al. 2016; Jamal & Tan, 2010) while others have found that the principles-based standards are susceptible to manipulation which decreases the quality of financial reports (Cuccia, 1995; Nelson et al. 2002). Yet, others find that financial reporting decisions are not influenced by the nature of accounting standards (Henderson & O'Brien, 2014). Following, Folsom et al. (2016) I use textual analysis of keywords related to each IFRS to calculate a standardized measure a firm's reliance on principles-based standards. I combine this with the RBC score calculated in the first part of this dissertation to arrive at the PSCORE, a firm level instrument that measure the extent to which a firm relies on principles-based standards. Using a sample of 268 firm (906 firm years) that used IFRS and cross-listed in U.S. capital markets from 2000-2004 and 2008-2012, I investigate the relation between principles-based standards and accounting informativeness. I find that firms that use more principles-based standards have more informative earnings, earnings that are more predictive of future cash flows, and earnings that better reflect the information in concurrent returns. This relation is present in the post-convergence period only. I find that firms that existed in both periods only show this association in the post-convergence period. This finding contributes to the existing literature by providing initial evidence that the convergence process has helped increase the informativeness of IFRS financial statements and that an optimal blend of principles- and rules-based standards may be worthwhile.

This dissertation has several limitations. First, the dissertation only examines firms that cross-list in the U.S. capital markets. This provides a feasible way to mitigate the effect of external factors such as enforcement, and legal environment that can influence reporting quality. But this limits the applicability of this study to environments outside the U.S. Second, the RBC and PSCORE are very new instruments that may need further refinement as the structure of new accounting standards change. For example, the FASB Codification codified U.S. GAAP into over 800 topics which can affect how components of the RBC and PSCORE are calculated. Finally, although this dissertation provides evidence that contributes to the discussion as to the how principles-based standards impact financial reporting, I make no claims as to the precedence of principles-based standards over rules-based standards.

Table 1.1 Panel A: U.S. GAAP Authoritative Standards for Publicly Traded Firms as of 1953 and 2014

	1953	2014
Financial Accounting Standards (SFAS)	0	60
Accounting Research Bulletins (ARBs)	26	17
Accounting Principles Board Opinions (APBs)	0	12
Statements of Financial Accounting Concepts (SFAC)	0	1
SEC Staff Accounting Bulletins (SAB)	0	1
Statement of Accounting Position	0	1
Total*	26	92

*Any standard that is an amendemnt to an existing standard is rolled into the existing standard to be counted as one standard. For example FAS 160 is an amendement to ARB 51 thus they are counted as one standard.

Panel B: Authoritative International Accounting Standards as of 1976 and 2014

	1976	2014
International Accounting Standards (IAS)	2	30
International Financial Reporting Standards (IFRS)	0	15
Statements of Interpretations Committee (SIC)	0	6
IFRS Interpretations Committee (IFRIC)	0	13
Total	2	64

Table 1.2 Panel A: Descriptive Statistics for IFRS 1976-2014

Variables:		BL			Except			Guidance			Detail		
Year	N	Mean	Median	Std Dev	Mean	Median	Std Dev	Mean	Median	Std Dev	Mean	Median	Std Dev
1976	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1706	1706	402
1977	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2195	1706	1352
1978	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1811	1315	1204
1979	8	0.00	0.00	0.00	0.25	0.00	0.71	0.00	0.00	0.00	1768	1345	1040
1980	11	0.00	0.00	0.00	0.73	0.00	1.27	0.00	0.00	0.00	1904	1528	959
1981	13	0.00	0.00	0.00	0.77	0.00	1.24	0.00	0.00	0.00	1983	1805	931
1982	13	0.00	0.00	0.00	0.77	0.00	1.24	0.00	0.00	0.00	1983	1805	931
1983	15	0.00	0.00	0.00	0.87	0.00	1.30	0.00	0.00	0.00	2114	1857	890
1984	17	0.00	0.00	0.00	1.06	0.00	1.34	0.00	0.00	0.00	2303	1990	1100
1985	21	0.00	0.00	0.00	1.00	0.00	1.26	0.00	0.00	0.00	2582	2260	1175
1986	23	0.00	0.00	0.00	0.91	0.00	1.24	0.00	0.00	0.00	2529	2027	1134
1987	24	0.00	0.00	0.00	1.00	0.00	1.29	0.00	0.00	0.00	2612	2144	1181
1988	25	0.00	0.00	0.00	0.96	0.00	1.27	0.00	0.00	0.00	2648	2260	1170
1989	25	0.00	0.00	0.00	0.96	0.00	1.27	0.00	0.00	0.00	2648	2260	1170
1990	27	0.11	0.00	0.42	0.93	0.00	1.24	0.00	0.00	0.00	2688	2354	1186
1991	27	0.11	0.00	0.42	0.93	0.00	1.24	0.00	0.00	0.00	2688	2354	1186
1992	29	0.10	0.00	0.41	0.86	0.00	1.22	0.00	0.00	0.00	2851	2498	1300
1993	29	0.10	0.00	0.41	0.86	0.00	1.22	0.00	0.00	0.00	2851	2498	1300
1994	29	0.10	0.00	0.41	0.86	0.00	1.22	0.00	0.00	0.00	2955	2844	1289
1995	29	0.07	0.00	0.37	0.90	0.00	1.29	0.00	0.00	0.00	3418	3033	1592
1996	30	0.13	0.00	0.51	0.93	0.00	1.28	0.00	0.00	0.00	3935	3455	2307
1997	30	0.13	0.00	0.51	0.93	0.00	1.28	0.00	0.00	0.00	3935	3455	2307
1998	39	0.10	0.00	0.45	0.87	0.00	1.30	0.05	0.00	0.22	3474	3027	2537
1999	49	0.14	0.00	0.58	1.04	0.00	1.59	0.27	0.00	0.53	3842	3027	3382
2000	53	0.19	0.00	0.68	0.96	0.00	1.56	0.32	0.00	0.70	3582	2844	3364
2001	52	0.19	0.00	0.63	1.19	0.00	2.06	0.33	0.00	0.71	3972	2987	3857
2002	64	0.20	0.00	0.67	1.02	0.00	1.91	0.27	0.00	0.65	3453	1926	3640
2003	65	0.20	0.00	0.67	1.03	0.00	1.90	0.26	0.00	0.64	3459	1929	3611
2004	63	0.30	0.00	1.09	1.08	0.00	2.01	0.27	0.00	0.65	3454	2288	3265
2005	49	0.37	0.00	1.18	1.67	0.00	2.42	0.39	0.00	0.73	4314	3678	3359
2006	57	0.53	0.00	1.52	1.95	0.00	2.55	0.67	0.00	1.47	3960	3406	3419
2007	58	0.52	0.00	1.51	2.02	0.00	2.61	0.76	0.00	1.56	3898	3337	3395
2008	63	0.48	0.00	1.46	1.87	0.00	2.56	0.70	0.00	1.51	3734	3033	3305
2009	65	0.74	0.00	1.70	2.32	1.00	3.24	1.22	0.00	2.07	3662	2733	3605
2010	64	0.75	0.00	1.71	2.33	1.00	3.24	1.28	0.00	2.22	3706	2789	3621
2011	64	0.75	0.00	1.71	2.33	1.00	3.24	1.28	0.00	2.22	3778	2789	3694
2012	63	0.79	0.00	1.72	2.40	1.00	3.26	1.33	0.00	2.23	3977	2884	3857
2013	66	0.79	0.00	1.82	2.44	1.00	3.23	1.39	0.00	2.28	4094	2838	3792
2014	64	0.81	0.00	1.84	2.52	1.00	3.25	1.44	0.00	2.30	4117	2838	3832

Table 1.2 Panel B: Descriptive Statistics for U.S. GAAP 1976-2014

Variables:		BL			Except			Guidance			Detail		
Year	N	Mean	Median	Std Dev	Mean	Median	Std Dev	Mean	Median	Std Dev	Mean	Median	Std Dev
1976	53	0.28	0.00	1.41	1.38	0.00	2.09	0.79	1.00	0.97	3221	2320	3195
1977	52	0.33	0.00	1.44	1.25	0.00	2.20	0.87	1.00	1.09	3653	2280	3834
1978	53	0.32	0.00	1.42	1.43	0.00	2.55	1.11	1.00	1.35	3777	2320	3928
1979	56	0.34	0.00	1.40	1.38	0.00	2.50	1.54	1.00	2.20	3949	2328	4212
1980	59	0.34	0.00	1.37	1.41	0.00	2.52	1.54	1.00	2.29	4013	2320	4339
1981	66	0.32	0.00	1.30	1.33	0.00	2.43	1.55	1.00	2.33	3847	2280	4125
1982	77	0.42	0.00	1.41	1.39	0.00	2.55	1.47	1.00	2.25	4204	2493	4481
1983	79	0.41	0.00	1.39	1.38	0.00	2.32	1.38	0.00	2.25	4007	2256	4440
1984	79	0.41	0.00	1.39	1.42	0.00	2.32	1.71	1.00	2.59	4034	2305	4428
1985	82	1.37	0.00	0.39	1.40	0.00	2.30	2.13	1.00	3.21	4196	2306	4543
1986	83	0.40	0.00	1.36	1.41	0.00	2.28	2.43	1.00	3.73	4581	2493	5008
1987	81	0.38	0.00	1.37	1.43	0.00	2.45	2.87	1.00	4.91	4569	2307	5378
1988	88	0.48	0.00	1.68	1.42	0.00	2.50	3.14	1.00	5.76	4989	2665	6240
1989	80	0.40	0.00	1.39	1.43	0.00	2.53	3.38	1.00	6.45	5141	2779	6442
1990	82	0.39	0.00	1.38	1.56	0.00	2.69	3.62	1.00	6.92	5142	2779	6389
1991	81	0.40	0.00	1.38	1.53	0.00	2.69	3.77	1.00	7.03	5188	2804	6417
1992	85	0.40	0.00	1.36	1.75	0.00	3.02	3.89	2.00	7.12	5889	2967	7821
1993	84	0.42	0.00	1.36	1.85	0.00	3.06	4.61	2.00	7.76	5713	3165	7525
1994	86	0.41	0.00	1.35	1.92	0.00	3.16	4.94	2.00	8.19	5811	3243	7482
1995	89	0.43	0.00	1.36	1.99	0.00	3.23	5.19	2.00	8.94	6121	3363	7959
1996	89	0.43	0.00	1.36	2.03	0.00	3.23	5.84	3.00	9.77	6256	3363	8008
1997	94	0.45	0.00	1.37	1.97	0.00	3.17	6.16	3.00	10.44	6635	3374	8324
1998	91	0.34	0.00	0.96	1.96	0.00	3.17	6.78	3.00	11.23	6513	3351	8387
1999	94	0.37	0.00	1.02	2.00	0.00	3.16	6.94	3.00	11.79	6803	3374	8652
2000	95	0.34	0.00	0.94	2.08	0.00	3.39	8.79	3.00	17.13	7377	3384	9718
2001	98	0.33	0.00	0.93	2.32	0.50	3.66	12.57	4.00	26.89	8511	3455	10959
2002	94	0.32	0.00	0.93	2.14	0.00	3.40	10.50	4.00	21.69	8222	3374	10379
2003	93	0.32	0.00	0.93	2.18	0.00	3.41	10.90	4.00	22.59	8311	3384	10527
2004	93	0.32	0.00	0.93	2.18	0.00	3.41	11.24	4.00	22.84	8324	3384	10584
2005	95	0.32	0.00	0.93	2.17	0.00	3.38	11.47	4.00	23.13	8983	3423	12149
2006	92	0.28	0.00	0.89	2.20	0.00	3.43	11.58	4.00	23.59	9169	3422	12956
2007	95	0.27	0.00	0.88	2.35	1.00	3.50	11.29	4.00	23.38	9375	4020	13057
2008	96	0.27	0.00	0.88	2.48	1.00	3.62	11.42	4.00	23.34	10386	3949	14659
2009	96	0.27	0.00	0.88	2.46	1.00	3.56	10.90	4.00	22.94	11638	4074	17221
2010	92	0.28	0.00	0.89	2.57	1.00	3.61	11.38	4.50	23.32	12150	4238	17493
2011	92	0.28	0.00	0.89	2.61	1.00	3.65	11.38	4.50	23.32	12148	4238	17529
2012	92	0.28	0.00	0.89	2.61	1.00	3.65	11.38	4.50	23.32	12160	4238	17539
2013	93	0.28	0.00	0.89	2.76	1.00	3.89	13.29	5.00	29.62	12612	4299	18066
2014	92	0.28	0.00	0.89	2.64	1.00	3.68	11.38	4.50	23.32	12133	4238	17511

Variable Definitions:

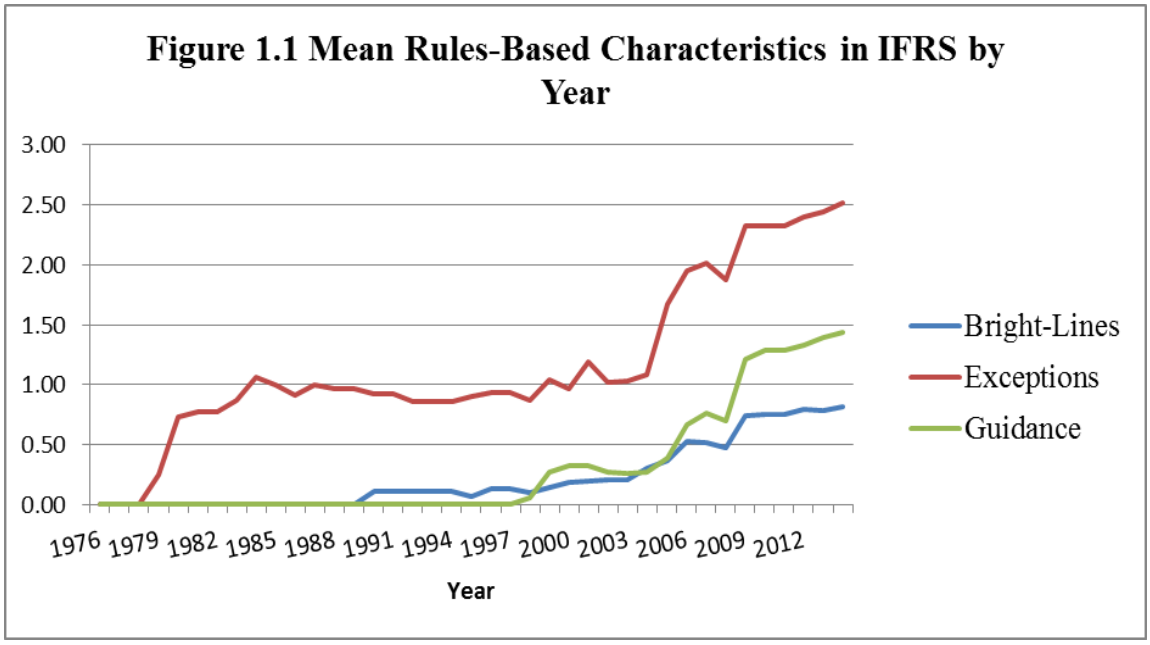
N= number of standards

BL = the number of numeric bright-lines

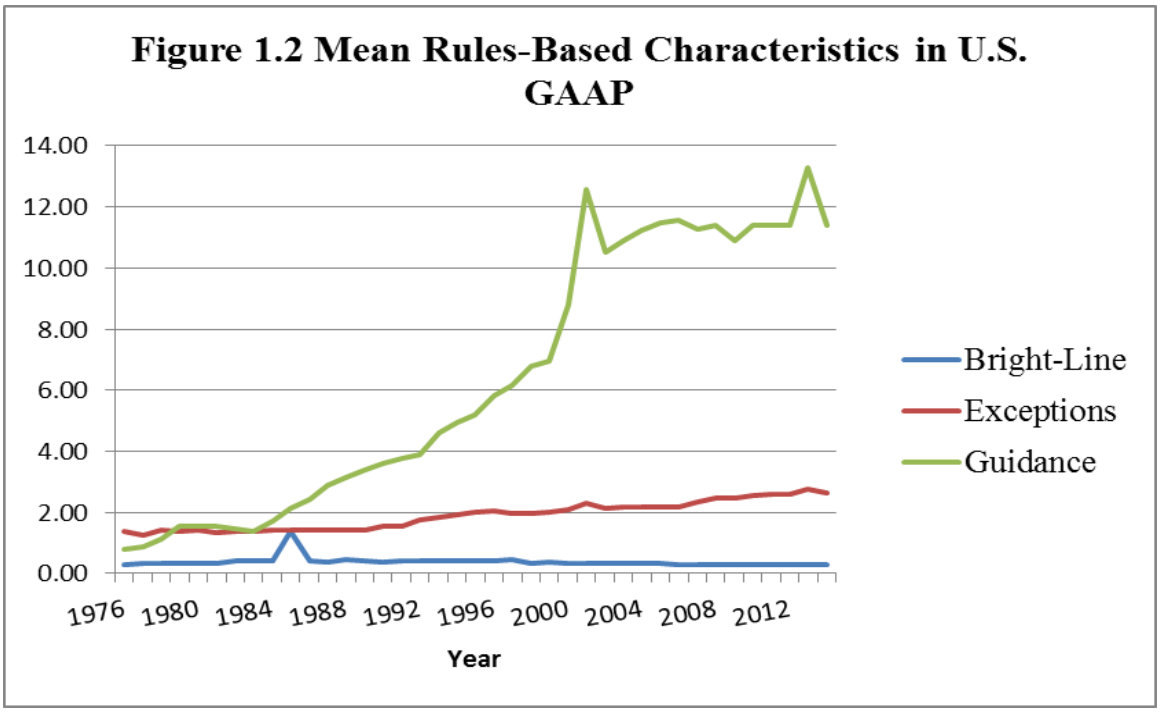
Except= the number of scope and legacy exceptions

