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The content of accounting standards: Principles versus rules

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ABSTRACT

The Global Accounting Alliance has raised a call for different perspectives on principles-based accounting standards. Based on prior studies this paper identifies a number of characteristics of principles-based accounting standards. It uses content analysis to empirically test whether the asserted characteristics are consistent with the IASB and FASB standards on interest costs. We find that rules-based standards, relative to principles-based standards, have more rules, more justification, acknowledge less judgement is required, have more bright-line thresholds, have more scope exceptions, and are more verbose and complex. The main drafting difference between a rules-based or principles-based approach is whether extensional definitions or intensional definitions are used. Several policy implications are noted.

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1. Introduction

Whether accounting standards are rules-based or principles-based is an important issue. Benston, Bromwich, and Wagenhofer (2006) and Alexander and Jermakowicz (2006) link the collapse of Enron to the rules-based accounting standards in the US. Furthermore, both the Financial Accounting Standards Board (FASB) and the Securities Exchange Commission (SEC) have consumed resources in moving towards more principles-based accounting standards. For example, the FASB has issued a document describing the features of a principles-based approach to standard setting (FASB, 2002). The SEC states that objectives-oriented standards avoid scope exceptions, bright-line tests, and excessive detail (SEC, 2003). The FASB's response included a set of plans to change the format and content of standards, setting appropriate implementation guidance and minimising scope exceptions (FASB, 2004). The Global Accounting Alliance (GAA) notes that a consensus has emerged towards reliance on principles and fewer rules as a basis for effective financial reporting (GAA, 2008).[1]

Several studies identify differences in the perceived characteristics of principles-based and rules-based accounting standards.[2] For example, rules-based accounting standards are perceived to be detailed, complex, and with numerous scope exceptions (Nelson, 2003; Schipper, 2003). On the other hand, principles-based standards are asserted to have more professional judgement (Benston et al., 2006). The objective of this paper is to provide empirical evidence on these characteristics. This is important, as both the GAA (2008) and the SEC (2003) note there is a range of different interpretations of the term 'principles-based standards'. The GAA (2008) has raised a 'call for action' to initiate discussion and debate on different perspectives of the principles-based standards.

This paper applies content analysis to the International Accounting Standards Board (IASB) and the FASB standards on borrowing costs. We choose these standards to compare the same accounting outcome both within and across jurisdictions

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[1] The GAA is an alliance of nine major professional accountancy bodies representing 750,000 professional accountants in over 140 countries.

[2] Dennis (2008) distinguishes between the *process* of the developing principles-based accounting standards and the *product* (i.e., whether the outcome of that process, the accounting standards, are principles-based). Following Dennis (2008) we restrict our study to principle-based standards as a product.

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(i.e., the IASB and FASB). This comparison is important because US accounting standards are perceived to be rules-based, while international accounting standards are perceived to be principles-based (FASB, 2002; Schipper, 2003). Specifically, we analyse versions of IAS 23, *Borrowing Costs* and FAS 34, *Capitalization of Interest Costs*. The advantage of analysing actual standards, compared to studies that illustrate a hypothetical example of a principles-based standard (e.g., AAA, 2003; FASB, 2002; SEC, 2003), is that the standards have been through due process.

We find that rules-based standards, relative to principles-based standards, have more rules, more justification, acknowledge less judgement is required, have more 'bright-line thresholds', have more scope exceptions, and are more verbose and complex.[3] The main drafting difference is whether extensional or intensional definitions are used (see Penno, 2008). FAS 34, uses an extensional definition (of 'qualifying assets'), in which the members of a category are identified by specifying a list and exceptions to the list. Hence, FAS 34 has more rules and exceptions. IAS 23 uses an intensional definition, in which members of a category are identified by specifying sets of properties. This standard provides more guidance on the definition.

This study makes a contribution to the literature at several levels. Prior research has used content analysis to examine letters to shareholders (e.g., Smith & Taffler, 2000), management commentary (e.g., Aerts, 1994), comment letters on exposure drafts (e.g., Yen, Hirst, & Hopkins, 2007) and annual reports (e.g., Jones & Shoemaker, 1994, p. 144).[4] Little research has examined the content and structure of accounting standards.[5] This paper, therefore, contributes to the literature that applies content analysis to provide a deeper understanding of documents in the financial reporting process. We develop a taxonomy for examining accounting standards. While taxonomies are typically developed for a specific purpose, the one developed in this paper might be useful for a variety of purposes (e.g., measuring principles and judgements within a standard and comparing standards for convergence).

Finally, our study contributes to the policy debate on principles versus rules (GAA, 2008). Several studies have examined the issue of rules-based versus principles-based accounting standards. Nobes (2005) provides several examples where accounting rules are based on inappropriate principles. Other studies have constructed hypothetical examples of principles-based standards (e.g., AAA, 2003; FASB, 2002; SEC, 2003). An important contribution of this paper is that it provides empirical evidence on the assertions made with regard to features of rules-based standards.[6]

2. Background

In this section we provide background on the FASB and IASB standards on borrowing costs and why we select this topic.

2.1. Development of accounting standards on borrowing cost

In 2002 the FASB issued *Proposal: Principles-based Approach to U.S. Standard Setting* (FASB, 2002).[7] Under this proposed approach (1) the principles would apply more broadly than under existing standards, (2) there would be few exceptions to the principles, (3) there would be less interpretive and implementation guidance. The proposal provides a version of how FAS 34 might look if developed under a principles-based approach.

The International Accounting Standards Committee issued IAS 23 *Borrowing Costs* in 1984. IAS 23 (1993) was issued as part of the 'Comparability of Financial Statements Project' and comprises both a benchmark and an alternative treatment. The benchmark (or preferred) treatment is to expense interest costs, while the alternative treatment allows the capitalisation of interest. In 2007 the IASB issued a number of amendments as part of its convergence project with US GAAP (see Eppstein & Jermakowicz, 2008). The IASB focused on eliminating the choice between capitalisation of borrowing costs and the immediate recognition of such costs as an expense. Expensing borrowing costs (the benchmark treatment) was eliminated.

2.2. Choice of interest capitalisation accounting standard

Bennett et al. (2006) undertake an analysis of the principles and judgements contained in research and development ('R&D') accounting standards from three jurisdictions (FAS 2, IAS 9, and FRS-13). A major weakness of this analysis is that the observed differences might reflect differences in the accounting outcome (i.e., expense or capitalise) rather than differences between principles-based or rules-based accounting standards. We choose interest capitalisation as the accounting standard for analysis because it is possible to compare the same accounting outcome both within and across jurisdictions.

[3] 'Bright-line' thresholds are clearly defined rules. For example, the twenty percent ownership rule that triggers equity accounting is a 'bright-line' threshold compared to invoking the condition of 'significant influence'.

[4] See Jones and Shoemaker (1994) for an early review of content analysis studies in accounting.

[5] Young (2003), Bennett, Bradbury, and Prangnell (2006) and Penno (2008) are some exceptions.

[6] To use a research design analogy, this study may be thought of as a hold-out sample used to test inductively derived assertions on the characteristics of principles-based accounting standards.

[7] The issue of capitalising interest cost has an earlier history. The Accounting Principles Board appointed a committee in 1971 to discuss the matter. ASR 163 was issued in 1976 and FAS 34 in 1979.

The accounting standards we analyse are: the 1995 version of IAS 23, the 2008 version of IAS 23 ('IAS 23R'), FAS 34 and Revised FAS 34 ('FAS 34R'). We are able to partition IAS 23 (1995) into two separate accounting standards: a benchmark accounting treatment ('IAS 23BT') and an allowed alternative accounting treatment ('IAS 23AT').

Table 1 lists the four accounting standards analysed in this study.[8] Each standard has the same accounting outcome (i.e., interest capitalisation) and is classified by the perceived type of standard (principles-based or rules-based). We make three pair-wise comparisons: rules-based FAS 34 with principles-based FAS 34R, IAS 23R and IAS 23AT. The comparison between FAS 34 and FAS 34R also highlights the FASB's proposed changes moving to principles-based standards. The advantage of comparing FAS 34 and IAS 23R and IAS 23AT is that all three standards have been through 'due process' (unlike FAS 34R). Furthermore, both FAS 34 and IAS 23AT were issued prior to the FASB's proposals (FASB, 2002).