Guidance= the number of interpetive announcements related to the standard

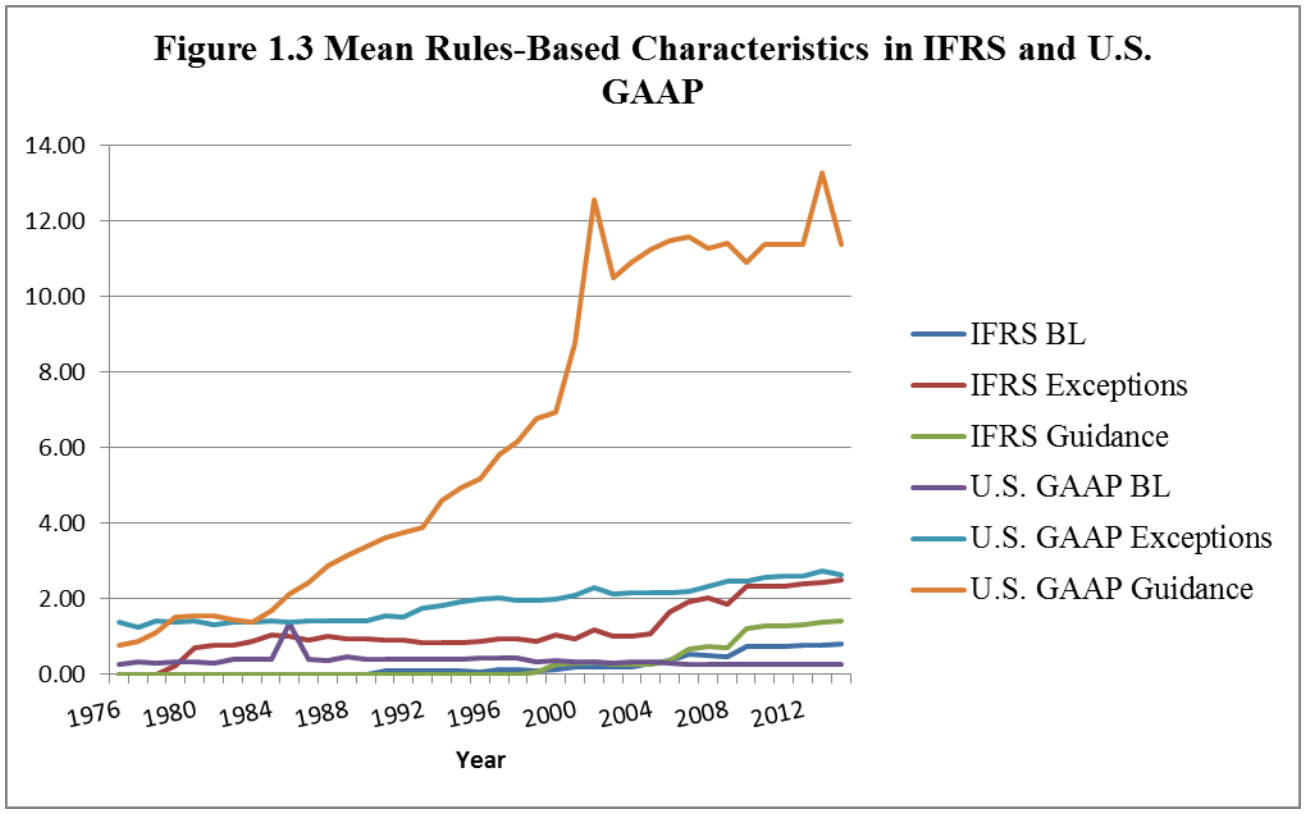
Details= the word count of the standard



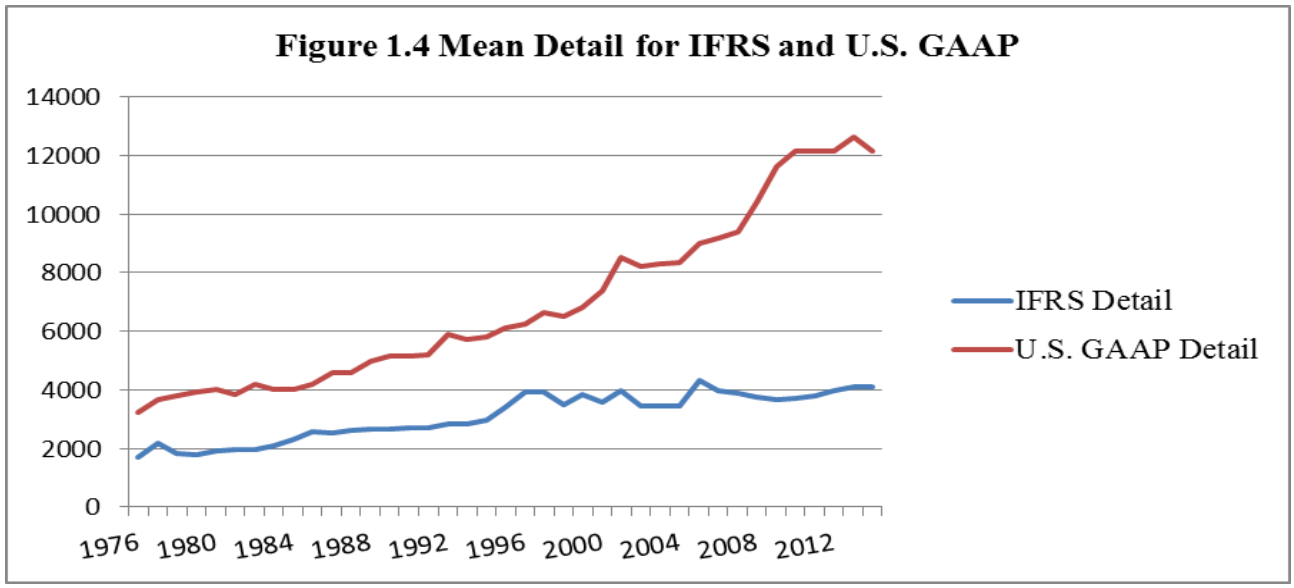
This figure plots the mean number of Bright-lines, Exceptions, and Guidance for IFRS by year.



This figure plots the mean number of Bright-lines, Exceptions, and Guidance for IFRS by year.



This figure plots the mean rules-based characteristics (BL, EXCEPT,and GUIDANCE) for both U.S. GAAP and IFRS.



This figure plots the mean DETAIL for IFRS and U.S. GAAP

Table 1.3 Panel A U.S. GAAP Mean and Median RBC By Year				
Year	Mean RBC1	Median RBC1	Mean RBC2	Median RBC2
1953	0.115	0.000	-1.520	-1.571
1954	0.111	0.000	-1.526	-1.571
1955	0.107	0.000	-1.529	-1.578
1956	0.138	0.000	-1.494	-1.571
1957	0.138	0.000	-1.491	-1.571
1958	0.125	0.000	-1.500	-1.571
1959	0.188	0.000	-1.431	-1.563
1960	0.188	0.000	-1.431	-1.563
1961	0.188	0.000	-1.431	-1.563
1962	0.176	0.000	-1.440	-1.563
1963	0.171	0.000	-1.443	-1.556
1964	0.171	0.000	-1.441	-1.556
1965	0.171	0.000	-1.416	-1.571
1966	0.225	0.000	-1.306	-1.552
1967	0.237	0.000	-1.250	-1.564
1968	0.289	0.000	-1.098	-1.550
1969	0.270	0.000	-1.129	-1.559
1970	0.308	0.000	-1.057	-1.546
1971	0.400	0.000	-0.955	-1.523
1972	0.422	0.000	-0.900	-1.473
1973	0.440	0.000	-0.868	-1.441
1974	0.440	0.000	-0.864	-1.441
1975	0.453	0.000	-0.822	-1.426
1976	0.472	0.000	-0.602	-1.367
1977	0.481	0.000	-0.555	-1.375
1978	0.491	0.000	-0.465	-1.367
1979	0.518	0.000	-0.411	-1.326
1980	0.525	0.000	-0.393	-1.286
1981	0.515	0.000	-0.452	-1.274
1982	0.584	0.000	-0.313	-1.179
1983	0.608	0.000	-0.354	-1.158
1984	0.608	0.000	-0.323	-1.134
1985	0.610	0.000	-0.308	-1.001
1986	0.663	0.000	-0.247	-0.886
1987	0.667	0.000	-0.234	-0.918

Table 1.3 Panel A (Continued)

Year	Mean RBC1	Median RBC1	Mean RBC2	Median RBC2
1988	0.648	0.000	-0.103	-0.809
1989	0.675	0.000	-0.153	-0.795
1990	0.695	0.000	-0.106	-0.739
1991	0.704	1.000	-0.103	-0.794
1992	0.753	1.000	0.054	-0.681
1993	0.798	1.000	0.115	-0.628
1994	0.779	1.000	0.138	-0.628
1995	0.809	1.000	0.221	-0.667
1996	0.831	1.000	0.267	-0.589
1997	0.862	1.000	0.312	-0.615
1998	0.868	1.000	0.213	-0.640
1999	0.883	1.000	0.288	-0.584
2000	0.916	1.000	0.452	-0.578
2001	1.031	1.000	0.844	-0.494
2002	1.000	1.000	0.580	-0.571
2003	1.022	1.000	0.624	-0.566
2004	1.022	1.000	0.643	-0.566
2005	1.032	1.000	0.701	-0.566
2006	1.000	1.000	0.698	-0.583
2007	1.042	1.000	0.755	-0.566
2008	1.052	1.000	0.899	-0.474
2009	1.063	1.000	1.001	-0.435
2010	1.098	1.000	1.123	-0.351
2011	1.098	1.000	1.137	-0.351
2012	1.098	1.000	1.139	-0.351
2013	1.118	1.000	1.384	-0.319
2014	1.109	1.000	1.145	-0.293

This table provides the mean and median RBC 1 and RBC2 by year. The RBC1 score ranges from 0 to 1. RBC2 to is a measure of the rules-basedness of a standard relative to all other standard. The greater the RBC1 and RBC2 the more rules-based the standard

Table 1.3 Panel B IFRS Mean and Median RBC By Year				
Year	Mean RBC1	Median RBC1	Mean RBC2	Median RBC2
1976	0.000	0.000	-1.824	-1.824
1977	0.250	0.000	-0.497	-1.822
1978	0.167	0.000	-1.011	-1.949
1979	0.250	0.000	-1.112	-1.939
1980	0.364	0.000	-1.024	-1.730
1981	0.385	0.000	-1.046	-1.730
1982	0.385	0.000	-1.046	-1.730
1983	0.400	0.000	-1.010	-1.730
1984	0.471	0.000	-0.904	-1.401
1985	0.476	0.000	-0.890	-0.942
1986	0.435	0.000	-0.964	-1.115
1987	0.458	0.000	-0.908	-1.028
1988	0.440	0.000	-0.921	-1.115
1989	0.440	0.000	-0.921	-1.115
1990	0.481	0.000	-0.937	-0.942
1991	0.481	0.000	-0.937	-0.942
1992	0.448	0.000	-0.923	-0.870
1993	0.448	0.000	-0.923	-0.870
1994	0.448	0.000	-0.889	-0.870
1995	0.552	0.000	-0.644	-0.764
1996	0.633	0.500	-0.469	-0.673
1997	0.633	0.500	-0.469	-0.673
1998	0.641	0.000	-0.423	-0.764
1999	0.857	1.000	-0.118	-0.930
2000	0.811	0.000	-0.225	-1.028
2001	0.865	0.000	0.056	-1.008
2002	0.734	0.000	-0.307	-1.265
2003	0.738	0.000	-0.307	-1.239
2004	0.762	0.000	-0.234	-1.183
2005	1.082	1.000	0.486	-0.541
2006	1.035	1.000	0.578	-0.629

Table 1.3 Panel B (Continued)

Year	Mean RBC1	Median RBC1	Mean RBC2	Median RBC2
2007	1.069	1.000	0.647	-0.677
2008	1.000	1.000	0.461	-0.987
2009	1.062	1.000	0.949	-0.780
2010	1.078	1.000	1.017	-0.802
2011	1.094	1.000	1.040	-0.802
2012	1.143	1.000	1.175	-0.780
2013	1.197	1.000	1.261	-0.308
2014	1.234	1.000	1.340	-0.088

This table provides the mean and median RBC 1 and RBC2 by year. The RBC1 score ranges from 0 to 1. RBC2 to is a measure of the rules-basedness of a standard relative to all other standard. The greater the RBC1 and RBC2 the more rules-based the standard

Table 1.4 Rules-Based Continuum Construct Validity

Panel A: Pearson Corr. Coeff. Among Rules-Based Characteristics for U.S. GAAP

	DetailInd	GuidanceInd	ExcepInd
GuidanceInd	0.56		
	(<.0001)		
ExcepInd	0.42	0.52	
	(<.0001)	(<.0001)	
BLInd	0.24	0.16	0.15
	(<.0001)	(<.0001)	(<.0001)

Panel B: Pearson Corr. Coeff. Among Rules-Based Characteristics for IFRS

	DetailInd	GuidanceInd	ExcepInd
GuidanceInd	0.44		
	(<.0001)		
ExcepInd	0.48	0.41	
	(<.0001)	(<.0001)	
BLInd	0.29	0.41	0.34
	(<.0001)	(<.0001)	(<.0001)

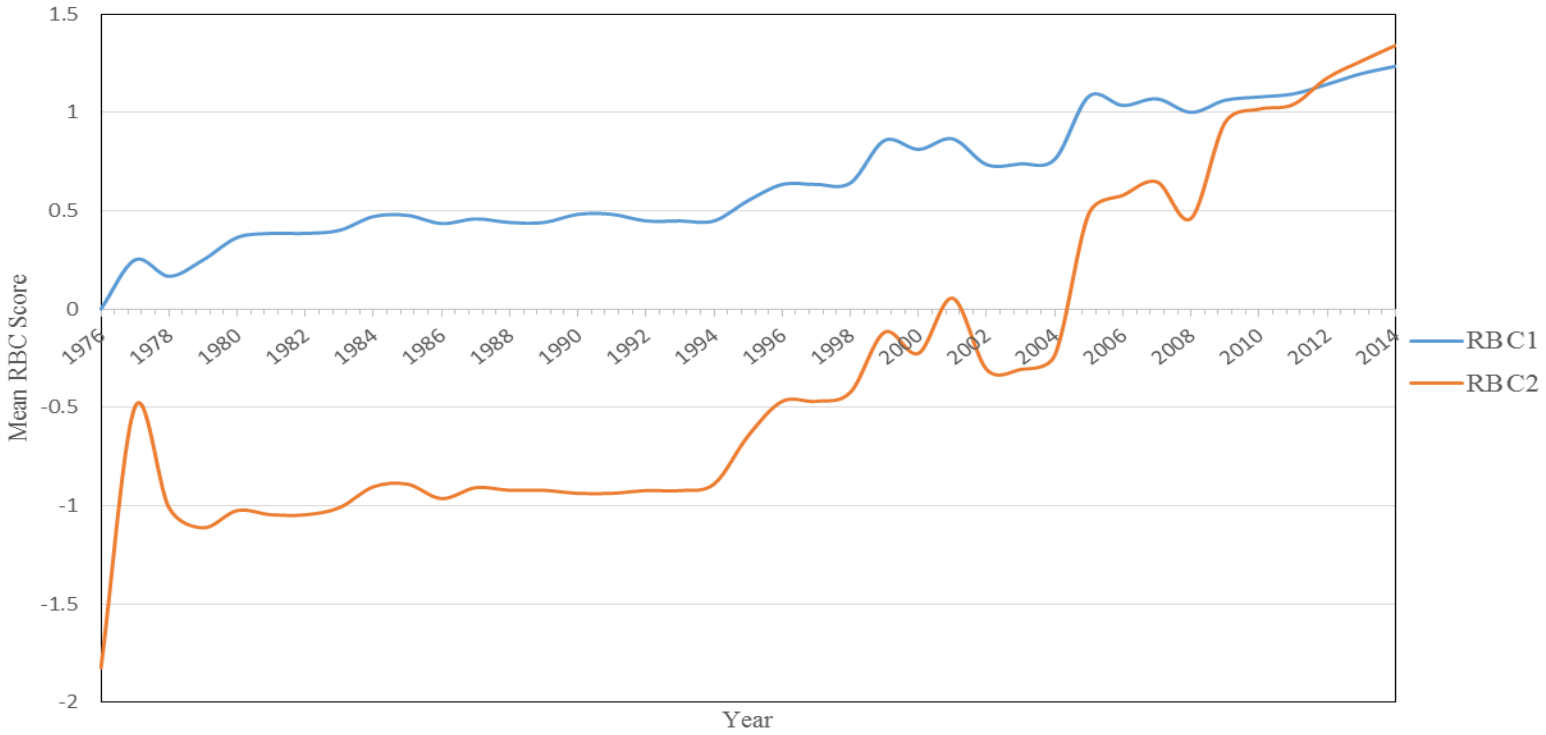
This table provides the correlations between the four characteristics of rules-based standards identified by the SEC and FASB as

Table 1.5: Comparison of Select IFRS and U.S. GAAP Standards

Descritpion	IFRS Standard	IFRS RBC	Donelson et al. 2012 IFRS RBC	U.S. GAAP Standard	U.S.RBC	Donelson et al. 2012 U.S. RBC1	SEC Classification
Recog. of Financial Assets/Liabilities	IAS 39	4	3	FAS 140 (Topic 860)	4	4	Rules-Based
Post-retirement benefits	IAS 19	2	2	FAS 106 (Topic 715)	3	3	Rules-Based
Taxes	IAS 12	1	2	FAS 109 (Topic 740)	4	4	Rules-Based
Stock-based Compensation	IFRS 2	2	2	FAS 123 (Topic 718)	4	4	Rules-Based
Lease accounting	IAS 17	2	2	FAS 13 (Topic 840)	4	4	Rules-Based
Pensions	IAS 19	2	2	FAS 87 (Topic 715)	3	4	Rules-Based
Derivatives and Hedging	IAS 39	4	3	FAS 133 (Topic 815)	3	3	Rules-Based
Accounting for Sale of Real Estate	IAS 18	1	2	FAS 66 (Topic 360)	3	3	Rules-Based
Consolidation	IAS 27	2	1	ARB 51 (Topic 810)	3	3	Rules-Based
Business Combination	IFRS 3	2	2	FAS 141 (Topic 805)	3	3	Rules-Based
Intangibles	IAS 38	2	2	FAS 142 (Topic 350)	3	3	Principles-Based
Long-lived Asset Impairment	IAS 36	2	2	FAS 144 (Topic 360)	3	3	Principles-Based
Foreign Currency	IAS 21	2	1	FAS 52 (Topic 830)	2	2	Principles-Based
Inventory	IAS 2	0	1	ARB 43-4 (Topic 330)	0	0	Principles-Based
Borrowing Costs	IAS 23	1	1	FAS 34 (Topic 835)	0	0	Principles-Based

This table recreates Donelson et al. 2012 Table 1 Panel B. It provides the median RBC score for some of the US GAAP standards the SEC classified as either rules- or principles-based and presents the score for the corresponding IFRS Standards. IFRS RBC and U.S. RBC provide the median RBC scores as of 2014. The higher the RBC score the more rules-based the standard; thus an RBC of 4 is extremely rules-based and RBC of 0 is principles-based. RBC is calculated each year for each standard because standards change over time. This accounts for the differences between my RBC scores and those in Doneslon et al. 2012

Figure 1.5
IFRS Rules-Based Characteristics Over Time



This graph depicts the average RBC1 and RBC2 scrore overtime. RBC1 scores range from (highly-principles-based) to 4 rules-based. RBC 2 captures the rules-based characteristics of the standards relative to all other standards in the accounting system at time (t).