Table 1
Interest capitalisation standards analysed.

Rules-based
FAS 34
Principles-based
FAS 34R
IAS 23R
IAS 23AT

3. Method

3.1. Approach

Our approach is based on the maintained assumption that US standards are perceived to be rules-based, while IASB standards are principles-based. We also assume that accounting for interest costs is an appropriate example to demonstrate the difference in perception between rules-based and principles-based accounting standards. We believe these to be reasonable assumptions, given that FAS 34R is a proposed principles-based interest cost standard (FASB, 2002).

Alexander (1999) examines the nature of principles and rules in an accounting context and describes three broad categories; Type A: overall criteria (e.g., true and fair view); Type B: conventions (e.g., conceptual framework criteria); and Type C rules (e.g., lower of cost or market). While several studies note the ambiguous nature of the concept of 'principles-based' accounting standards (Dennis, 2008; GAA, 2008; Moonitz, 1961; SEC, 2003; Story & Story, 1998), in this study we adopt Alexander's framework. A number of characteristics of principles-based accounting standards identified in the literature lead us to develop empirically testable propositions.[9]

Rules (proposition 1): Bennett et al. (2006) argue that all accounting standards are rules because they require the preparer to undertake some action and that principles and guidance are used to support the rules. We interpret an accounting rule as a phrase that requires the preparer to recognise, measure or disclose an item (i.e., Alexander's Type C category). Proposition 1 is that principles-based standards will have relatively fewer rules (than rules-based standards).

Justification (proposition 2): Schipper (2003) notes that rules are often justified by accounting principles (i.e., Alexander's Type B category). Nobes (2005) suggests that the underlying issue is whether the most appropriate principle has been used. We interpret 'appropriate accounting principle' as an appeal to a conceptual framework qualitative characteristic (Bennett et al., 2006; Nobes, 2005; SEC, 2003). Proposition 2 is that principles-based standards will have relatively more references to conceptual framework qualitative characteristics.

Judgement (proposition 3): Although Alexander's Type A category transcends specific accounting standards, Bennett et al. (2006) and Benston et al. (2006) suggest that judgement is an important feature of overall criteria such as 'true and fair view'. Proposition 3 is that principles-based standards will require relatively more judgements.

Bright-line thresholds (proposition 4): The SEC (2003) and FASB (2004) consider that a principles-based standard is 'devoid of 'bright-line' tests'. Proposition 4 is that principles-based standards will contain relatively fewer bright-line thresholds.

Guidance: The SEC (2003, p. 12) considers that a principles-based standard provides an 'appropriate amount of implementation guidance'. In the absence of what appropriate means in this context (e.g., Dennis, 2008) we make no proposition and simply describe the comparative level of guidance.

Exceptions (proposition 5): Nelson (2003), the SEC (2003) and Schipper (2003) suggest there should be few exceptions or internal inconsistencies in principles-based standards. Proposition 5 is that principles-based standards have relatively fewer exceptions.

[8] IAS 23BT is an interest "expense" accounting standard and is therefore not comparable to the "capitalisation" standards. However, as it combined with IAS 23AT, we include for completeness.

[9] Yin (2003, p. 22) uses the term 'proposition' to refer to a testable implication in case research and 'hypothesis' to a statistically testable hypothetical explanation.

Complexity and verbosity (proposition 6): Hronsky and Houghton (2001), suggest that FASB standards are perceived to be rules-based because of the way they are drafted. In particular, rules-based standards are considered more verbose (Benston et al., 2006) and complex (Schipper, 2003). Proposition 6 is that principles-based standards are relatively less complex and verbose.

3.2. Content analysis

Content analysis is a research method which draws inferences from text by systematically identifying characteristics within the text (Jones & Shoemaker, 1994, p. 142). There are two generic approaches to content analysis (Smith & Taffler, 2000): 'form-oriented' analysis (which involves the systematic counting of keywords or references) and 'meaning-oriented' analysis (which analyses the underlying themes in the text). While meaning-oriented analysis is less objective it has the advantage of potentially providing more insight (Krippendorf, 1980, p. 63). Our paper is mostly meaning-oriented, although it does incorporate form-oriented analysis. One of the advantages of content analysis is that it is unobtrusive to the communicator (Weber, 1980). Disadvantages include the time and effort required to develop a coding system and to ensure its reliability.

3.3. Coding system

Both authors coded a single accounting standard, compared the results, and developed a coding system. Then, one author coded all standards. Each standard usually created some new coding issues. At the end of this process a written coding manual was established.[10] The manual was tested and refined by post-graduate students, as part of a class exercise. Each student was each given a single page from IAS 23 or FAS 34 and was asked to code this in accordance with the manual. The 'tested' manual was then used by the second author to re-analyse all standards. As several of the standards are similar or extensions of a previous standard (e.g., IAS 23 and IAS 23R; IAS34 and IAS34R), the coding for similar standards was compared paragraph by paragraph for consistency and differences in coding were reconciled. This final comparison uncovered only four minor 'differences'. Finally, an independent coder randomly test checked approximately 10 percent of the coding with the manual and no differences were found.

While content analysis is inherently subjective, the extensive checking we undertook should ensure consistency of coding. Furthermore, unlike prior accounting research that applies content analysis to management commentaries and exposure draft comment letters, we code technical documents. In prior research the authorship of the coded document is more heterogeneous than our study, the content is more heterogeneous in terms of firm specific factors and economic conditions, and there are known biases in terms of explanations (Aerts, 1994).[11]

3.4. Data units

Krippendorf (1980, p. 57) describes a hierarchy of three types of narrative data units: sampling units, context units, and recording units. The sampling units in this study are the four accounting standards described in Table 1. The context units are segments of the sampling unit that are searched and analysed. One of the difficulties encountered in analysing FASB and IASB accounting standards is that they are structured differently. We concentrated our analysis only on the main body of the standard, which is the common element among standards. From the FASB standards we ignore the summary, effective date and transition, dissenting opinions, and the appendices (background information and basis for conclusion). We include any footnotes related to the standards section. For the IASB standards we ignore the transitional provisions and effective date.[12]

We analysed each context unit to identify the number (and nature) of accounting rules and the justification or supporting text for each rules (e.g., principles and examples). Following Mason and Gibbins (1991) and Bennett et al. (2006), our recording unit is a 'phrase'. That is, each rule, each principle, each example is recorded as one unit of analysis. We began by sequentially numbering and examining each sentence. In most cases a phrase is a sentence. However, there are some cases where two sentences are combined into a phrase.[13] For example, IAS 23R paragraph 8 comprises two sentences that were classified as one phrase. The choice to expense or capitalise, although expressed in two sentences, was coded as one rule and therefore one phrase. Some sentences were considered to be more than one phrase. For example in IAS 23R paragraph 6, each of the five examples of borrowing costs was recorded as a separate phrase.

Three features increase the reliability of our results. First, we keep a sequential numerical control over the number of sentences and phrases. Second, we document the link between a justification and guidance phrase to the corresponding phrase it supports. Third, we keep the number of basic components as simple as possible by using only five basic units of analysis: rules, justification, guidance, application and other.[14]

[10] The written coding manual was provided to the editor and is available from the authors on request.

[11] This is not to imply that accounting standards are unbiased (see Young, 2003).

[12] There were no dissenting opinions for the IASB standards in our study, nor were there basis for conclusions.

[13] Sentences are easy to identify. However, for a given set of text, the number of sentences can vary significantly. For example, each line in a list of items might use a semi-colon or full-stop. Hence the use of a phrase is a much more meaningful, possibly less reliable, recording unit.

[14] We did not classify phrases by subheading of the standard, as in Bennett et al. (2006). First, FRSB and IASB standards are structured differently. Second, the heading in the standard does not always reflect the underlying nature of the text. For example, measurement rules can be found under the 'recognition' heading.