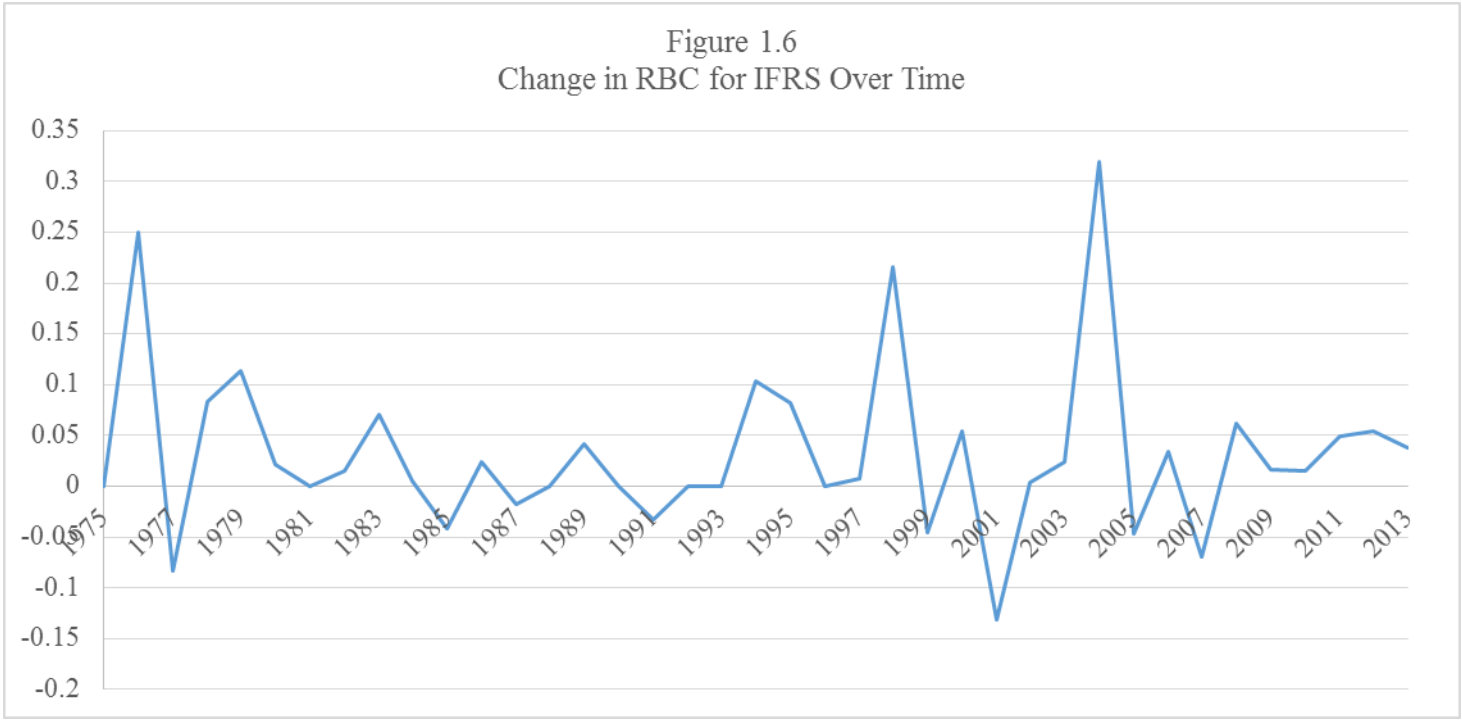
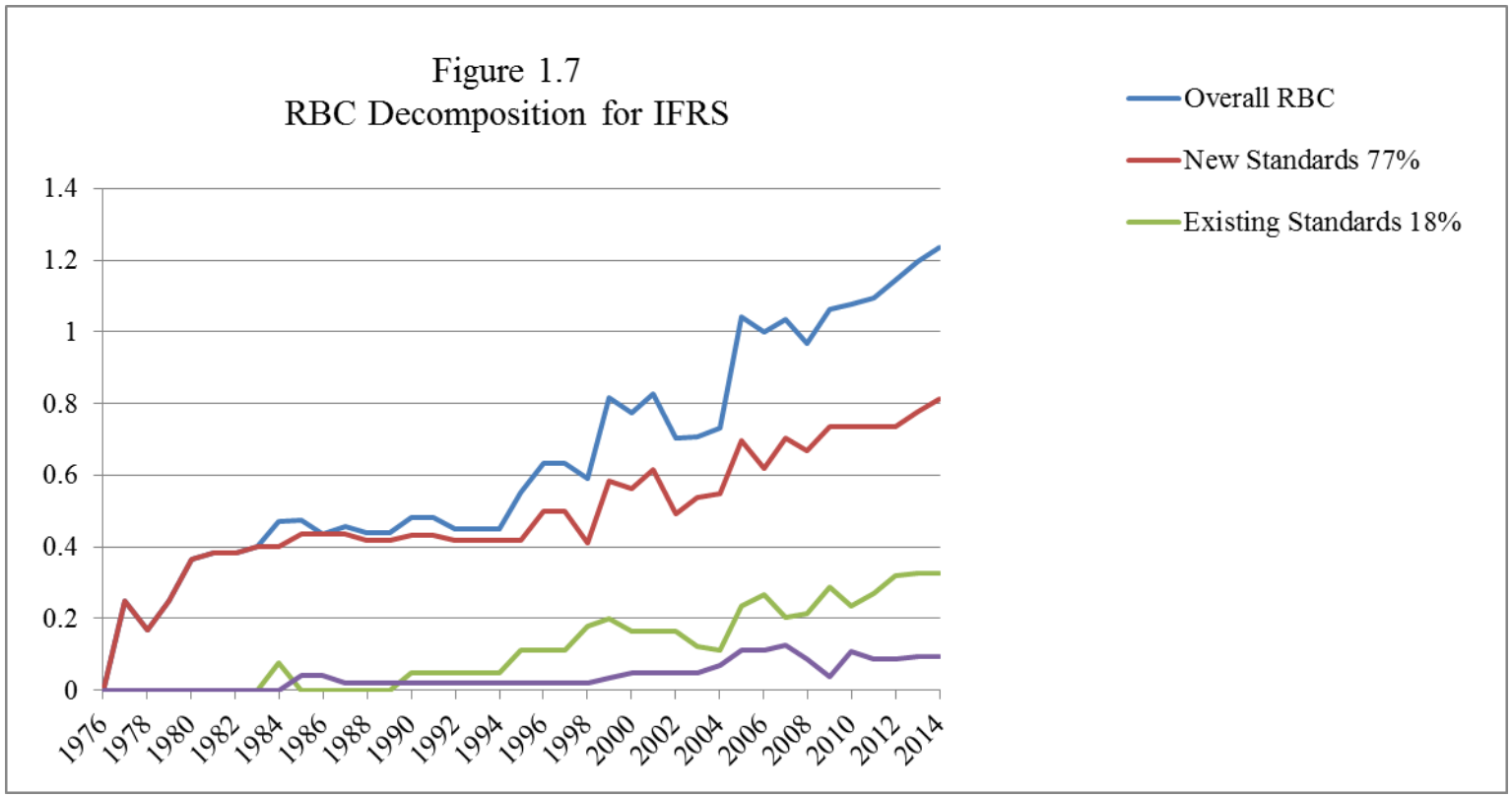
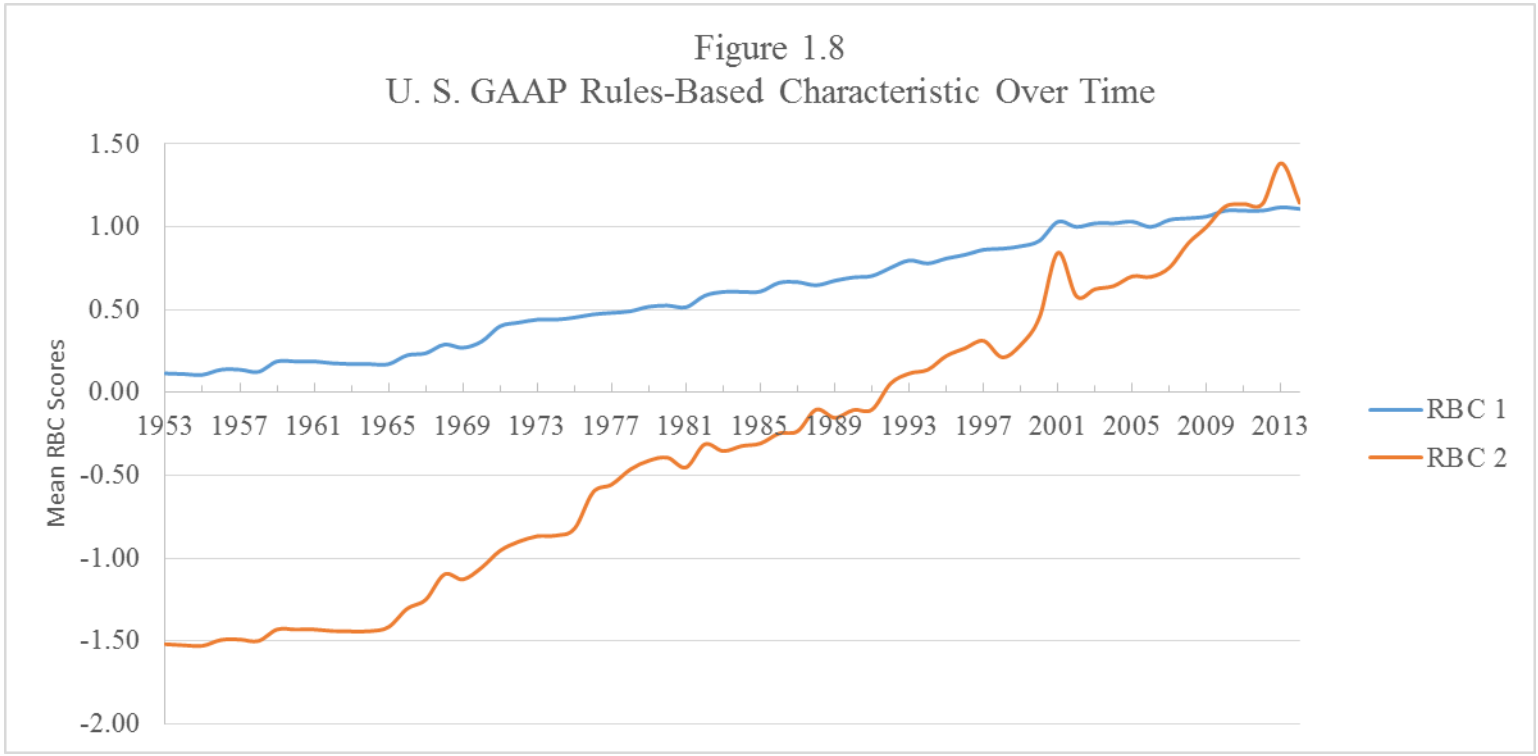


Figure 1.6 shows the change in the mean RBC1 score



This figure presents the RBC1 score decomposed into New Standards, Existing Standards,and Replacement Standards. Replacement standards are standards the replace existing standards.



This graph depicts the average RBC1 and RBC2 scrore overtime. RBC1 scores range from (highly-principles-based) to 4. (rules-based). RBC 2 captures the rules-based characteristics of the standards relative to all other standards in the accounting system at time (t).

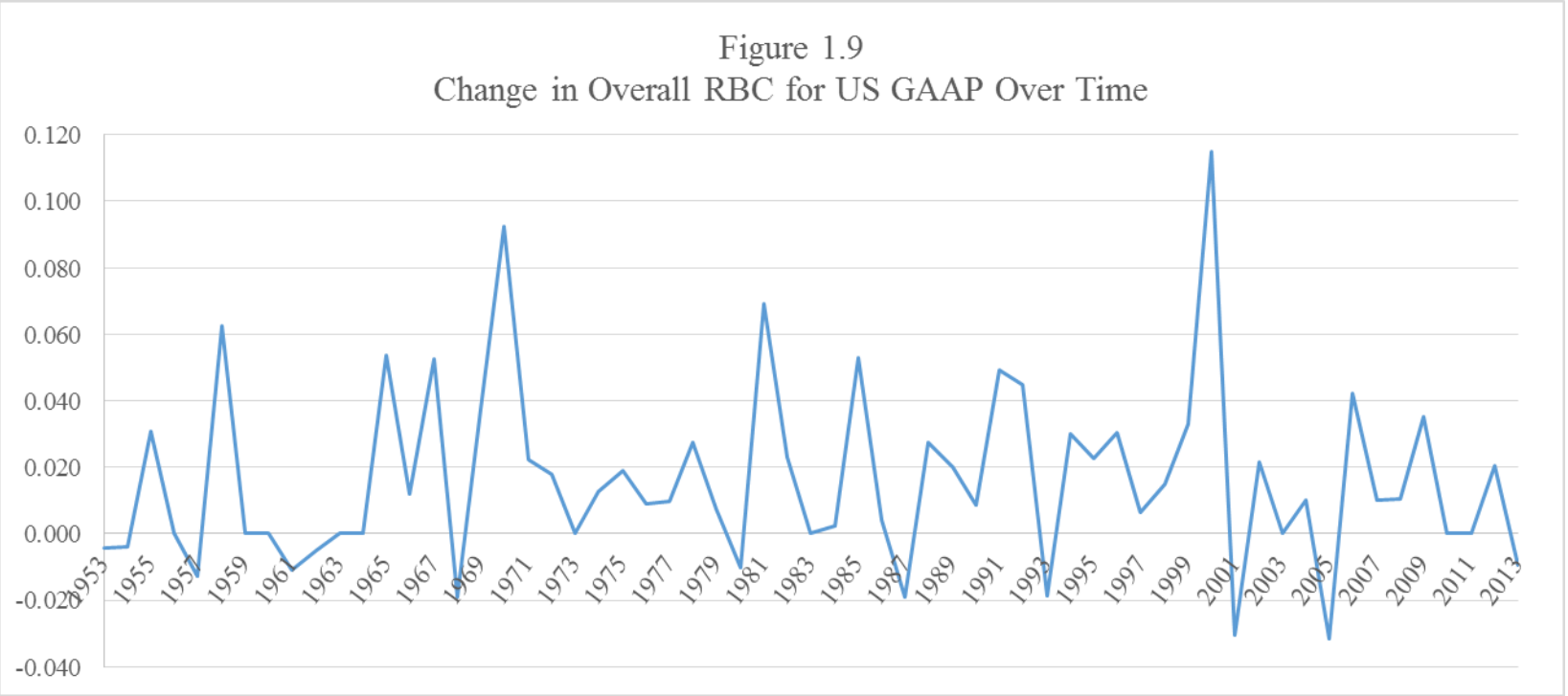
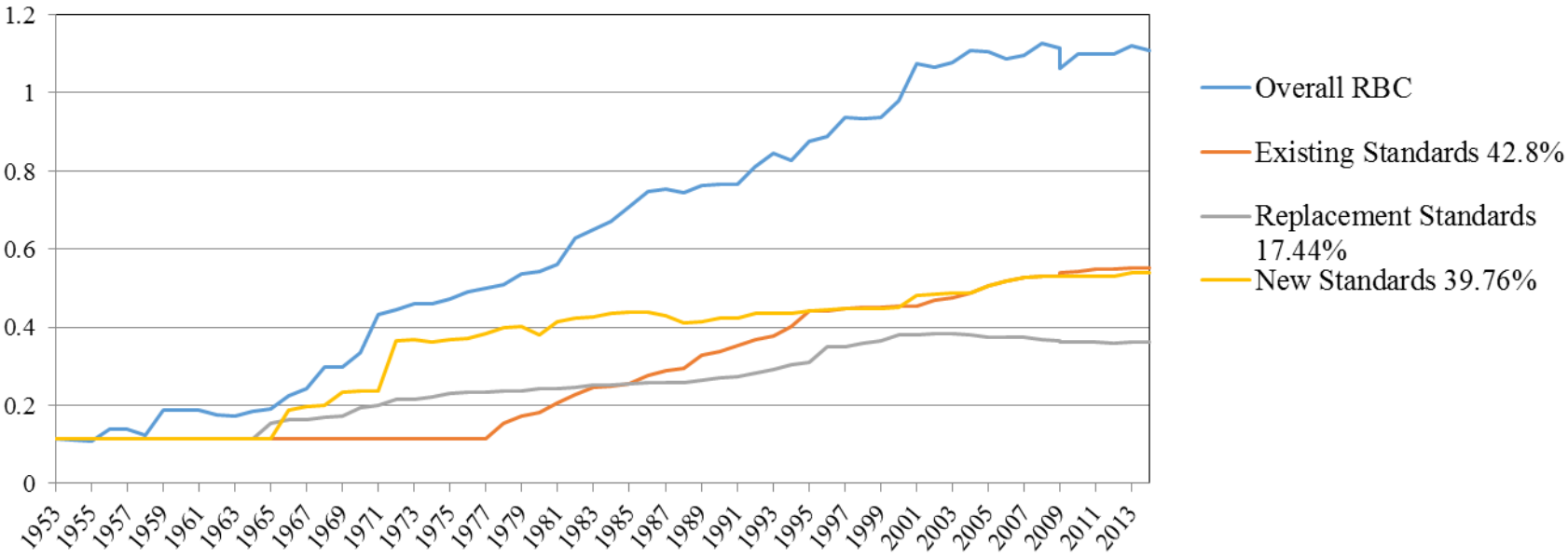


Figure 1.9 shows the change in the mean RBC1 score

Figure 1.10
RBC Decomposition for U.S. GAAP



This figure presents the RBC1 score decomposed into New Standards, Existing Standards,and Replacement Standards. Replacement standards are standards the replace existing standards.