3.5. Keyword search

We also carried out a word search (form-oriented content analysis). Our initial approach to the keyword search was an additional control to improve the reliability of the meaning-oriented analysis. We report our word search under three main headings: accounting principles, measurement, and types of judgement.

The purpose of the first set of keywords was to identify *Framework* qualitative characteristics within the standard (e.g., relevance). While a similar search was undertaken in the meaning-oriented analysis, the two approaches yield slightly different results. For example, examining for phrases found only one use of 'reliability' as a measure of 'justification' (FAS 34R, see Table 2 Panel B), whereas a word count found two further cases (see Table 3 Panel A). In the case of IAS 23R the word 'reliability' was coded in the meaning-oriented analysis as providing guidance on a definition. On the other hand, Table 2 Panel B shows that meaning-oriented analysis was able to record the phrase "…a measure of acquisition cost that more closely reflects the enterprise's total investment in the asset…" (FAS 34.7) as 'faithful representation'. This did not get picked up in a word search. While we initially undertook the keyword search as a measure of control, the difference in results leads us to conclude it provides complementary evidence.[15]

Professional judgement is considered to be a major factor in principles-based standards (Bennett et al., 2006; Benston et al., 2006) and, therefore, the second set of keyword searches attempts to measure the extent of judgements required in each standard. The third keyword search identified specific measurement attributes in the standard.

4. Results and discussion

Table 2 analyses the components of the standard. 'Justification' phrases are conceptual arguments that used to justify rules. Guidance phrases are an 'acknowledgement' that professional judgement is required or 'examples' to assist the preparers'. IAS 23.26 contains guidance in the form of an indicator phrase as to when an asset is complete for its intended use.[16] Application phrases are analysed into 'general' (i.e., to the whole standard) or 'specific' (i.e., to a specific paragraph or appendix). 'Definitions' are a special case of general application phrases. 'External' phrases contain references to other accounting standards. Table 3 reports the search for 42 keywords under three main headings: accounting principles, judgement, and measurement.[17]

The perception of rules-based versus principles-based standards is examined by comparing FAS 34 (column 1) with FAS 34R, IAS 23R and IAS 23AT (columns 2, 3 and 4). We test the difference in the relative frequencies for each pair-wise comparison using a series of chi-square tests.[18]

Rules (proposition 1)

Table 2, Panel A, also shows that FAS 34 comprises more than twice the number of rules than the principles-based standards (35 phrases) compared FAS 34R (17 phrases), IAS 23R (16 phrases) and IAS 23AT (16 phrases). The source for this higher number of rules can be seen in Panel B of Table 2. FAS 34 has 23 recognition rules, compared to only 6 in FAS 34R. FAS 34.9 comprises a list of assets on which 'interest shall be capitalised'. Each item on this list represents a separate rule. FAS 34.10 comprises a list of rules that specify on which assets interest 'shall not be capitalised'. Under IFRS the typical format is to provide a definition and a list of examples. Based on the chi-square tests, there is weak evidence to support proposition 1, that principles-based standards have relatively fewer rules.

The number of rules depends on how the standard is drafted. FAS 34 provides a definition of 'qualifying assets', whereas IAS 23AT paragraph 5 is a list of items that *may be* qualifying assets. The approach in FAS 34 is 'extensional' (Penno, 2008). That is, the members of a category are identified by specifying a list. In contrast, IAS 23AT is 'intensional', as it indirectly identifies the members by specifying a set of properties. The revised FASB standard (FAS 34R) adopts an intensional definition approach and has a lower number of rules.

Justification (proposition 2)

Table 2 Panel A shows that FAS 34 contains more 'justification' phrases than FAS 34R and almost three times as many as the corresponding IASB standards. Table 2 Panel B analyses the nature of the justification phrase into conceptual framework concepts (considered to be the most 'appropriate'), other concepts and other justification. Based on the ratio of conceptual framework phrases to total justification phrases, proposition 2, (that principles-based standards contain relatively more conceptual framework justification) is not supported. Although the ratio of FAS 34R is twice FAS 34, this is achieved by a lower total justification rather than increasing conceptual framework justification.

[15] We do not think that a word search is as "objective" as claimed in prior literature (Krippendorf, 1980). While a word search is mechanically objective in detecting a word, identifying a 'sentence' is as objective. Subjectivity arises in word selection (which, in our case, was developed from the form-oriented analysis) and in deciding if a word (with multiple meanings) is appropriate. This subjectivity is similar to recognising appropriate phrases within and across sentences.

[16] Although indicators are barely used in the context of accounting for interest it is likely to be important in other accounting standards. To facilitate future research we, therefore, report it as a separate 'phrase'.

[17] Searches were undertaken using the search facility in Adobe Acrobat.

[18] We also undertook Fishers' exact test, which is considered more appropriate for small samples. These results are similar to the chi-square results, typically with lower p-values, and are therefore not reported.

Table 2
Result of content analysis.

	(1)	(2)	(3)	(4)	(5)
Accounting standard	FAS 34	FAS 34R	IAS 23R	IAS 23AT	IAS 23BT
Accounting outcome	Capitalise	Capitalise	Capitalise	Capitalise	Expense
Perceived basis	Rules	Principles	Principles	Principles	Principles
Panel A: number of sentences, phrases and components of standards					
Reconciliation					
Sentences	68	50	56	60	9
Additional phrases	45	15	22	15	5
	113	65	78	75	14
Combined sentences	5	3	2	1	0
Phrases	108	62	76	74	14
χ^2		5.179	3.166	9.520	1.874
p-Value		0.075	0.205	0.009	0.392
Basic components					
Rule	35	17	16	16	2
Justification	15	10	6	5	0
Guidance	34	26	41	41	6
Application	22	9	11	12	6
Other	2	0	2	0	0
	108	62	76	74	14
χ^2		3.563	9.993	11.731	5.688
p-Value		0.468	0.041	0.019	0.128
Panel B: further analysis of rule and justification phrases					
Rule					
Recognition	23	6	5	5	1
Measurement	9	9	9	8	0
Disclosure	3	2	2	3	1
	35	17	16	16	2
χ^2		4.470	5.449	5.285	1.969
p-Value		0.107	0.066	0.071	0.374
Conceptual framework concepts					
Asset recognition			1	1	
Faithful representation	1				
Materiality	2	1			
Reliability		1			
Usefulness		1			
Uniformity		1			
	3	4	1	1	0
Other concepts					
Acquisition cost	3	2			
Historical cost		1			
Lower of cost or market	1	1			
Matching	1	1			
Opportunity cost	2	1	1	1	
Prudence					
Separable					
Substance over form					
	7	6	1	1	0
Other justification	5	0	4	3	0
Total justification	15	10	6	5	0
Ratio of framework concepts to total concepts	0.20	0.40	0.16	0.20	0.00
Panel C: further analysis of guidance and application phrases					
Guidance					
Acknowledgement	2	0	5	5	0
Indicator	0	0	1	1	0
Example	19	15	22	21	5
Other	13	11	13	14	1
	34	26	41	41	6
χ^2		1.599	1.868	1.785	2.355
p-Value		0.450	0.600	0.618	0.502
Guidance for					
Definition	0	0	13	13	5
Other application	4	0	1	0	0
Measurement rule	13	8	11	11	0

Table 2 (*continued*)

	(1)	(2)	(3)	(4)	(5)
Accounting standard	FAS 34	FAS 34R	IAS 23R	IAS 23AT	IAS 23BT
Accounting outcome	Capitalise	Capitalise	Capitalise	Capitalise	Expense
Perceived basis	Rules	Principles	Principles	Principles	Principles
Recognition rule	17	18	16	17	1
	34	26	41	41	6
χ^2		4.228	9.073	8.392	2.355
p-Value		0.121	0.028	0.039	0.502
Application					
General	1	5	4	5	4
Specific	5	2	0	1	0
Definition	5	2	2	2	1
External	11	0	5	4	1
	22	9	11	12	6
χ^2		13.088	7.503	7.602	1.400
p-Value		0.004	0.057	0.055	0.706

The reported statistical test is a chi-square test (χ^2) comparing the frequencies for that column with the frequencies in column (1); except for column (5) which compares column(4) and column (5).