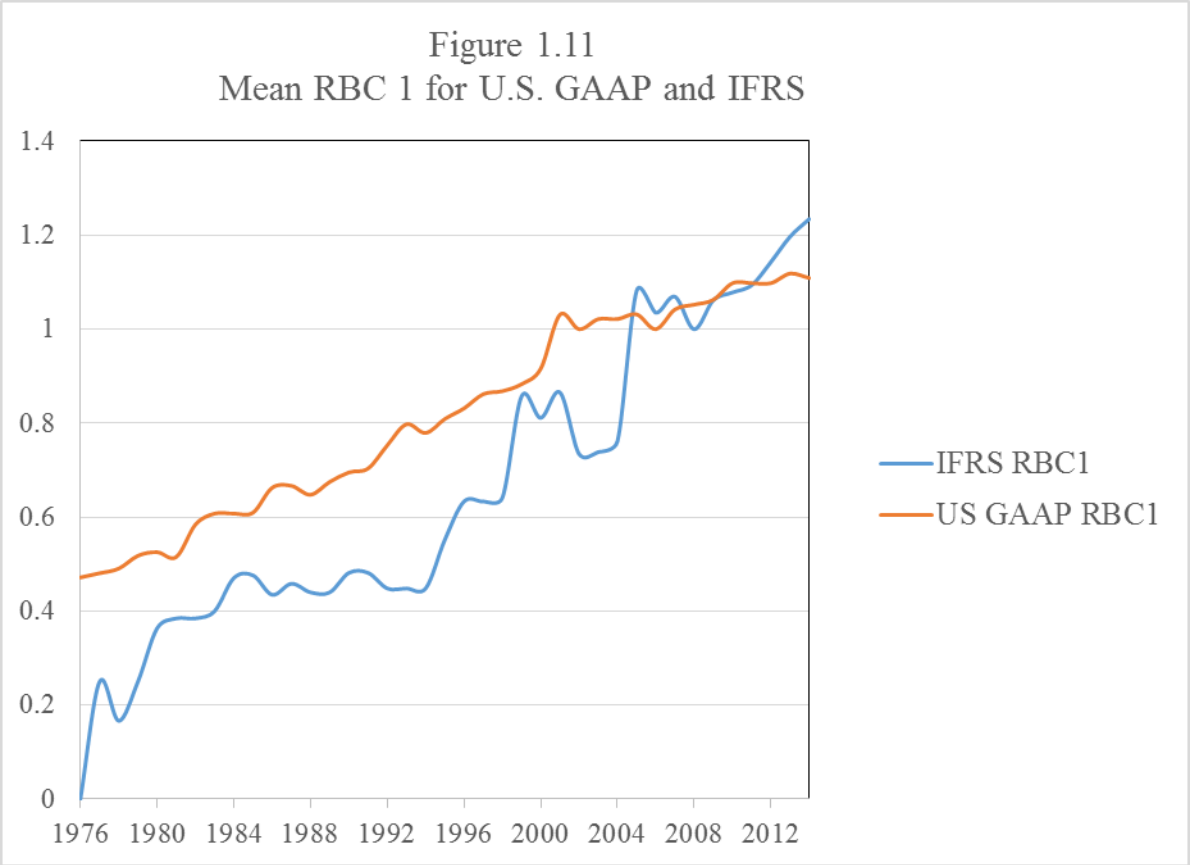
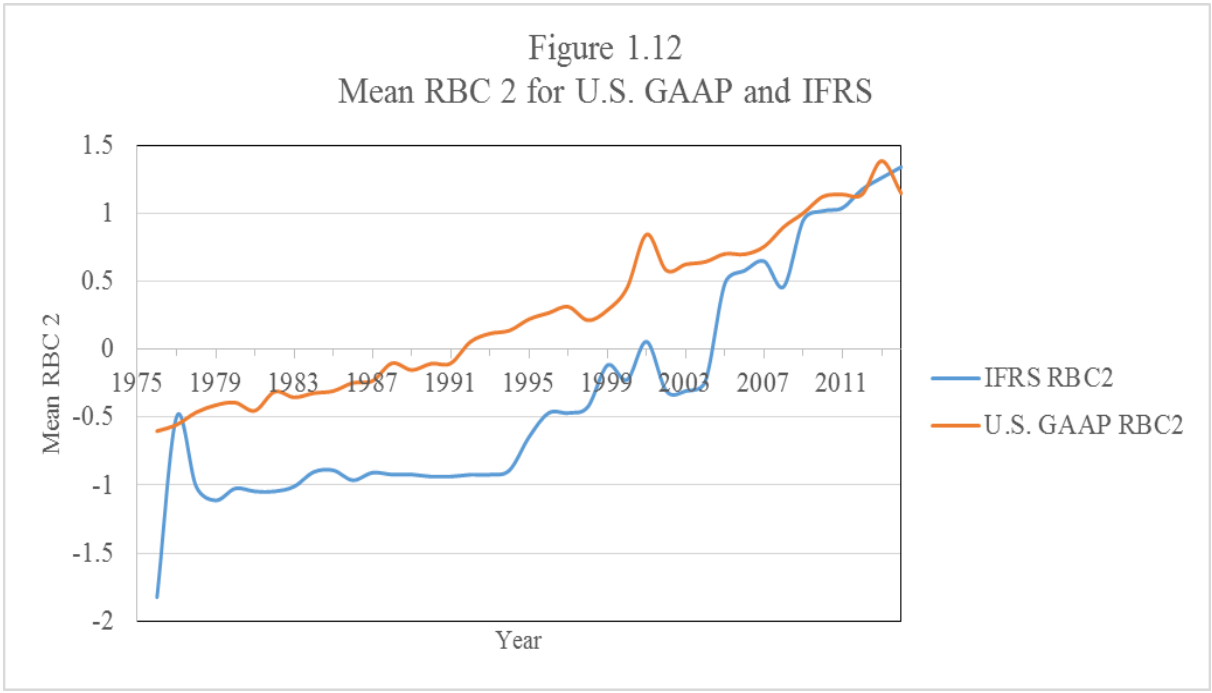


Figure 1.11 present the mean RBC1 for U.S. GAAP and IFRS. I find that the RBC is increasing for both accounting systems indicating that both are becoming more-rules-based.



This figure plots the mean RBC 2 for both U.S. GAAP and IFRS

Table 1.6: Difference in Means Tests

Panel A: US GAAP Rules Based Characteristics Difference in Means

	2002 n= 94	2005 n= 95	2005 n= 95	2009 n= 96	2002 n= 94	2009 n= 96
Characteristic Detail						
Mean	8222.1	8983.3	8983.3	11638.4	8222.1	11638.4
Standard Deviation	10378.9	12149.2	12149.2	17220.9	10378.9	17220.9
Except						
Mean	2.14	2.17	2.17	2.46	2.14	2.46
Standard Deviation	3.40	3.38	3.38	3.56	3.40	3.56
BL						
Mean	0.32	0.32	0.32	0.27	0.32	0.27
Standard Deviation	0.93	0.93	0.93	0.88	0.93	0.88
Guidance						
Mean	10.50	11.47	11.47	10.90	10.50	10.90
Standard Deviation	21.69	23.13	23.13	22.94	21.69	22.94
RBC 1						
Mean	1.00	1.03	1.03	1.06	1.00	1.06
Standard Deviation	1.14	1.17	1.14	1.19	1.14	1.19
RBC 2						
Mean	0.58	0.70	0.70	1.00	0.58	1.00
Standard Deviation	3.44	3.57	3.57	3.82	3.44	3.82

Table 1. 6 Continued

Panel B: IFRS Rules Based Characteristics Difference in Means

	2002	2005	2005	2009	2002	2009
	n= 64	n= 49	n= 49	n= 65	n= 64	n= 96
Characteristic Detail						
Mean	3453.30	4314.20	4314.20	3661.7	3453.30	3661.7
Standard Deviation	3639.6	3358.8	3358.8	3604.8	3639.6	3604.8
Except						
Mean	1.02	1.67	1.67	2.32	1.02	2.32***
Standard Deviation	1.91	2.42	2.42	3.24	1.91	3.24
BL						
Mean	0.20	0.37*	0.37	0.74***	0.20	0.74***
Standard Deviation	0.37	1.18	1.18	1.70	0.37	1.70
Guidance						
Mean	0.27	0.65***	0.65	1.22***	0.27	1.22***
Standard Deviation	0.39	0.73	0.73	2.07	0.39	2.07
RBC 1						
Mean	0.73	1.08**	1.08	1.06	0.73	1.06**
Standard Deviation	0.98	1.06	1.06	1.04	0.98	1.04
RBC 2						
Mean	-0.31	0.49	0.49	0.95	-0.31	0.95***
Standard Deviation	2.61	2.73	2.73	3.69	2.61	3.69

Table 1.6 (Continued) Panel C Difference in Means Tests U.S. GAAP and IFRS Rules Based Characteristics , RBC 1, RBC2

	U.S. GAAP 2002 n= 94	IFRS 2002 n= 64	U.S. GAAP 2005 n= 95	IFRS 2005 n= 49	U.S. GAAP 2009 n= 94	IFRS 2009 n= 65
Characteristic Detail						
Mean	8222.1	3453.30 ***	8983.30	4314.20 ***	11638.4	3661.7 ***
Standard Deviation	10378.9	3639.6	12149.20	3358.8	17220.9	3604.8
Except						
Mean	2.14	1.02 ***	2.17	1.67 **	2.46	2.32
Standard Deviation	3.40	1.91	3.38	2.42	3.56	3.24
BL						
Mean	0.32	0.20	0.32	0.37	0.27	0.74 ***
Standard Deviation	0.93	0.67	0.93	1.18	0.88	1.70
Guidance						
Mean	10.50	0.27 ***	11.47	0.65 ***	10.90	1.22 ***
Standard Deviation	21.69	0.39	23.13	0.73	22.94	2.07
RBC 1						
Mean	1.00	0.73	1.03	1.08	1.06	1.06
Standard Deviation	1.14	0.98	1.14	1.06	1.19	1.04
RBC 2						
Mean	0.58	-0.31 **	0.70	0.49	1.00	0.95
Standard Deviation	3.44	2.61	3.57	2.73	3.82	3.69

Detail is the word count for each standard, Except is the number of scope/legacy exceptions in a standards, *BL* is the number of numeric bright-lines in a standard, and *Guidance* is the number of intereptive releases and guidance for a standard. **, *** significance at p-value < 0.05 and p-value < 0.01

Table 1.7 ANOVA for Rules-Based Characteristics in U.S. GAAP for Years 2002, 2005, and 2009

Words

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between	2	613300969	306650484	1.66	0.192
Within	282	52066018707	184631272		
Corrected Total	284	52679319676			

Exceptions

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between	2	5.96	2.980515	0.25	0.778
Within	282	3351.84	11.88596		
Corrected Total	284	3357.80			

BL

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between	2	0.139	0.0695	0.08	0.920
Within	282	233.910	0.8295		
Corrected Total	284	234.049			

Guidance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between	2	45.292	22.646	0.04	0.957
Within	282	144062.994	510.862		
Corrected Total	284	144108.286			

Word is the average word count, Exceptions is the average number of scope and legacy exceptions in a standard, BL is the average numeric bright-lines, and Guidance is the average number of interpretations and guidance associated with the standard. The ANOVA test indicates that for US GAAP for years 2002, 2005, and 2009 that mean value for each of the four rules-based characteristics do not differ from each other.

Table 1.8 ANOVA for Rules-Based Characteristics in Interantional Standards for Years 2002, 2005, and 2009

Words

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	21690436	10845218	0.86	0.425
Error	175	2207701625	12615438		
Corrected Total	177	2229392061			

Exceptions

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	55.125854	27.563	4.08	0.019 ***
Error	175	1181.97527	6.754		
Corrected Total	177	1237.101124			

Year Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
2002 - 2005	-0.6578	-1.8503	0.5346	
2005 - 2009	-0.6496	-1.8381	0.5389	
2009 - 2002	1.3075	0.2012	2.4137	***

BL

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	9.637	4.819	3.01	0.052 **
Error	175	280.301	1.602		
Corrected Total	177	289.938			

Year Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
2002 - 2005	-0.1642	-0.7449	0.4165	
2005 - 2009	-0.3711	-0.9499	0.2077	
2009 - 2002	0.5353	-0.0034	1.074	**

Table 1.8 (Continued)

Guidance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	33.601	16.800	8.99	0.000 ***
Error	175	327.102	1.869		
Corrected Total	177	360.702			

Year Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
2002 - 2005	-0.1221	-0.7494	0.5052	
2005 - 2009	-0.8276	-1.4529	-0.2024	***
2009 - 2002	0.9498	0.3678	1.5317	***

Comparisons significant at the 0.01, and .05 are indicated by *** and ** respectively. Word is the average word count, Exceptions is the average number of scope and legacy exceptions in a standard, BL is the average numeric bright-lines, and Guidance is the average number of interpretations and guidance associated with the standard. The ANOVA test for the Word characteristic indicates that for the three years there is no significant difference in the mean value. For the Exception characteristic the ANOVA test indicates that there is a difference between the three time groups. Using the Bonferroni method I find that it is the 2002 and 2009 time periods that differ. For the BL characteristic the analysis indicates 2002 and 2009 time periods differ. Finally for the Guidance that at least two of the time period groups differ significantly; using Bonferroni method I find that the characteristics the analysis indicates that the groups differ significantly from each other. Boneformi method results indicate that for this characteristic all three year groups differ significantly.

Table 2.1 List of Search Terms for IAS,IFRS, SIC, and IFRIC^						
Standard	No.	Keyword #1	Keyword #2	Keyword #3	Keyword #4	Keyword #5
IAS	1	Presentation w/ 2 financial statements				
IAS	2	Lower of cost or market	Inventory w/1 impairment	Inventory pricing	Firm purchase commitment	
IAS	7	Statement of Cash Flows	Presentation w/ 3 of Statement of Cash Flows			
IAS	8	Change in accounting principle	Change in accounting estimate	Change in reporting entity	Prior period adjustment	Adjustments to prior periods
IAS	10	Events after reporting period	Subsequent event w/ 5 reporting			
IAS	11	Percentage of completion	Long-term construction	Consruction w/2 progress	cost w/2 excess w/2 billings	
IAS	12	Income tax*				
IAS	14	Segment w/5 of disclos*	Operating segment	Report* segment	Geographic* segment	
IAS	15	Effect w/2 chang* w/3 prices	Current purchase approach	General purchasing power approach		
IAS	16	Depreciation w/5 of asset	Revaluation w/5 of PPE	Derecognition w/ 3 PPE	Depreciation w/ 3 PPE	
IAS	17	Leas* w/3 operating or finance	Leaseback transactions w/ 3 of sale			
IAS	18	Revenue	Services w/4 of revenue	Interest, Royalties w/ 5 revenue	Earned w/5 of sales, revenue	Probable future benefit
IAS	19	Employee benefit*	post-employment w/ 3 benefits	actuarial w/ 3 of gain or loss	employee-benefit*	
IAS	21	Functional currency w/ 3 of foreign exchange	Change w/3 of foregin currency	Reporting currency		
IAS	22	Business combination*	Acquisition	Uniting of interest		
IAS	23	Interest w/3 of capitalize	Borrowing cost			
IAS	24	Related part*				
IAS	25	investment propert*				
IAS	26	Retirement benefit plan	Pension w/5 benefit	Post-retirement w/3 benefits	Defined benefit plan	Defined contribution plan
IAS	27	Investment* w/ 5 of separate financial statements				

Table 2.1 (Continued)						
Standard	No.	Keyword #1	Keyword #2	Keyword #3	Keyword #4	Keyword #5
IAS	28	Investment* in associate*	Equity method w/3 investment in associate*	cost method w/3 investment* in associate*	Joint-control or joint venture	
IAS	29	Hyperinflation	Hyper-inflation			
IAS	31	Joint venture	Special purpose entity w/5 joint venture	Equity method w/ 5 joint venture		
IAS	32	Disclosure w/ 3 of financial instrument*	Presentation w/ 5 financial instrument*	Compound instrument*	Offsetting w/3 financial asset or liability	Puttable w/ 2 insturment*
IAS	33	Earnings per share w/5 comput*	Earnings per share w/ calculat*			
IAS	34	Interim w/2 financial report*				
IAS	35	Impair* w/5 long*	Impair* w/5 non-current	Disposal w/5 long*	noncurrent or non current or non-	Presentation w/3 discontinued
IAS	36	Reverse w/5 of impair*	Loss w/ 5 of impair*	Long-lived w/ 5 of impairment	Long-lived w/10 of dispos*	Goodwill impairment
IAS	37	Liab* w/ 5 of contingent	Loss w/5 contingent	Gain w/5 contingent		
IAS	38	Intangible w/4 asset*	Goodwill	Internally generated w/5 research		
IAS	39	Derivativ*	Hedg*	Fair-value w/5 of deriva*	Fair-value option w/5 of hedg*	
IAS	40	Fair value w/ 5 of investment propert*	Cost w/ 5 of investment property	investment propert*		
IAS	41	Agricult*	Fair value w/5 agricult*			
IFRIC	1	Decomission* w/3 of liabilit*	Restor* w/3 liabilit*			
IFRIC	2	Financial instrument disclosure	Presentation w/ 5 financial instrument*	Compound instrument*	Offsetting w/ financial asset or liability	
IFRIC	4	Lease	leases			
IFRIC	5	Rehab* w/3 interest	Decomm* w/3 interest	Restor w/3 environ* w/3 interest		
IFRIC	6	Liabilit* w/6 waste w/3 electronic	Electronic w/3 equipment			
IFRIC	7	Hyperinfl*				

Table 2.1 (Continued)						
Standard	No.	Keyword #1	Keyword #2	Keyword #3	Keyword #4	Keyword #5
IFRIC	8	Unidentified w/ 5 consider*	Unidentified w/5 share*			
IFRIC	9	Embed* w/5 derivativ*				
IFRIC	10	Interim w/2 financial report*	Interim w/5 impair*			
IFRIC	11	Treasury w/ 5 share* or stock* w/3 group*	share-based compensation w/ 5 group	stock-based compensation w/5 group	Share-based consider* w/5 group	Stock-based consider* w/5 group
IFRS	1	First-time w/5 of International	First w/5 of IFRS			
IFRS	2	Share-based w/3 of payment	Stock options w/5 grant	Stock-based w/5 compensat*	Restricted stock w/5 grant	
IFRS	3	Business combinat*	Acquisition*	Purchase w/ 5 combination	Merger w/5 purchase	
IFRS	4	Insurance contract*				
IFRS	5	Impair w/long*	Impair w/5 noncurrent(non-current)	Disposal w/5 long*	Disposal w/5 non-current (noncurrent)	Presentation w/3 discontin*
IFRS	6	Exploration	Mineral rights	Proved reserve*	Unproved reserv*	
IFRS	7	Derivativ*	Hedg*	Available-for-sale w/5 securit	Held-to-maturity w/5 securit	
IFRS	8	Segment w/5 of disclos*	Operating segment	Report* segment	Geographic* segment	
SIC	7	Functional curren*	Reporting curren*			
SIC	10	Government assistance w/ operat*				
SIC	15	Operating lease* w/5 incentiv*				
SIC	25	Change w/ 3 tax status				
SIC	29	Disclosure w/ 5 service concess*				
SIC	31	Barter w/5 advert*				
SIC	32	Web site cost*	Web-site cost*			
^Each standard was also searched by name and title.						

Table 2.2 Regression of Change in PSCORE

	Model 1		Model 2		Model 3	
	Coeff	t-stat	Coeff	t-stat	Coeff	t-stat
RBC1D	1.0332***	(213.31)	1.218***	(177.42)		
RELIMPD	0.8173***	(106.65)			0.9628***	(83.64)
_cons	-0.883***	(-23.611)	-0.429*	(-6.21)	-.9131***	(-29.74)
N	607		607		607	
R-squared	76.30%		62.82%		33.18%	

Table 2.2 Model 1 regresses the change in PSCORE on change in RBC1 and change in RELIMP. I find that 76% of the change in PSCORE for time t-1 to time t, is explained by changes in both RBC1 and RELIMP. When I regress change in PSCORE on change in RBC1 I find that 63% of the change is driven by change in RBC scores.

Table 2.3 Correlations Matrix of the Dollar Magnitude of Line Items & Word Count for Select Standards

Financial Line Item	IFRS 2	IAS 17	IAS 38	IAS 36	IAS 21	IAS 19
Stock Compensation (stkco/ib)	**0.804**	-0.0923	-0.0883	-0.0129	-0.1204	0.1211
	(0.002)	(0.0396)	(0.0488)	(0.7735)	(0.0771)	(0.0361)
Lease (dclo/at)	-0.0478	**0.3512**	-0.0354	-0.0475	-0.0091	0.0112
	(0.1698)	**(0.000)**	(0.2893)	(0.1544)	(0.7862)	(0.7737)
GoodwillD (Dgdwl/at)	0.0075	0.0085	**0.3276**	0.0036	0.0190	-0.0113
	(0.8578)	(0.8326)	**(0.000)**	(0.993)	(0.6343)	(0.8274)
GWImp (-gdwlip/at)	0.4653	0.1803	**0.329**	**0.2549**	-0.0118	-0.0954
	(0.07)	(0.0221)	**(0.000)**	**(0.001)**	(0.8850)	(0.2822)
ForeignCurr (abs[fcs/in])	0.0050	-0.0130	-0.0143	-0.0151	**0.4130**	-0.0535
	(0.8914)	(0.7083)	(0.6872)	(0.6663)	**(0.000)**	-0.181
Pension (xpr/ib)	0.163	0.0452	0.0029	.2058	-0.0391	**0.8391**
	(0.000)	(0.2476)	(0.9399)	(0.072)	(0.317)	**(0.000)**

Table 2.3 tests whether the keywords used to search for the standards is correlated with the magnitude of an identifiable line item associated with each standard. The bolded correlations indicate the correlations between the word count for the standard and its associated line item.