All standards invoke very little reference to conceptual framework concepts.[19] FAS 34 places much more emphasis on non-framework concepts such as 'acquisition cost', 'lower of cost or market' and 'matching'. The low use of *Framework* qualitative characteristics is also supported by the word count in Table 3.

Judgement (proposition 3)

Table 2 Panel C shows that the guidance in rules-based FAS 34 contains fewer acknowledgements that professional judgement is required compared to IAS 23R and IAS 23AT. Furthermore, Table 3 Panel B shows that FAS 34 has contains fewer judgement keywords. Proposition 3, that principles-based standards contain more judgement is supported. FAS 34R contains fewer judgement (acknowledgement) phrases, although has a similar number of judgement words. This suggests that judgement may be a fundamental difference between FASB and IASB standards rather than a difference between principles-based versus rules-based standards.

Bright-line thresholds (proposition 4)

FASB standards are also perceived to be more rules-based because they contain 'bright-line rules' (FASB, 2004; SEC, 2003). Both FAS 34 and IAS 23AT contain a bright-line rule limiting the maximum amount of interest capitalised in a period to the total of interest cost incurred (FAS 34.15 and IAS 23.15). FAS 34.15 extends this specific bright-line to consolidated financial statements and FAS 34.14 makes an explicit requirement that the capitalisation rate applies to all capitalised expenditure. Hence, proposition 4 that principles-based standards contain relatively fewer bright-line thresholds is supported.

The SEC staff study (SEC, 2003) states that 'principles-based' standards should be 'devoid' of bright-line thresholds. It would seem that this is not a necessary condition. Bennett et al. (2006) argue that 'soft' bright-line thresholds are useful as they assist judgement rather than acts as a rule.[20] IAS 23R and IAS 23AT contain an indicator phrase which provides an example when 'substantially all the activities are complete'.

Guidance

Table 2 Panel A shows IASB standards provide more guidance (41 phases) compared FAS 34 (34 phrases) and the principles-based FAS 34R (26 phrases). Panel C also indicates that the purpose of guidance differs between these standards. While all standards have a similar number of guidance phrases for measurement and recognition rules, the main difference, is that IAS standards provide guidance on definitions.

The lack of guidance on definitions in the FASB standards is the 'other side of the coin' to the use of extensional and intensional definitions. Recall, extensional definitions appear as rules in FAS 34, whereas IAS use intensional definitions which appear as guidance (mostly in the form of examples). While FAS 34R also uses intensional definitions; it has not included guidance for these definitions. This suggests the FASB ought to consider whether the lack of guidance on intensional definitions in FAS 34 is deliberate or an over-sight.

[19] The low cell frequencies across conceptual framework justifications (in Table 2 Panel B) mean that statistical analysis is unreliable.

[20] An example of a 'hard' bright-line rule is the specifying the number or maximum years of amortisation for goodwill. Whereas, a 'soft' bright-line would provide guidance that the normal period of amortisation is five years.

Table 3
Results of keyword search (number of words).

	Total	N/A	(1)	(2)	(3)	(4)	(5)
Accounting standard			FAS 34	FAS 34R	IAS 23R	IAS 23AT	IAS 23BT
Accounting outcome			Capitalise	Capitalise	Capitalise	Capitalise	Expense
Perceived basis			Rules	Principles	Principles	Principles	Principles
Panel A: accounting principles (qualitative characteristics)							
Benefits	13	0	5	6	1	1	0
Material	11	8	2	1	0	0	0
Reliability/reliable/reliably	3	0	0	1	1	1	0
Useful to investors	2	1	0	1	0	0	0
Bias, **confidential**ity, **complet**e, **comparable**, **conservat**ism **consisten**t, faithful **represent**ation, **match**ing, **neutral**, **pruden**ce, **relevan**ce, **risk** and **rewards (benefit**s), **substance**, **time**liness, **understand**, **uniform**	49	49	0	0	0	0	0
	78	58	7	9	2	2	0
Panel B: use of judgement							
Assess	3	1	0	2	0	0	0
Determine	16	1	2	1	6	6	0
Disclose	10	5	1	1	1	1	1
Identify	7	1	1	1	2	2	0
Judge	2	0	0	0	1	1	0
Measure	8	0	2	4	1	1	0
Recognise	22	6	4	2	4	3	3
Allocate, **demonstrat**e, **estimat**e, **forecast**, **match**, **verif**y	1	1	0	0	0	0	0
	69	15	10	11	15	14	4
Panel C: measurement							
Avoided/**opportunity** cost/**alternative** use	25	16	3	2	2	2	0
Current **location** and **condition**/**intended use**	57	7	9	19	11	11	0
Historical cost	7	0	3	4	0	0	0
Value	5	0	2	0	2	1	0
	94	23	17	25	15	14	0