Table 2.4 Variable Definitions

Variable	Definition
PSCORE	Instrument that measures firms reliance on principles-based standards; higher PSCORE is indicative of greater reliance on principles-based standards
EARN	Earnings before Ext ordinary items scaled by TA
CFO	Cash flow from operations scaled by TA
SIZE	Log of total sales revenue
BTM	Book-to-Market ratio of firm at the of beginning year
LEVERAGE	Ratio of debt to market value of equity at the beginning of year
BUSSEG	Number of operating segments reported in COMPUSTAT
GEOSEG	Number of geographic segments reported in COMPUSTAT
RET	Market adjusted abnormal returns from the prior year to current year's earnings announcement

Table 2.5 Panel A Sample Selection

	Pre-Convergence 2000-2004	Post Convergence 2008-2012	Pre and Post Convergence* Firms
Cross-listed Firms that use IFRS	152	1,065	
less firms with missing COMPUSTAT DATA	(32)	(144)	
less firms unable to calculate PSCORE	(16)	(119)	
Full Sample Firm Years	104	802	140
less firm without returns during the period	(6)	(52)	
Returns Sample firm years	98	750	127

*This represents firms that were present in at least 2 pre convergence and 2 post convergence years. This consists of 18 sample firms for the full sample and 17 for the returns .This table presents the sample selection criteria. I begin with all foreign firms that cross-list in U.S. Capital Markets and use IFRS/IAS as published in English by the IASB. I subtract any firms with missing income before extraordinary items, total assets, operating cash flows and common shares outstanding. To calculate the PSCORE, I need to obtain the 20-F filing in machine readable format. For the returns regression I need to have CRSP stock returns data thus reducing the sample for those tests.

Table 2.5 Panel B Sample Selection by Year

	2000	2001	2002	2003	2004	2008	2009	2010	2011	2012
Cross-listed Firms that use IFRS	11	15	46	41	39	135	165	207	255	303
less firms with missing COMPUSTAT DATA	(4)	(3)	(13)	(5)	(7)	(16)	(24)	(29)	(29)	(46)
less firms unable to calculate PSCORE	(2)	(3)	(4)	(6)	(1)	(8)	(15)	(21)	(30)	(45)
Full sample firm count	**5**	**9**	**29**	**30**	**31**	**111**	**126**	**157**	**196**	**212**
less firm without returns during the period	(2)	(2)	(2)	0	0	(2)	(5)	(18)	(14)	(13)
Returns sample firm count	**3**	**7**	**27**	**30**	**31**	**109**	**121**	**139**	**182**	**199**

Table 2.5 Panel C Sample Distribution by Country

COUNTRY	TOTAL	2000	2001	2002	2003	2004	2008	2009	2010	2011	2012
ARGENTINA	12								2	3	7
AUSTRAILIA	36						11	8	6	5	6
BELGIUM	8						1	1	2	2	2
BERMUDA	21					1	1	2	4	6	7
BRAZIL	75						4	6	22	22	21
CANADA	26								1	13	12
SWITZERLAND	25	1	2	4	4	4	2	2	2	2	2
CHILE	41							7	11	11	12
CHINA	84		1	11	10	9	9	11	11	11	11
CAYMAN ISLANDS	13									5	8
GERMANY	45	2	3	5	5	5	6	7	4	4	4
DEMARK	10					1	2	2	2	2	1
SPAIN	19						3	3	4	5	4
FINLAND	10		1	1	1	2	1	1	1	1	1
FRANCE	34						8	7	6	6	7
UNITED KINGDOM	114			1	1	1	22	20	23	23	23
HONG KONG	19						3	4	4	4	4
HUNGARY	6			1	1	1	1	1	1		
INDONESIA	6							1	1	2	2
INDIA	23				1		1	4	5	6	6
IRELAND	22						5	4	4	5	4
ISRAEL	45						6	9	10	9	11
ITALY	13						2	2	3	3	3
JERSEY	8						1	1	1	2	3
JAPAN	3								1	1	1
SOUTH KOREA	16								1	8	7
LUXEMBOURG	35	1	1	4	3	3	5	5	5	4	4
MEXICO	27				1	1	1		2	8	14
MASHALL ISLANDS	6							2	1	2	1
NETHERLANDS	25						4	5	4	5	7
NORWAY	5						1	1	1	1	1
NEW ZEALAND	5						1	1	1	1	1
PANAMA	2									1	1
PERU	2									1	1
PHILIPPINES	5						1	1	1	1	1
PAPUA NEW GUINEA	4			1	1	1	1				
PORTUGAL	5						1	1	1	1	1
RUSSIA	4			1	1	1	1				
SWEDEN	5						1	1	1	1	1
TURKEY	5						1	1	1	1	1
BRITISH VIRGIN ISLAND	13	1	1					1	2	3	5
SOUTH AFRICA	24				1	1	4	4	5	5	4
TOTAL	906	5	9	29	30	31	111	126	157	196	212

This table provides the sample breakdown by country and year

Table 2.5 Panel D Sample by 2-Digit SIC Code

Industry	Year 2000-2004 PRE	Year 2008-2012 POST	All Sample Years
Agriculture, forestry, & fishing	0	2	2
Construction	0	2	2
Finance, insurance & real estate	5	136	141
Manufacturing	56	296	352
Mining	9	67	76
Retail trade	0	16	16
Services	0	34	34
Transportation & Public Utilities	34	232	266
Wholesale trade	0	17	17
Total	104	802	906

This table provides the sample by 2-DIGIT SIC code

Table 2.6 Panel A Descriptive Statistics for Full Sample

	N	Mean	Stdev	p25	Median	p75
PSCORE	906	(36.680)	27.840	(46.500)	(30.460)	(17.480)
EARN	906	0.030	0.200	0.010	0.040	0.090
CFO	906	0.080	0.220	0.030	0.090	0.140
$EARN_{(t+1)}$	906	0.020	0.260	0.000	0.040	0.080
$CFO_{(t+1)}$	906	0.079	0.115	0.029	0.086	0.139
SIZE	906	3.680	1.090	3.170	3.840	4.510
BTM	906	0.750	1.070	0.280	0.550	0.930
LEV	906	1.050	4.780	0.050	0.230	0.700
BUSSEGT	906	3.170	1.830	2.000	3.000	4.000
GEOSEGT	906	3.790	3.670	1.000	3.000	5.000
RET	848	(0.004)	0.038	(0.022)	(0.001)	0.016

This table reports the descriptive statistics for the full sample period. EARN is earnings before extraordinary items divided by total assets. CFO is cash flow from operations divided by total assets. RET is market adjusted abnormal returns from prior year's earnings announcements to the current year's announcement. PSCORE is the measure of the firms reliance on principles based standards. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal year. LEV is ratio of debt to market value of equity at the end the prior fiscal year. BUSSEGT and GEOSEGT is the number of business and geographic segments reported in compustat. All variables, except BUSSEGT and GEOSEGT, are winsorwized at the 1 and 99 percentiles.

Table 2.6 Panel B Descriptive Statistics Pre-Convergence Yr 2000-2004						
	N	Mean	Stdev	p25	Median	p75
PSCORE	104	(35.189)	21.465	(45.522)	(30.230)	(20.658)
EARN	104	0.047	0.106	0.013	0.055	0.101
CFO	104	0.115	0.083	0.062	0.108	0.171
$EARN_{(t+1)}$	104	0.063	0.072	0.014	0.067	0.116
$CFO_{(t+1)}$	104	0.105	0.114	0.049	0.112	0.171
SIZE	104	3.470	0.750	3.050	3.480	4.220
BTM	104	0.790	0.960	0.280	0.620	1.030
LEVERAGE	104	0.940	2.770	0.020	0.120	0.500
BUSSEGT	104	3.880	2.410	2.000	3.000	5.000
GEOSEGT	104	3.290	1.890	2.000	3.000	5.000
RET	98	0.010	0.046	(0.015)	0.007	0.030

This table reports the descriptive statistics for the Pre-Convergence period. EARN is earnings before extraordinary items divided by total assets. CFO is cash flow from operations divided by total assets. RET is market adjusted abnormal returns from prior years earnings announcements to the current years announcement. PSCORE is score of the firms reliance on principles based standards. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal year. LEV is ratio of debt to market value of equity at the end the prior fiscal year. BUSSEGT and GEOSEGT is the number of business and geographic segments reported in compustat. All variables, except BUSSEGT and GEOSEGT, are winsorwized at the 1 and 99 percentiles.

Table 2.6 Panel C Descriptive Statistics Post-Convergence Yr 2008-2012						
	N	Mean	Stdev	p25	Median	p75
PSCORE	802	(36.627)	27.437	(46.815)	(30.562)	(17.230)
EARN	802	0.033	0.118	0.005	0.040	0.084
CFO	802	0.081	0.116	0.027	0.087	0.139
$EARN_{(t+1)}$	802	0.032	0.106	0.004	0.036	0.078
$CFO_{(t+1)}$	802	0.076	0.116	0.028	0.082	0.135
SIZE	802	3.700	1.105	3.212	3.892	4.560
BTM	802	0.712	0.651	0.285	0.553	0.914
LEV	802	0.802	1.683	0.055	0.247	0.722
BUSSEGT	802	3.079	1.717	2.000	3.000	4.000
GEOSEGT	802	3.858	3.838	1.000	3.000	5.000
RET	750	(0.008)	0.038	(0.023)	(0.005)	0.013

This table reports the descriptive statistics for the Post-Convergence period. EARN is earnings before extraordinary items divided by total assets. CFO is cash flow from operations divided by total assets. RET is market adjusted abnormal returns from prior years earnings announcements to the current years announcement. PSCORE is score of the firms reliance on principles based standards. ACC is EARN-CFO. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal year. LEV is ratio of debt to market value of equity at the end the prior fiscal year. BUSSEGT and GEOSEGT is the number of business and geographic segments reported in compustat. All variables, except BUSSEGT and GEOSEGT, are winsorwized at the 1 and 99 percentiles.

Table 2.7 Panel A Descriptive Statistics by PSCORE Quintile for Full Sample

	Mean					Median				
	Rules				Principles	Rules				Principles
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
PSCORE	(80.9829)	(42.9176)	(30.4536)	(19.9253)	(8.8528)	(73.4319)	(42.1618)	(30.4337)	(19.9974)	(9.2375)
EARN	0.0327	0.0371	0.0330	0.0027	0.0318	0.0404	0.0386	0.0455	0.0465	0.0420
$EARN_{(t+1)}$	0.0340	0.0379	0.0397	(0.0211)	0.0286	0.0387	0.0331	0.0383	0.0387	0.0419
CFO	0.0752	0.0955	0.0826	0.0579	0.0886	0.0784	0.0822	0.0879	0.1065	0.1022
$CFO_{(t+1)}$	0.0680	0.0728	0.0865	0.0188	0.0794	0.0751	0.0739	0.0902	0.0975	0.1037
SIZE	3.4263	3.7115	3.8552	3.7013	3.7100	3.5127	3.8960	3.9276	3.9401	3.9479
BTM	0.7620	0.9373	0.7984	0.6379	0.6148	0.6469	0.6339	0.6130	0.4581	0.4314
LEVERAGE	1.0155	1.3270	0.9685	0.7675	1.1582	0.1764	0.2517	0.2774	0.1948	0.3144
BUSSEG	3.0879	3.0939	3.2762	3.4309	2.9669	3.0000	3.0000	3.0000	3.0000	3.0000
GEOSEG	3.8571	3.8066	4.0331	4.0055	3.2597	3.0000	3.0000	3.0000	3.0000	2.0000
RET	(0.0040)	(0.0047)	(0.0049)	(0.0005)	(0.0062)	(0.0004)	(0.0030)	(0.0048)	0.0010	0.0008

This table provides the mean and median for the sample firms based on PSCORE quintiles. PSCORE is the firm specific score of reliance on principles-based standards. EARN is earnings before extraordinary items divided by total assets. CFO is cash flow from operations divided by total assets. . RET is market adjusted abnormal returns from prior years earnings announcements to the current years announcement. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal years announcement. ACC is EARN-CFO. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal year. LEV is ratio of debt to market value of equity at the end the prior fiscal year. BUSSEGT and GEOSEGT is the number of business and geographic segments reported in compustat. All variables, except BUSSEGT and GEOSEGT, are winsorwized at the 1 and 99 percentiles.

Table 2.7 Panel B Descriptive Statistics by PSCORE Quintile for Pre-Convergence Sample

	Mean					Median				
	Rules				Principles	Rules				Principles
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
PSCORE	(69.2396)	(41.3527)	(30.3902)	(22.1546)	(11.6894)	(65.3215)	(40.4300)	(30.0273)	(21.6635)	(11.7062)
EARN	0.0236	0.0477	0.0656	0.0057	0.0960	0.0254	0.0500	0.0543	0.0794	0.0874
$EARN_{(t+1)}$	0.0324	0.0548	0.0749	0.0677	0.0887	0.0254	0.0500	0.0664	0.0949	0.0954
CFO	0.0790	0.0981	0.1351	0.1268	0.1386	0.0762	0.0900	0.1084	0.1291	0.1211
$CFO_{(t+1)}$	0.0787	0.0765	0.1320	0.1046	0.1348	0.0879	0.1100	0.1291	0.1349	0.1372
SIZE	3.6917	3.3312	3.6523	3.5428	3.6301	3.4511	3.2400	3.5372	3.5099	3.6716
BTM	0.7855	0.8573	0.6323	0.6018	1.0693	0.7727	0.6800	0.4682	0.7163	0.5010
LEVERAGE	2.6514	0.4639	0.3389	0.3197	0.9315	0.7621	0.1500	0.0908	0.0666	0.0662
BUSSEG	3.2857	3.4762	4.3810	4.1429	4.1500	3.0000	3.0000	4.0000	3.0000	3.0000
GEOSEG	3.1429	3.0000	4.0000	2.8095	3.5000	2.0000	3.0000	4.0000	3.0000	2.5000
RET	0.004	0.015	0.013	-0.002	0.020	0.012	0.003	0.010	0.000	0.010

This table provides the mean and median for the sample firms based on PSCORE quintiles. PSCORE is the firm specific score of reliance on principles-based standards. EARN is earnings before extraordinary items divided by total assets. CFO is cash flow from operations divided by total assets. . RET is market adjusted abnormal returns from prior years earnings announcements to the current years announcement. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal years announcement. ACC is EARN-CFO. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal year. LEV is ratio of debt to market value of equity at the end the prior fiscal year. BUSSEGT and GEOSEGT is the number of business and geographic segments reported in compustat. All variables, except BUSSEGT and GEOSEGT, are winsorwized at the 1 and 99 percentiles.

Table 2.7 Panel C Descriptive Statistics by PSCORE Quintile for Post-Convegence Sample

	Mean					Median				
	Rules				Principles	Rules				Principles
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
PSCORE	(80.9700)	(43.1200)	(30.4000)	(19.5500)	(8.6100)	(74.6400)	(40.4346)	(30.4900)	(19.6700)	(8.8000)
EARN	0.0400	0.0400	0.0300	0.0300	0.0300	0.0400	0.0464	0.0400	0.0400	0.0400
$EARN_{(t+1)}$	0.0400	0.0400	0.0300	0.0200	0.0300	0.0400	0.0517	0.0400	0.0300	0.0400
CFO	0.0800	0.0800	0.0700	0.0800	0.0900	0.0800	0.0893	0.0900	0.0900	0.1000
$CFO_{(t+1)}$	0.0800	0.0800	0.0700	0.0800	0.0900	0.0800	0.1099	0.0900	0.0900	0.1000
SIZE	3.3800	3.7900	3.9000	3.7000	3.7300	3.4900	3.2369	4.1200	3.9700	4.0000
BTM	0.7600	0.8000	0.7900	0.6200	0.5700	0.6200	0.6785	0.6200	0.4500	0.4200
LEVERAGE	0.7000	0.8400	0.9400	0.7200	0.8200	0.1700	0.1484	0.2900	0.2200	0.3500
BUSSEG	3.0200	3.1500	3.0100	3.2800	2.9200	3.0000	3.0000	2.0000	3.0000	3.0000
GEOSEG	3.9200	3.9700	4.0200	4.1400	3.2300	3.0000	3.0000	3.0000	3.0000	2.0000
RET	(0.0062)	(0.0075)	(0.0052)	(0.0033)	(0.0075)	(0.0037)	(0.0032)	(0.0046)	(0.0018)	(0.0009)

This table provides the mean and median for the sample firms based on PSCORE quintiles. PSCORE is the firm specific score of reliance on principles-based standards. EARN is earnings before extraordinary items divided by total assets. CFO is cash flow from operations divided by total assets. . RET is market adjusted abnormal returns from prior years earnings announcements to the current years announcement. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal years announcement. ACC is EARN-CFO. SIZE is the log of total sales. BTM is the book-to-market ratio of the firm at the end of prior fiscal year. LEV is ratio of debt to market value of equity at the end the prior fiscal year. BUSSEGT and GEOSEGT is the number of business and geographic segments reported in compustat. All variables, except BUSSEGT and GEOSEGT, are winsorwized at the 1 and 99 percentiles.

Table 2.7 Panel D Difference in Means Test for PSCORE						
	Full Sample		Quintile 1		Quntile 5	
	Pre/Early Convergence	Post/Late Convergence	Pre/Early Convergence	Post/Late Convergence	Pre/Early Convergence	Post/Late Convergence
	n= 104	n= 802	n= 21	n= 162	n= 21	n= 162
PSCORE						
Mean	-35.19	-36.63	-69.24	-80.97***	-11.69	-8.61***
Standard Deviation	21.47	27.44	17.52	23.78***	4.44	3.42**

This table presents the difference in means test for PSCORE between the two time periods in the study for the full sample, Quintile 1 (Rules-Based) and Quintile 5 (Principles-based). **, *** significant at p-value < 0.05, 0.001.

Table 2.8 Variable Correlations

	PSCORE	EARN	CFO	SIZE	BTM	LEVERAGE	BUSSEGT	GEOSEGT
PSCORE	1.0000	0.0501	0.1046	0.0954	-0.1552	0.0370	-0.0308	-0.0746
		(0.1317)	(0.0016)	(0.0041)	(<.0001)	(0.2656)	(0.3548)	(0.0247)
EARN	-0.0083	1.0000	0.6760	0.0352	-0.3940	-0.4561	0.1051	0.1398
	(0.8022)		(<.0001)	(0.2904)	(<.0001)	(<.0001)	(0.0015)	(<.0001)
CFO	-0.0297	0.7286	1.0000	0.1475	-0.2975	-0.2587	0.1870	0.1355
	(0.372)	(<.0001)		(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
SIZE	0.0851	0.3186	0.3586	1.0000	0.0783	0.3274	0.2009	0.1249
	(0.0104)	(<.0001)	(<.0001)		(0.0184)	(<.0001)	(<.0001)	(0.0002)
BTM	-0.0852	-0.1832	-0.1740	0.0125	1.0000	0.3493	-0.0470	-0.1378
	(0.0103)	(<.0001)	(<.0001)	(0.7063)		(<.0001)	(0.1574)	(<.0001)
LEVERAGE	-0.0011	-0.1480	-0.1653	0.1125	0.4142	1.0000	-0.0282	-0.1490
	(0.9748)	(<.0001)	(<.0001)	(0.0007)	(<.0001)		(0.3963)	(<.0001)
BUSSEGT	0.0064	0.0775	0.1412	0.2278	-0.0870	-0.0729	1.0000	0.3718
	(0.8478)	(0.0197)	(<.0001)	(<.0001)	(0.0088)	(0.0281)		(<.0001)
GEOSEGT	-0.0282	0.0115	0.0399	0.1823	-0.0906	-0.1153	0.2706	1.0000
	(0.3969)	(0.7295)	(0.2302)	(<.0001)	(0.0064)	(0.0005)	(<.0001)	

The table provides the spearman correlations above the diagnal and the Pearson correlations below the diagnal.

Table 2.9 Panel A Estimates of the Effect of Principles-Based Standards on the Persistence of Accounting Earnings for Full Sample

$$EARN_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.719***	(3.39)	0.686***	(3.59)
PSCORE	0.000	(1.30)	0.00	(1.31)
EARN*PSCORE	0.003*	(1.58)	0.003*	(1.49)
EARN*SIZE	0.030	(0.94)	0.014	(0.52)
EARN*BTM	-0.134	(-1.92)	-0.136*	(-2.00)
EARN*LEVERAGE	-0.093***	(-2.95)	-0.119***	(-3.46)
EARN*BUSSEGT	0.029	(1.28)	0.032	(1.20)
EARN*GEOSEGT	-0.012	(-0.61)	-0.012	(-0.52)
SIZE			0.011**	(2.47)
BTM			-0.003	(-0.61)
LEVERAGE			-0.007***	(-3.63)
BUSSEGT			-0.003	(-1.30)
GEOSEGT			-0.001	(-0.87)
_cons	0.001	(0.13)	-0.016	(-0.66)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	906		906	
R-squared	52.42%		54.31%	

Table 2.9 Panel B Estimates of the Effect of Principles-Based Standards on the Persistance of Accounting Earnings for Pre-Convergence Years

$$EARN_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.374***	(1.77)	0.519**	(1.92)
PSCORE	0.001	(1.13)	0.000	(0.94)
EARN*PSCORE	0.00	(0.02)	0.001	(0.17)
EARN*SIZE	0.044	(0.53)	0.237	(0.78)
EARN*BTM	-0.007	(-0.13)	-0.035	(-0.58)
EARN*LEVERAGE	-0.031*	(-1.17)	-0.073**	(-1.87)
EARN*BUSSEGT	0.085***	(2.29)	0.090***	(2.39)
EARN*GEOSEGT	-0.067*	(-1.28)	-0.108	(-1.40)
SIZE			0.019***	(2.43)
BTM			0.003	(0.41)
LEVERAGE			-0.005***	(-2.25)
BUSSEGT			-0.005	(-1.33)
GEOSEGT			0.007	(0.87)
_cons	0.037	(1.20)	-0.040	(-0.27)
Year Dummies	Included		Included	
Industry Fixed Effects	Included		Included	
Firm Fixed Effects	Included		Included	
N	104		104	
R-squared	42.34%		48.44%	

Table 2.9 Panel C Estimates of the Effect of Principles-Based Standards on the Persistence of Accounting Earnings for Post-Convergence Years

$$EARN_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	1.015***	(11.75)	0.712***	(10.02)
PSCORE	-0.005***	(-2.86)	-0.000***	(-2.84)
EARN*PSCORE	0.099***	(4.51)	0.004***	(3.81)
EARN*SIZE	0.091	(1.31)	0.016	(0.74)
EARN*BTM	-0.234***	(-4.64)	-0.146***	(-4.27)
EARN*LEVERAGE	-0.068***	(-4.88)	-0.213***	(-5.40)
EARN*BUSSEGT	0.050	(0.51)	0.022	(1.18)
EARN*GEOSEGT	-0.008	(-0.37)	-0.003	(-0.38)
SIZE			0.01***	(2.98)
BTM			-0.006	(-1.15)
LEVERAGE			-0.004**	(-2.07)
BUSSEGT			-0.004*	(-1.79)
GEOSEGT			-0.001	(-1.20)
_cons	0.026	(0.53)	0.025	(0.36)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	802		802	
R-squared	60.01%		62.70%	

This table presents the regression estimates of future earnings on current earnings and earnings interacted with the PSCORE and control variables to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. Fiscal year indicators are included in the model but not presented. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 respectively.

Table 2.10 Estimates of the Effect of Principles-Based Standards on the Persistence of Accounting Earnings for Firms Existing in Pre and Post-Convergence Period

$$EARN_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 POSTCONV + \alpha_4 EARN_{it} * PSCORE_{it} + \alpha_5 PSCORE_{it} * POSTCONV + \alpha_6 EARN_{it} * PSCORE_{it} * POSTCONV + \alpha_{7-12} CONTROLS + \alpha_{13-18} CONTROLS * EARN_{it} + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.097	(0.65)	0.240	(0.75)
PSCORE	0.001**	(2.62)	0.001**	(2.86)
POSTCONV	-0.016	(-0.95)	-0.034	(-1.70)
EARN*PSCORE	-0.010***	(-3.41)	-0.009***	(-3.17)
PSCORE*POSTCONV	-0.000	(-0.69)	-0.001*	(-2.08)
EARN*PSCORE*POSTCONV	0.004**	(2.43)	0.008***	(4.30)
EARN*SIZE	0.010	(0.18)	-0.048	(-0.47)
EARN*BTM	0.018*	(1.87)	0.100***	(4.05)
EARN*LEVERAGE	-0.075***	(-9.15)	-0.057***	(-3.77)
EARN*BUSSEGT	0.040*	(1.87)	0.046**	(2.48)
EARN*GEOSEGT	0.005	(0.19)	0.025	(0.84)
SIZE			0.012	(1.03)
BTM			-0.013***	(-3.55)
LEVERAGE			-0.000	(-0.55)
BUSSEGT			-0.004	(-1.33)
GEOSEGT			-0.001	(-0.77)
_cons	0.059	(3.25)	0.043	(1.15)
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	140		140	
R-squared	48.43%		54.85%	

This table presents the regression estimates of future earnings on current earnings and earnings interacted with the PSCORE and a dummy variable to indicate the post-convergence period to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 respectively.

Table 2.11 Panel A Estimates of the Effect of Principles-Based Standards on the Relation Between Earnings and Future Cash Flows for the Full Sample

$$CFO_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.728***	(4.63)	0.703***	(4.82)
PSCORE	-0.000	(-1.28)	-0.000	(-1.55)
EARN*PSCORE	0.006***	(2.77)	0.005**	(2.33)
EARN*SIZE	0.003	(0.07)	-0.012	(-0.24)
EARN*BTM	-0.130***	(-2.69)	-0.143***	(-3.18)
EARN*LEVERAGE	-0.056***	(-3.04)	-0.086***	(-3.77)
EARN*BUSSEGT	0.073***	(2.59)	0.054	(1.62)
EARN*GEOSEGT	0.001	(0.03)	-0.001	(-0.03)
SIZE			0.022***	(4.57)
BTM			-0.010	(-1.61)
LEVERAGE			-0.006**	(-2.42)
BUSSEGT			0.001	(0.32)
GEOSEGT			-0.001*	(-1.76)
_cons	0.047***	(5.50)	-0.014	(-0.64)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	906		906	
R-squared	48.00%		52.30%	

Table 2.11 Panel B Estimates of the Effect of Principles-Based Standards on the Relation Between Earnings and Future Cash Flows for the Pre-Convergence Sample

$$CFO_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.660	(0.97)	0.410	(0.47)
PSCORE	0.000	(0.25)	0.000	(0.98)
EARN*PSCORE	0.004	(0.48)	0.000	(0.07)
EARN*SIZE	-0.010	(-0.17)	-0.008	(-0.14)
EARN*BTM	0.061	(1.09)	-0.021	(-0.23)
EARN*LEVERAGE	-0.043	(-1.16)	-0.129***	(-2.94)
EARN*BUSSEGT	0.065	(1.10)	0.027	(0.39)
EARN*GEOSEGT	0.011	(0.19)	0.058	(0.45)
SIZE		(1.39)	0.073***	(3.30)
BTM			0.005	(0.42)
LEVERAGE			-0.014***	(-4.97)
BUSSEGT			-0.010	(-1.20)
GEOSEGT			-0.009	(-0.65)
_cons	0.046	(1.39)	-0.113	(-1.04)
Year Dummies	Included		Included	
Industry Fixed Effects	Included		Included	
Firm Fixed Effects	Included		Included	
N	104		104	
R-squared	44.52%		56.46%	

Table 2.11 Panel C Estimates of the Effect of Principles-Based Standards on the Relation Between Earnings and Future Cash Flows for the Post-Convergence Sample

$$CFO_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	1.909***	(3.39)	2.034***	(3.93)
PSCORE	-0.000	(-0.66)	-0.000	(-0.72)
EARN*PSCORE	0.004***	(2.88)	0.002***	(2.78)
EARN*SIZE	0.004	(0.09)	-0.037	(-0.92)
EARN*BTM	-0.162*	(-1.92)	-0.193**	(-2.45)
EARN*LEVERAGE	-0.071	(-1.27)	-0.156**	(-2.14)
EARN*BUSSEGT	0.060***	(2.80)	0.050***	(3.21)
EARN*GEOSEGT	0.007	(0.71)	0.005	(0.68)
SIZE			0.017***	(2.75)
BTM			-0.021***	(-2.78)
LEVERAGE			-0.005	(-1.45)
BUSSEGT			0.002	(0.41)
GEOSEGT			-0.002	(-1.49)
_cons	0.052***	(3.38)	0.014	(0.55)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	802		802	
R-squared	64.45%		66.79%	

This table presents the regression estimates of future cash flow on current earnings and earnings interacted with the PSCORE and control variables to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. Fiscal year indicators are included in the model but not presented. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 respectively.

Table 2.12 Estimates of the Effect of Principles-Based Standards on the Relation Between Earnings and Future Cash Flows for Firms in the Pre and Post-Convergence Sample

$$CFO_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 POSTCONV + \alpha_4 EARN_{it} * PSCORE_{it} + \alpha_5 PSCORE_{it} * POSTCONV + \alpha_6 EARN_{it} * PSCORE_{it} * POSTCONV + \alpha_{7-12} CONTROLS + \alpha_{13-18} CONTROLS * EARN_{it} + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	-11.367	(-1.77)	-4.143	(-1.27)
PSCORE	0.001	(1.84)	0.000	(1.54)
POSTCONV	-0.007	(-0.20)	-0.020	(-0.27)
EARN*PSCORE	-0.008*	(-2.02)	-0.003	(-1.07)
PSCORE*POSTCONV	-0.001	(-1.64)	-0.001	(-1.59)
EARN*PSCORE*POSTCONV	0.617***	(3.53)	0.521***	(4.46)
EARN*SIZE	0.621***	(2.75)	0.352	(0.24)
EARN*BTM	-0.013***	(-2.23)	-0.025	(-0.94)
EARN*LEVERAGE	-0.140***	(-6.11)	-0.010***	(-7.33)
EARN*BUSSEGT	-0.010	(-0.33)	0.020	(1.02)
EARN*GEOSEGT	0.005	(0.12)	-0.013	(-0.09)
SIZE			-0.002	(1.10)
BTM			0.002	(0.82)
LEVERAGE			0.001	(-1.49)
BUSSEGT			-0.009	(-1.61)
GEOSEGT			-0.001	(-0.66)
_cons	0.079***	(3.06)	0.066	(0.850)
Industry Fixed Effect	Included		Included	
Firm FE Included	Included		Included	
N	140		140	
R-squared	50.86%		62.46%	

This table presents the regression estimates of future cash flow on current earnings and earnings interacted with the PSCORE, earnings interacted with PSCORE and dummy varaible representing post-convergence and control variables to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. Fiscal year indicators are included in the model but not presented. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 repectively.

Table 2.13 Panel A Effect of Principles-Based Standards on the Relation Between Annual Returns and Earnings for the Full Sample

$$RET_{it} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4\text{-}10} CONTROLS + \alpha_{11\text{-}17} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.059**	(2.09)	0.070**	(2.44)
PSCORE	-0.000	(-1.19)	-0.000	(-0.82)
EARN*PSCORE	0.000	(0.60)	0.000	(1.04)
EARN*SIZE	0.015	(1.49)	0.020**	(2.11)
EARN*BTM	-0.036***	(-3.63)	-0.036**	(-2.01)
EARN*LEVERAGE	0.028***	(4.90)	0.020**	(2.43)
EARN*BUSSEGT	0.010	(1.06)	0.011	(0.96)
EARN*GEOSEGT	-0.004	(-0.83)	-0.004	(-0.65)
SIZE			-0.001	(-0.83)
BTM			0.014***	(4.72)
LEVERAGE			-0.003	(-1.82)
BUSSEGT			-0.001	(-0.70)
GEOSEGT			0.000	(-0.21)
_cons	-0.010	(-0.45)	-0.008	(-1.02)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	848		848	
R-squared	26.70%		30.34%	

Table 2.13 Panel B Effect of Principles-Based Standards on the Relation Between Annual Returns and Earnings for Pre-convergence Sample

$$RET_{it} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-10} CONTROLS + \alpha_{11-17} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.189	(0.91)	0.380	(2.19)
PSCORE	-0.000	(-0.39)	-0.000	(-0.97)
EARN*PSCORE	0.002	(0.80)	0.003	(1.80)
EARN*SIZE	0.041	(0.78)	-0.011	(-0.21)
EARN*BTM	-0.045	(-0.95)	-0.051	(-0.92)
EARN*LEVERAGE	0.008	(1.26)	-0.002	(-0.33)
EARN*BUSSEGT	-0.034***	(-2.95)	-0.038***	(-3.62)
EARN*GEOSEGT	-0.013	(-1.58)	-0.003	(-0.37)
SIZE			0.014**	(2.07)
BTM			0.006	(1.35)
LEVERAGE			-0.004***	(-3.89)
BUSSEGT			0.003	(1.91)
GEOSEGT			-0.005**	(-2.28)
_cons	-0.004	(-0.29)	-0.052**	(-2.24)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	98		98	
R-squared	56.83%		67.34%	

Table 2.13 Panel C Effect of Principles-Based Standards on the Relation Between Annual Returns and Earnings for Post-convergence Sample

$$RET_{it} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-10} CONTROLS + \alpha_{11-17} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.313***	(3.56)	0.224***	(4.13)
PSCORE	-0.000	(-0.58)	-0.000	(-0.91)
EARN*PSCORE	0.001	(1.38)	0.001***	(2.78)
EARN*SIZE	0.016	(1.09)	0.028***	(2.51)
EARN*BTM	-0.028**	(-2.26)	-0.073***	(-2.63)
EARN*LEVERAGE	0.002**	(2.00)	0.140***	(1.95)
EARN*BUSSEGT	-0.010	(-1.20)	0.014**	(1.97)
EARN*GEOSEGT	-0.008**	(-2.06)	-0.012**	(-2.12)
SIZE			-0.002	(-0.95)
BTM			0.012***	(2.52)
LEVERAGE			0.000	(-0.80)
BUSSEGT			-0.001	(-1.60)
GEOSEGT			0.000	(0.64)
_cons	-0.035**	(-2.44)	-0.019	(-1.01)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	750		750	
R-squared	31.03%		40.84%	

This table presents the regression estimates of concurrent market returns on current earnings and earnings interacted with the PSCORE and control variables to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. Fiscal year indicators are included in the model but not presented. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 respectively.

Table 2.14 Effect of Principles-Based Standards on the Relation Between Annual Returns and Earnings Pre and Post-Convergence

$$RET_{it} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 POSTCONV + \alpha_4 EARN_{it} * PSCORE_{it} + \alpha_5 PSCORE * POSTCONV + \alpha_6 EARN * PSCORE * POSTCONV + \alpha_{7-14} * EARN_{it} * CONTROLS + \alpha_{15-22} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.119	(0.96)	0.023	(0.15)
PSCORE	-0.000	(-0.17)	-0.001	(-0.62)
POSTCONV	-0.015	(-1.60)	-0.008	(-0.67)
EARN*PSCORE	0.001	(0.61)	0.000	(0.21)
PSCORE*POSTCONV	-0.000	(-0.26)	0.000	(0.14)
EARN*PSCORE*POSTCONV	0.001**	(2.12)	0.003**	(3.54)
EARN*SIZE	0.043	(1.42)	0.069	(1.63)
EARN*BTM	0.012	(0.67)	0.033	(1.26)
EARN*LEVERAGE	0.005	(1.59)	0.010	(2.13)
EARN*BUSSEGT	-0.023**	(-2.28)	-0.020**	(-3.01)
EARN*GEOSEGT	-0.005	(-1.15)	-0.007	(-1.02)
SIZE			-0.007	(-1.37)
BTM			-0.004	(-1.25)
LEVERAGE			-0.001	(-0.94)
BUSSEGT			0.001	(0.56)
GEOSEGT			0.000	(0.30)
_cons	-0.003	(-0.42)	0.018	(0.96)
Industry Fixed Effects	Included		Included	
Firm Fixed Effects	Included		Included	
N	127		127	
R-squared	61.80%		64.58%	

This table presents the regression estimates of concurrent market returns on current earnings and earnings interacted with the PSCORE and a dummy variable representing post-convergence and control variables to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. Fiscal year indicators are included in the model but not presented. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 repectively.

Table 2.15 Estimates of the Effect of Principles-Based Standards on the Persistence of Accounting Earnings for firms in the highest and lowest PSCORE deciles

$$EARN_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 PSCORE_{it} + \alpha_3 EARN_{it} * PSCORE_{it} + \alpha_{4-11} CONTROLS + \alpha_{12-19} EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
EARN	0.688***	(5.95)	0.574***	(5.24)
PSCORE	-0.001**	(-2.16)	-0.001**	(-2.49)
EARN*PSCORE	0.009***	(3.57)	0.007***	(3.22)
EARN*SIZE	0.149	(1.29)	0.148	(1.31)
EARN*BTM	-0.001	(-0.01)	-0.002	(-0.01)
EARN*LEVERAGE	-0.114	(-1.36)	-0.281*	(-1.95)
EARN*BUSSEGT	-0.005	(-0.10)	0.018	(0.32)
EARN*GEOSEGT	-0.041	(-0.79)	-0.056	(-0.89)
SIZE			0.015	(1.00)
BTM			-0.013	(-0.95)
LEVERAGE			-0.013	(-1.62)
BUSSEGT			-0.003	(-0.52)
GEOSEGT			0.002	(0.50)
_cons	-0.032	(-0.54)	0.051	(0.44)
Year Dummies	Included		Included	
Industry Fixed Effect	Included		Included	
Firm Fixed Effect	Included		Included	
N	182		182	
R-squared	62.19%		63.48%	

This table presents the regression estimates of future earnings on current earnings and earnings interacted with the PSCORE and control variables for firms in the highest and lowest PSCORE decile to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. Fiscal year indicators are included in the model but not presented. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 respectively.

Table 2.16 Estimates of the Effect of Change in Reliance on Principles-Based Standards on the Persistence of Accounting Earnings for Pre and Post-Convergence Firms

$$\Delta EARN_{it+1} = \alpha_0 + \alpha_1 \Delta EARN_{it} + \alpha_2 \Delta PSCORE_{it} + \alpha_3 \Delta EARN_{it} * PSCORE_{it} + \alpha_{4-11} \Delta CONTROLS + \alpha_{12-19} \Delta EARN_{it} * CONTROLS + \varepsilon_{it}$$

	MODEL 1		MODEL 2	
	Coef.	t-stat	Coef.	t-stat
ΔEARN	-0.077	(-1.19)	-0.139	(-1.89)
ΔPSCORE	0.001	(1.72)	0.001	(1.59)
ΔEARN*PSCORE	0.008**	(2.49)	0.008**	(2.61)
ΔEARN*SIZE	0.130	(0.13)	0.160	(0.18)
ΔEARN*BTM	-0.084***	(-3.07)	-0.064**	(-2.29)
ΔEARN*LEVERAGE	0.022	(1.02)	0.000	(0.23)
ΔEARN*BUSSEGT	0.006	(0.64)	0.000	(0.60)
ΔEARN*GEOSEGT	0.000	(0.53)	0.000	(0.71)
ΔSIZE			-0.012	(-0.27)
ΔBTM			0.003	(1.67)
ΔLEVERAGE			0.000	(-0.91)
ΔBUSSEGT			0.007	(1.74)
ΔGEOSEGT			0.002	(0.55)
_cons	0.006**	(2.04)	0.011**	(2.09)
Year Dummies	Included		Included	
Firm Fixed Effects	Included		Included	
Industry Fixed Effect	Included		Included	
N	121		121	
R-squared	30.93%		35.83%	

This table presents the regression estimates of change in future earnings on change current earnings and change earnings interacted with the change in PSCORE and control variables for firms that existed in at least 2 consecutive years in the full sample period to examine whether firm's reliance on principles-based standards increases or decreases earnings informativeness. All the variable are defined in table 2.4. Fiscal year indicators are included in the model but not presented. P-Values are calculated using standards. *,**, *** signify p-value < 0.10, 0.05, and 0.01 respectively.

REFERENCES

Agoglia, C. P., Doupnik, T. S., & Tsakumis, G. T. (2011). Principles-based versus rules- based accounting standards: The influence of standard precision and audit committee strength on financial reporting decisions. *The Accounting Review*, *86*(3), 747-767.

Albrecht, W., Stice, E., & Stice, J. *Financial Accounting*. Cengage 2010

Atwood, T. J., Drake, M. S., & Myers, L. A. (2010). Book-tax conformity, earnings persistence and the association between earnings and future cash flows. *Journal of Accounting and Economics,* 50(1), 111-125.

Barth, M. E., Landsman, W. R., Lang, M., & Williams, C. (2012). Are IFRS-based and US GAAP-based accounting amounts comparable? *Journal of Accounting and Economics*, 54(1), 68-93.

Bennet, B., & Bradbury, M. Prangnell (2006) Rules, Principles and Judgments in Accounting Standards. *Abacus*, 42(2), 189-204.

Benston, G.J., Bromwich, M., Litan, R.E., & Wagenhofer, A., (2006) Worldwide Financial Reporting: The Development and Future of Accounting Standards. *Oxford University Press*, Oxford, UK.

Bowen, R. M., Burgstahler, D., & Daley, L. A. (1986). Evidence on the relationships between earnings and various measures of cash flow. *The Accounting Review*, 713-725.

Carmona, S., & Trombetta, M. (2008). On the global acceptance of IAS/IFRS accounting standards: The logic and implications of the principles-based system. *Journal of Accounting and Public Policy*, 27(6), 455-461.

Chen, L., Ng, J., & Tsang, A. (2014). The Effect of Mandatory IFRS Adoption on International Cross-Listings. *The Accounting Review*, *90*(4), 1395-1435.

Cohn, Michael (2015). FASB votes to defer revenue recognition standard. *Accounting Today* July. www.accountingtoday.com

Congress, 2002. The Sarbanes-Oxley Act of 2002.

Covrig, V. M., DeFond, M. L., & Hung, M. (2007). Home bias, foreign mutual fund holdings, and the voluntary adoption of international accounting standards. *Journal of Accounting Research*, 45(1), 41-70.

Cuccia, A. D., Hackenbrack, K., & Nelson, M. W. (1995). The ability of professional standards to mitigate aggressive reporting. *Accounting Review*, 227-248.

Cunningham, L. A. (2007). Prescription to retire the rhetoric of principles-based systems in corporate law, securities regulation, and accounting, a. *V and. L. Rev.*, *60*, 1409.

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, *50*(2), 344-401.

DeFond, M., Hu, X., Hung, M., & Li, S. (2011). The impact of mandatory IFRS adoption on foreign mutual fund ownership: The role of comparability. *Journal of Accounting and Economics*, 51(3), 240-258.

DeFond, M. L., Hu, X., Hung, M. Y., & Li, S. (2012). Has the Widespread Adoption of IFRS Reduced US Firms' Attractiveness to Foreign Investors? *Journal of International Accounting Research*, 11(2), 27-55.

DiPiazza, S., McDonnell, D., Samyn, F., Flynn, T., Quigley, J., & Turley, J. (2008). *Global dialogue with capital market stakeholders: A report from the CEOs of the international audit networks.* New York: Global Public Policy Symposium.

Dichev, I. D., Graham, J. R., Harvey, C. R., & Rajgopal, S. (2013). Earnings quality: Evidence from the field. *Journal of Accounting and Economics*, 56(2), 1-33.

Donelson, D. C., McInnis, J. M., & Mergenthaler, R. D. (2012). Rules-based accounting standards and litigation. *The Accounting Review*, 87(4), 1247-1279.

Donelson, D., McInnis, J., and Mergenthaler, R. (2016) Explaining Rules-Based Characteristics in U.S. GAAP: Theories and Evidence. *Journal of Accounting Research*, Forthcoming.

Ehrlich, I., & Posner, R. A. (1974). An economic analysis of legal rulemaking. The Journal of Legal Studies, 3(1), 257-286.

Financial Accounting Standards Board. (2002) Principles-based approach to standards setting. www.fasb.org

__. (2002). Memorandum of Understanding: The Norwalk Agreement. www.fasb.org

_____ . (2006) A roadmap for convergence between IFRS and US GAAP—2006-2008 Memorandum of Understanding between the FASB and IASB, Feb 27. www.fasb.org

_____ , (2008) Completing the February 2006 Memorandum of Understanding: A Progress Report and Timetable for Completion, September 11. www.fasb.org

Folsom, D., Hribar, P., Mergenthaler, R., & Peterson, K. (2016). *Principles-Based Standards and Earnings Attributes*. Management Science, Forthcoming

Guerrera, F., and P. Norman (2002) Brussels attacks accounting rules in the U.S. *Financial Times* (February 21):1

Henderson, D., & O'Brien, P. C. (2014). *Principles, Rules, Bright Lines and Transaction Structuring: A Cross-Regime Study of Lessees.* Working paper. University of Waterloo.

Henry, E., Lin, S., & Yang, Y. W. (2009). The European-US "GAAP Gap": IFRS to US GAAP Form 20-F Reconciliations. *Accounting Horizons*, 23(2), 121-150.

Herz, R. H. (2003). A year of challenge and change for the FASB. *Accounting Horizons*, *17* (3): 247-255.

Holland, Kevin, and Richard HG Jackson. "Earnings management and deferred tax." *Accounting and Business Research* 34.2 (2004): 101-123.

Hoogervorst, H. (2015) Maintaining High-Quality, Reliable, Financial Reporting: A Shared and Weighty Responsibility. Keynote Address to 2015 AICPA National Conference. Washington D.C. https://www.sec.gov/news/speech/keynote-2015-aicpa-white.html

Imhoff, E., and J. Thomas. (1988). Economic consequences of accounting standards: the lease disclosure rule change. *Journal of Accounting and Economics*, 10 (4): 277-310

International Accounting Standards Board (2001) *Conceptual Framework for Financial Reporting*. www.ifrs.org

_____ (2003) *Boards Decision on International Financial Reporting Standards Update*. www.ifrs.org

_____ (1998, 2008, 2010, 2015) *Conceptual Framework for Financial Reporting*. www.ifs.org

International Organization of Securities Commissions IOSCO (1998) *International Disclosures Standards for cross-border offerings and initial listings by foreign issuers*. https://www.iosco.org/publications

Jamal, K., & Tan, H. T. (2010). Joint effects of principles-based versus rules-based standards and auditor type in constraining financial managers' aggressive reporting. *The Accounting Review*, 85(4), 1325-1346.

Katz, D. (2014) The split over convergence: FASB and IASB back away from the goal of single accounting language. *CFO Magazine* (October)

Kim, J. B., & Shi, H. (2012). Voluntary IFRS adoption, analyst coverage, and information quality: International evidence. *Journal of International Accounting Research*, 11(1), 45- 76.

Kormendi, R. and Lipe, R. (1987) Earnings Innovations, earnings persistence and stock returns. The Journal of Business 60: 323-345

Li, F. (2008). Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and economics*, *45*(2), 221-247.

Lin, S., Riccardi, W., & Wang, C. (2012). Does accounting quality change following a switch from US GAAP to IFRS? Evidence from Germany. *Journal of Accounting and Public Policy*, 31(6), 641-657.

Melone, M. A. (2003). United States accounting standards-Rules or principles. *U. Miami L. Rev.*, *58*, 1161.

Mergenthaler, R.D. (2011). *Principles-Based versus Rules-Based Standards and Accounting*
Irregularities. Working paper, University of Iowa.

Nelson, M. W., Elliott, J. A., & Tarpley, R. L. (2002). Evidence from auditors about managers' and auditors' earnings management decisions. *The Accounting Review*, *77*(s-1),
175-202.

Nelson, M., (2003) Behavioral Evidence on the Effects of Principles-and Rules-Based Standards. *Accounting Horizons*, 17 (1): 91-104.

Ng, T. B. P., & Tan, H. T. (2002). Effects of authoritative guidance availability and audit committee effectiveness on auditors' judgments in an auditor-client negotiation
context. *The Accounting Review*, *78*(3), 801-818.

Ng, M. (2004). The future of standard setting, The CPA Journal, Jan, 74(1), pp.18-20. Nobes, C. W. (1983). A judgmental international classification of financial reporting practices. *Journal of Business Finance & Accounting*, 10(1), 1-19.

_____ (2004). On accounting classification and the international harmonization debate. *Accounting, Organizations and Society*, 29(2), 189-200.

Norris, F. (2012). The Case for Global Accounting, May 10, 2012. *New York Times*. Pactor Paul (1998) International Accounting Standards: The World's Standards by 2002. *CPA Journal*

Psaros, J., & Trotman, K. T. (2004). The impact of the type of accounting standards on preparers' judgments. *Abacus*, 40(1), 76-93.

Reidl, E.J., and Srinivasan, S. (2010) Signaling firm performance through financial statement presentation: An analysis using special items. Contemporary Accounting Research 27: 289-
332.

Schipper, K (2003) Principles-based Accounting Standards. *Accounting Horizons,* 17 (1): 61-72.

Securities and Exchange Commission SEC (2000) *Concept Release on International Standards* February. www.sec.gov

_____ (2003) *Study pursuant to Section 108(d) of the Sarbanes-Oxley Act of 2002 on the adoption by the United States Financial Reporting System of a principles-based accounting system.* Washington DC: SEC.

_____ . (2008). *Final Report of the Advisory Committee on Improvements to Financial Reporting*. Washington, DC: SEC.

_____ (2012) *Workplan for the Consideration of Incorporating International Financial Reporting Standards into the Financial Reporting System of U.S. Issuers: Final Staff Report.* Washington DC: SEC. www.sec.gov.

Selling, T. (2008). Top ten reasons why US adoption of IFRS is a terrible idea. The Accounting Onion Retrieved, 8(22), 2015.

Stice, E. K., & Stice, J. D. (2010). Count US out? How the French put US adoption of International Accounting Standards on the rocks. *Marriott Alumni Magazine*, 12-15.

Trompeter, G. (1994). The Effect of Partner Compensation Schemes and Generally Accepted Accounting Principles on Audit Partner Judgement. *Auditing: A Journal of Theory and Practice,* 13(2): 56-71.

Tribunella, H. (2009). Twenty questions on international financial reporting standards. *The CPA Journal*, 79(3), 32.

Tweedy, David (2006) *Address Before the Economic Operations Committee of the European Parliament.* www.ifrs.org

Wang, C. (2014). Accounting standards harmonization and financial statement comparability: Evidence from transnational information transfer. *Journal of Accounting Research*, 52(4), 955-992.

White, Mary Jo. (2015) Maintaining High-Quality, Reliable, Financial Reporting: A Shared and Weighty Responsibility. *Keynote Address to 2015 AICPA National*

Conference. Washington D.C. https://www.sec.gov/news/speech/keynote-2015-aicpa-white.html

Yip, R. W., & Young, D. (2012). Does mandatory IFRS adoption improve information comparability?. *The Accounting Review*, 87(5), 1767-1789.

Zeff, S. A. (2005). Evolution of US generally accepted accounting principles (GAAP).

_____. (2012). The Evolution of the IASC into the IASB, and the Challenges it Faces. The *Accounting Review*, 87(3), 807-837.

APPENDICES

Appendix A: Types Authoritative Pronouncements in U.S. GAAP	
Acronym	Description
SFAS	Statements of Financial Accounting Standards
APB	Accounting Principles Board Opinions
ARB	Accounting Research Bulletins
SFAC	Statements of Financial Accounting Concepts
SAB	Staff Accounting Bulletins

Appendix B:Types of Authoritative Pronouncements in IFRS	
Acronym	Description
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards

Appendix C: Summary of IFRS and Interpretive Pronouncements RBC Scores

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year
SIC	1	Consistency Different Cost Formulas for Inventories	1999	0	2004	0
SIC	2	Consistency-Capitalization of Borrowing Costs	1998	0	2004	0
SIC	3	Elimination of Unrealized Profits and Losses on Transactions with Associates	1998	0	2004	0
SIC	5	Classification of Financial Instruments-Contingent Settlement Provisions	1998	0	2004	0
SIC	6	Costs of Modifying Software	1998	1	2004	1
SIC	7	Introduction of Euro	1998	0		0
SIC	8	First-time Application of IASs as the Primary Basis of Accounting	1998	1	2003	1
SIC	9	Business Combinations-Classification either as Acquisitions or Unitings of Interests	1998	0	2003	0
SIC	10	Government Assistance-No Specific Relation to Operating Activities	1998	0	2013	0
SIC	11	Foreign Exchange-Capitalization of Losses Resulting from Severe Currency Devaluations	1999	0	2004	0
SIC	12	Consolidation-Special Purpose Entities	1999	0	2012	1
SIC	13	Jointly Controlled Entities-Non-Monetary Contributions by Venturers	1999	0	2012	0
SIC	14	Property, Plant, and Equipment-Compensation for the Impairment or Loss of Items	1999	0	2004	0
SIC	15	Operating Leases-Incentives	1999	0	2013	0
SIC	16	Share Capital-Reacquired Own Entity Instruments (Treasury Shares)	1999	0	2004	0
SIC	17	Equity-Costs of an Equity Transaction	2000	0	2004	0
SIC	18	Consistency-Alternative Methods	2001	0	2004	0
SIC	19	Reporting Currency-Measurement and Presentation of Financial Statements under IAS 21 an	2001	0	2004	0
SIC	20	Equity Accounting Method-Recognition of Losses	2000	0	2004	0
SIC	21	Income Taxes-Recovery of Revalued Non-Depreciable Assets	2000	0	2011	0
SIC	22	Business Combinations-Subsequent Adjustments of Fair Values and Goodwill Initially Report	2000	0	2003	0
SIC	23	Property, Plant, and Equipment-Major Inspection or Overhaul Costs	2000	0	2004	0

Appendix C (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year
SIC	24	Earnings Per Share-Financial instruments and other contracts that may be settled in shares	2001	0	2004	0
SIC	25	Income Taxes-Changes in the Tax Status of an Entity or its Shareholders	2000	0		0
SIC	27	Evaluating the Substance of Transactions Involving the Legal Form of a Lease	2002	0		0
SIC	28	Business Combinations-'Date of Exchange' and Fair Value of Equity Instruments	2002	0	2004	0
SIC	29	Disclosure-Service Concession Arrangements	2002	0	2007	0
SIC	30	Reporting Currency-Translation from Measurement Currency to Presentation Currency	2001	0	2004	0
SIC	31	Revenue-Barter Transactions Involving Advertising Services	2002	0		0
SIC	32	Intangible Assets-Web Site Costs	2002	0		0
SIC	33	Consolidation and equity method-Potential voting rights and allocation of ownership interests	2002	0		0
IFRIC	1	Changes in Existing Decommissioning, Restoration and Similar Liabilities	2004	0		0
IFRIC	2	Members' Shares in Cooperative Entities and Similar Instruments	2005	0		0
IFRIC	4	Determining whether an Arrangement contains a Lease	2006	0		0
IFRIC	5	Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitatic	2006	0		0
IFRIC	6	Liabilities arising from Participating in a Specific Market---Waste Electrical and Electronic Eq	2006	0		0
IFRIC	7	Approach under IAS 29 Financial Reposting in Hyperinflationary Economies	2006	0		0
IFRIC	8	Scope of IFRS 2	2006	1	2009	1
IFRIC	9	Reassessment of Embedded Derivatives	2006	0		1
IFRIC	10	Interim Financial Reporting and Impairment	2007	0		0
IFRIC	11	IFRS 2-Group and Treasury Share Transactions	2007	0		0
IFRIC	12	Service Concession Arrangements	2008	0		0
IFRIC	13	Customer Loyalty Programs	2008	0		0
IFRIC	14	IAS 19-The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Inte	2008	0		0

Appendix C (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year
IFRIC	15	Agreements for the Construction of Real Estate	2009	0		0
IFRIC	16	Hedges of Net Investment in a Foreign Operation	2008	0		0
IFRIC	17	Distributions of Non-Cash Assets	2009	0		0
IFRIC	18	Transfers of Assets from Customers	2009	0		0
IFRIC	19	Extinguishing Financial Liabilities with Equity Instruments	2010	1		1
IFRIC	20	Stripping Costs in the Production Phase of a Surface Mine	2013	0		0
IAS	1	Presentation of Financial Statements	1975	0		2
IAS	2	Inventories	1975	0		1
IAS	3	Consolidated Financial Statements	1976	2	1989	2
IAS	4	Depreciation Accounting	1976	0	1998	0
IAS	5	Information to Be Disclosed in Financial Statements	1976	0	1998	0
IAS	6	Accounting Responses to Changing Prices	1977	0	1983	0
IAS	7	Statement of Cash Flows	1978	0		0
IAS	8	Accounting Policies, Changes in Accounting Estimates and Errors	1978	1		1
IAS	9	Accounting for Research and Development Activities	1978	1	1998	1
IAS	10	Events After the Reporting Period	1979	1		1
IAS	11	Construction Contracts	1979	0		0
IAS	12	Income Taxes	1980	1		2
IAS	13	Presentation of Current Assets and Current Liabilities	1980	0	1997	0
IAS	14	Segment Reporting	1981	0	2008	2
IAS	15	Information Reflecting the Effects of Changing Prices	1981	0	2004	0
IAS	16	Property, Plant, and Equipment	1982	1		2
IAS	17	Leases	1982	1		2
IAS	18	Revenue	1982	1		2

Appendix C (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year
IAS	19	Employee Benefits	1983	0		2
IAS	20	Accounting for Government Grants and Disclosure of Government Assistance	1983	1		2
IAS	21	The Effects of Changes in Foreign Exchange Rates	1983	0		0
IAS	22	Business Combinations	1983	0	2003	2
IAS	23	Borrowing Costs	1984	0		1
IAS	24	Related Party Transactions	1984	0		0
IAS	25	Accounting for Investments	1986	0	2000	0
IAS	26	Accounting and Reporting by Retirement Benefit Plans	1987	1		0
IAS	27	Separate Financial Statements	1989	1		0
IAS	28	Investments in Associates and Joint Ventures	1989	0		1
IAS	29	Financial Reporting in Hyperinflationary Economies	1989	0		0
IAS	30	Disclosures in the Financial Statements of Banks and Similar Financial Institutions	1991	0	2006	0
IAS	31	Interests in Joint Ventures	1992	0	2012	1
IAS	32	Financial Instruments: Presentation	1996	2		2
IAS	33	Earnings per Share	1997	0		0
IAS	34	Interim Financial Reporting	1999	0		0
IAS	35	Discontinuing Operations	1999	0	2004	0
IAS	36	Impairment of Assets	1999	2		3
IAS	37	Provisions, Contingent Liabilities and Contingent Assets	1999	1		2
IAS	38	Intangible Assets	1999	2		3
IAS	39	Financial Instruments: Recognition and Measurement	2001	2		3
IAS	40	Investment Property	2002	1		1
IAS	41	Agriculture	2003	1		1
IFRS	1	First-time Adoption of International Financial Reporting Standards	2004	0		0
IFRS	2	Share-based Payment	2005	1		3
IFRS	3	Business Combinations	2004	2		2
IFRS	4	Insurance Contracts	2005	1		1

Appendix C (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year
IFRS	5	Non-current Assets Held for Sale and Discontinued Operations	2005	1		1
IFRS	6	Exploration for and Evaluation of Mineral Resources	2006	1		1
IFRS	7	Financial Instruments: Disclosures	2007	1		2
IFRS	8	Operating Segments	2009	1		2
IFRS	9	Financial Instruments	2018	2		3
IFRS	10	Consolidated Financial Statements	2013	1		1
IFRS	11	Joint Arrangements	2013	0		0
IFRS	12	Disclosures of Interests in Other Entities	2013	1		1
IFRS	13	Fair Value Measurement	2013	2		2
IFRS	14	Regulatory Deferral Accounts	2016	0		0
IFRS	15	Revenue from Contracts with Customers	2018	2		2

This appendix provides a brief summary of each IFRS, its RBC in the first effective year and its RBC in final effective year or 2014 if the IFRS is still effective.

Appendix D: Summary of U.S. GAAP and RBC Scores

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year	Codification Topic
APB	1	New Depreciation Guidelines	1963	0	1988	0	
APB	2	Accounting for Investment Credit	1963	0	2014	0	ASC 323
APB	3	Statement of Source and Application of Funds	1963	0	1971	0	
APB	5	Reporting of Leases in Financial Statements of Lessee	1965	1	1976	1	
APB	7	Accounting for Leases in Financial Statements of Lessors	1967	1	1976	1	
APB	8	Accounting for Cost of Pension Plans	1967	1	1986	1	
APB	9	Reporting the Results of Operations	1967	1	2014	1	ASC 225, 250, 505
APB	10	Omnibus Opinion-Provides authoritative guidance on consolidated financial statements, tax allocation accounts, taxes payable, and activities related to stocks.	1967	0	2014	0	ASC 210, 605, 704
APB	11	Accounting for Income Taxes	1968	1	1988	2	
APB	12	Ominbus Opinion-Provides authoritative guidance on allowances, depreciation, deferred compensation, capital changes and debt.	1968	0	2014	0	ASC 310, 360, 505, 710,835
APB	14	Accounting for Convertible Debt snd Debt Issued with Stock Purchase Warrants	1969	0	2014	0	ASC 470
APB	15	Earnings Per Share	1970	2	1997	2	
APB	16	Business Combinations	1970	2	2001	3	
APB	17	Intangible Assets	1971	0	2001	1	
APB	18	Equity Method of Accounting for Investments in Common Stock	1971	2	2014	3	ASC 320-10
APB	19	Reporting Changes in Financial Position	1971	0	1988	0	
APB	20	Accounting for Changes	1971	1	2005	1	
APB	21	Interest on Receivable and Payables	1972	1	2014	1	ASC 835
APB	22	Disclosure of Accounting Policies	1972	0	2014	0	ASC 235
APB	23	Accounting for Income Taxes-Special Areas	1973	1	2014	1	ASC 740
APB	24	Accounting for Income Taxes-Investments in Commons Stock Accounted for by the Equity Method	1973	1	1988	1	
APB	25	Accounting for Stock Issued to Employees	1973	0	1994	1	
APB	26	Early Extinguishment of Debt	1973	1	2014	1	ASC 470
APB	27	Accounting for Lease Transactions by Manufacturer or Dealer Lessors	1973	1	1976	1	
APB	28	Interim Financial Reporting	1974	0	2014	0	ASC 270
APB	29	Accounting for Nonmonentary Transactions	1974	1	2014	1	ASC 845

Appendix D: (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year	Codification Topic
APB	30	Reporting the Results of Operations-Reporting Effects of Disposal of a Segment of a Business, and Extrordinary, Unusual and Infrequently Occuring Events and Transactions	1974	0	2014	1	ASC 225
APB	31	Disclosure of Lease Commitments by Lessees	1974	1	1976	1	
ARB	44	Declining Balance Depreciation	1954	0	1958	0	
ARB	45	Long-Term Construction Type Contracts	1956	0	2014	0	ASC 605
ARB	47	Accounting for Costs of Pension Plans	1957	1	1966	1	
ARB	48	Business Combinations	1958	0	1970	0	
ARB	49	Earnings Per Share	1959	0	1966	0	
ARB	50	Contingencies	1959	0	1975	0	
ARB	51	Consolidated Financial Statements	1960	2	2014	4	ASC 810
ARB	43_10a	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 720
ARB	43_10b	Restatement and Revision of Accounting Research Bulletins	1954	1	1967	1	
ARB	43_11a	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 912
ARB	43_11b	Restatement and Revision of Accounting Research Bulletins	1954	0	2005	0	
ARB	43_11c	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 912
ARB	43_12	Restatement and Revision of Accounting Research Bulletins	1954	0	2009	0	
ARB	43_13a	Restatement and Revision of Accounting Research Bulletins	1954	0	1966	0	
ARB	43_13b	Restatement and Revision of Accounting Research Bulletins	1954	0	2005	0	
ARB	43_14	Restatement and Revision of Accounting Research Bulletins	1954	1	1964	1	
ARB	43_15	Restatement and Revision of Accounting Research Bulletins	1954	0	1972	0	
ARB	43_1a	Restatement and Revision of Accounting Research Bulletins	1954	1	2014	1	ASC 310, 505, 605, 850
ARB	43_1b	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 505
ARB	43_2a	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 205
ARB	43_2b	Restatement and Revision of Accounting Research Bulletins	1954	0	1966	0	
ARB	43_3a	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 470
ARB	43_3b	Restatement and Revision of Accounting Research Bulletins	1954	0	2009	0	
ARB	43_4	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 330
ARB	43_5	Restatement and Revision of Accounting Research Bulletins	1954	0	1970	0	
ARB	43_6	Restatement and Revision of Accounting Research Bulletins	1954	0	1975	0	
ARB	43_7a	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 852

Appendix D: (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year	Codification Topic
ARB	43_7b	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 505
ARB	43_7c	Restatement and Revision of Accounting Research Bulletins	1954	0	1956	0	
ARB	43_8	Restatement and Revision of Accounting Research Bulletins	1954	0	1966	0	
ARB	43_9a	Restatement and Revision of Accounting Research Bulletins	1954	0	2009	0	
ARB	43_9b	Restatement and Revision of Accounting Research Bulletins	1954	0	2009	0	
ARB	43_9c	Restatement and Revision of Accounting Research Bulletins	1954	0	2014	0	ASC 360/ASC 976
ARB	44r	Declining Balance Depreciation Revised	1958	0	1988	0	
CON	5_6	Recognition and measurement in Financial Statements and Business Enterprises	1986	0	2014	0	ASC 35, 30, 35
EITF	00_21	Revenue Arrangements with Multiple Deliverables	2000	2	2014	2	ASC 605-25
SAB	101	Revenue Recognition in Financial Staements	1999	1	2014	1	ASC 605
SOP	97_2	Software Revenue Recoginition	1997	2	2014	2	ASC 985
FAS	1	Disclosure of Foreign Currency Transalation Information	1974	0	1975	0	
FAS	2	Accounting for Research and Development Costs	1975	1	2014	1	ASC 730
FAS	5	Accounting for Contingencies	1976	0	2014	2	ASC 450
FAS	7	Accounting and Reporting by Development Stage Enterprises	1976	0	2014	0	ASC 915
FAS	8	Accounting for the Translation of Foreign Currency Transactions and Foreign Currency	1976	0	1982	0	
FAS	12	Accounting for Certain Marketable Securities	1976	1	1993	2	
FAS	13	Accounting for Leases	1977	3	2014	4	ASC 840
FAS	14	Financial Reporting for Segments of a Business Enterprise	1977	1	1997	1	
FAS	15	Accounting by Debtors and Creditors for Toubled Debt Restructurings	1977	1	2014	2	ASC 470/ASC 310
FAS	16	Prior Period Adjustments	1977	0	2014	0	ASC 250
FAS	19	Financial Accounting and Reporting by Oil and Gas Producing Companies	1978	1	2014	3	ASC 932
FAS	31	Accounting for Tax Benefits Related to U.K. Tax Legislation Concerning Stock Relief	1979	0	1988	0	
FAS	33	Financial Reporting and Changing Prices	1979	2	1986	2	
FAS	34	Capitalization of Interest Cost	1979	0	2014	0	ASC 835
FAS	35	Accounting and Reporting byDefined Benefit Pension Plans	1980	1	2014	0	ASC 960
FAS	43	Accounting for Compensated Absences	1980	1	2014	1	ASC 710

Appendix D: (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year	Codification Topic
FAS	44	Accounting for Intangible Assets of Motor Carriers	1980	0	2002	0	
FAS	45	Accounting for Franchise Fee Revenue	1981	0	2014	0	ASC 952
FAS	47	Disclosure of Long-Term Obligations	1981	1	2014	2	ASC 470/ASC 440
FAS	48	Revenue Recognition when Right of Return Exists	1981	1	2014	1	ASC 605
FAS	49	Accounting for Product Financing Arrangements	1981	1	2014	1	ASC 470-40
FAS	50	Financial Reporting in the Record and Music Industry	1981	0	2014	0	ASC 928
FAS	51	Financial Reporting by Cable Television Companies	1981	0	2014	0	ASC 922
FAS	52	Foreign Currency Translation	1982	1	2014	2	ASC 830
FAS	53	Financial Reporting by Producers and Distributors of Motion Picture Films	1982	0	2000	0	
FAS	57	Related Party Disclosures	1982	1	2014	1	ASC 850
FAS	60	Accounting and Reporting by Insurance Enterprises	1982	1	2014	1	ASC 944/ASC 310
FAS	61	Accounting for Title Plant	1982	0	2014	0	ASC 950
FAS	63	Financial Reporting by Broadcasters	1982	0	2014	0	ASC 920
FAS	65	Accounting for Certain Mortgage Banking Activities	1982	1	2014	1	ASC 948/ASC 310
FAS	66	Accounting for Sales of Real Estate	1982	2	2014	3	ASC 360/ASC 976
FAS	67	Accounting for Costs and Intial Rental Operations of Real Estate Projects	1982	1	2014	1	ASC 970
FAS	68	Research and Development Arrangements	1982	1	2014	1	ASC 730
FAS	71	Accounting for the Effects of Certain Types of Regulations	1983	1	2014	1	ASC 980
FAS	74	Accounting for Special Termination Benefits Paid to Employees	1983	0	1985	0	
FAS	77	Reporting by Transferors for Transfers of Receivables with Recourse	1983	1	1996	1	
FAS	80	Accounting for Futures Contracts	1984	1	1999	1	
FAS	81	Disclosure of Postretirment Health Care and Life Insurance Benefits	1984	1	1992	1	
FAS	86	Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed	1985	1	2014	1	ASC 985
FAS	87	Employer's Accounting for Pensions	1986	3	2014	4	ASC 715
FAS	88	Employers' Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits	1985	0	2014	1	ASC 715
FAS	89	Financial Reporting and Changing Prices	1986	1	2014	1	ASC 255
FAS	93	Recognition of Depreciation by Not-for-Profit Organizations	1988	0	2014	0	ASC 958
FAS	95	Statement of Cash Flows	1988	0	2014	0	ASC 230

Appendix D: (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year	Codification Topic
FAS	96	Accounting for Income Taxes	1988	1	1992	1	
FAS	97	Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments	1988	1	2014	1	ASC 944
FAS	101	Regulated Enterprises- Accounting for the Discontinuatuon of FASB Statement No. 71	1988	0	2014	0	ASC 980
FAS	105	Dislcosure of Information about Financial Instruments with Off-Balance Sheet Risk	1990	1	2000	1	
FAS	106	Employers' Accounting for Postretirement Benefits Other Than Pensions	1992	3	2014	4	ASC 715
FAS	107	Disclosures about Fair Value of Financial Instruments	1992	1	2014	1	ASC 825
FAS	109	Accounting for Income Taxes	1992	3	2014	4	ASC 740
FAS	113	Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts	1992	0	2014	0	ASC 944
FAS	115	Accounting for Certain Investments in Debt and Equity Securities	1993	2	2014	3	ASC 320
FAS	116	Accounting for Contributions Received and Made	1994	1	2014	1	ASC 720
FAS	117	Financial Statements of Not-for-Profit Organization	1994	1	2014	1	ASC 958
FAS	119	Disclosure about Derivative Financial Instruments and Fair Value of Financial Instruments	1994	0	2000	0	
FAS	121	Accounting for the Impairment of Long-lived Assets and for Long-lived Assetsto Be Disposed Of	1995	1	2001	1	
FAS	123	Accounting for Stock-Based Compensation	1995	4	2005	4	
FAS	124	Accounting for Certain Investments Held by Not-for-Profit Organization	1995	1	2014	1	ASC 958-320
FAS	125	Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities	1996	1	2001	2	
FAS	128	Earnings Per Share	1997	2	2014	3	ASC 260
FAS	129	Disclosure of Information about Capital Structure	1997	0	2014	0	ASC 440-10
FAS	130	Reporting Comprehensive Income	1997	1	2014	1	ASC 220
FAS	131	Disclosures about Segments of an Enterprise and Related Information	1997	2	2014	2	ASC 280
FAS	133	Accounting for Derivative Instruments and Hedging Activities	2000	3	2014	3	ASC 815
FAS	136	Transfers of Assets to a Not-for-Profit Organization or Charitable Trust That Raises of Holds Contributions for Others	1999	1	2014	1	ASC 958-605
FAS	140	Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities-Replacement of FASB Statement No. 125	2001	4	2014	4	ASC 860

Appendix D: (Continued)

Type	Number	Title	First Effective Year	RBC FIRST YR	Last Effective Year	RBC Last Year	Codification Topic
FAS	141	Business Combinations	2001	3	2008	3	
FAS	142	Goodwill and Other Intangible Assets	2001	2	2014	3	ASC 350
FAS	143	Accounting for the Asset Retirement Obligations	2002	2	2014	1	ASC 410
FAS	144	Accounting for Impairment or Disposal of Long-Lived Assets	2001	2	2014	3	ASC 360/ASC 976
FAS	146	Accounting for Costs Associated with Exit or Disposal Activities	2002	0	2014	0	ASC 420
FAS	150	Accounting for Certain Financial Instruments with Characteristics	2003	1	2014	1	ASC 480
FAS	154	Accounting for Changes and Error Corrections--a replacement of APB Op. No. 20 and FASB Statement No. 3	2005	0	2014	0	ASC 250
FAS	157	Fair Value Measurements	2007	2	2014	2	ASC 820
FAS	159	Fair Value Option for Financial Assets and Financial Liabilites--Including an amendment of FASB Statement No. 155	2007	1	2014	1	ASC 825
FAS	164	Not-for-profit Entities: Mergers and Acquisitions--Including an amendment of FASB Statement No. 142	2009	2	2014	2	ASC 958-805
FAS	165	Subsequent Events	2009	1	2014	1	ASC 855
FAS	123r	Share-Based Payment	2005	2	2014	2	ASC 718
FAS	141r	Business Combinations (Acquisition Method)	2008	2	2014	2	ASC 805

This appendix provides the title of each U.S. GAAP, its RBC in the first effective year and its RBC in final effective year or 2014 if it is still in effect. It also provides the codification topic.

Appendix E

Example of keyword search for IAS 23

keywords:

*interest within 3 words of capitali**

cost of borrowing

results of searching 'interest within 3 words of capital*"

Exerpt from Sasol LTD 2011 20-F Filing

Interest capitalised in 2011, 2010 and 2009 relates to interest on specific borrowings only. Included in interest incurred is an amount of R468 million in 2011, R373 million in 2010 and R374 million in 2009 related to notional interest (unwinding of discount) primarily in respect of
environmental rehabilitation and decommissioning obligations.

VITA

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PRESENTATIONS AND PRESENTATIONS

Sawani, Assma, (2015), *Audit Committee Composition, Audit Committee Chair Characteristics, and Auditor Dismissals in a Going Concern Context*. (Working paper presented at the spring 2015 FIU School of Accounting Research Workshop)