The search term is written in bold type. For example, we searched on '**verif**' to capture verify and verification.
'Total' is the total number of times a word featured in a search. 'N/A' is the number of times the word was not applicable. For example, 'material' also captured materials used in the manufacture of inventory.

Exceptions (proposition 5)

FASB standards are perceived to be more rules-based because they contain more scope and application exceptions (FASB, 2002; Schipper, 2003; SEC, 2003). As an additional analysis we coded the number of phrases that included exceptions. These results are reported in Table 4. FAS 34 has more exceptions than IAS 23AT and IAS 23R. IAS 23R has some broad scope exceptions; FAS 34 allows exemptions in terms of assets that do not qualify for interest capitalisation. FAS 34R reduces the number of exceptions by making them examples of the cost and benefits of reporting capitalised interest.[21] The lack of statistical difference between FAS 34 and FAS 34R suggests, as with the use of judgement phrases, the use of exceptions is a more fundamental difference between FASB and IASB standards.

Complexity and verbosity (proposition 6)

FAS 34 comprises more phrases than IAS 23AT. FAS 34 has more sentences and 'additional phrases'. Additional phrases arise when a sentence comprises more than one phrase.[22] This suggests the principles-based proposals in FAS 34R have reduced the verbosity. Also, IAS 23R has moved towards FAS 34. This raises the possibility that IASB convergence with FASB standards may lead to more verbose and complex standards. The increase in wording related to measurement (Table 3, Panel C) is due to the increased emphasis on "current location and condition".

Table 2 Panel A reveals that FAS 34 has almost twice the number of application phrases than IAS 23AT. Table 2 Panel C shows that the type of application phrases employed is significantly different between FAS 34 and all three principles-based standards. FAS 34 contains more specific references to other paragraphs within the standard and more references to other accounting standards. FAS 34 has more definitions than IAS 23AT. Under IFRS, definitions are reported in a separate section, whereas in FAS 34 the definitions are scattered throughout the text and in footnotes. FAS 34R has improved over FAS 34 and

[21] In FAS 34R costs and benefits appear to be a different concept than materiality, whereas, FAS 34.8 considers materiality and costs and benefits to be similar concepts.

[22] In the chi-square test in Table 2 Panel A, we used the absolute amount of 'combined phrases' to avoid having a negative cell frequency.

Table 4
Result of content analysis (exceptions).

	(1)	(2)	(3)	(4)	(5)
Accounting standard	FAS 34	FAS 34R	IAS 23R	IAS 23AT	IAS 23BT
Accounting outcome	Capitalise	Capitalise	Capitalise	Capitalise	Expense
Perceived basis	Rules	Principles	Principles	Principles	Principles
Scope	0	1	3	1	1
Qualifying asset	10	1	2	2	2
Interest capitalisation	1	1	0	0	0
Activities for intended use	0	0	2	2	0
Suspension of activities	1	0	2	2	0
Cessation of activities	0	0	0	0	0
	12	3	9	7	3
χ^2		6.193	11.472	8.972	2.8571
p-Value		0.103	0.022	0.062	0.414

The reported statistical test is a chi-square test (χ^2) comparing the frequencies for that column with the frequencies in column (1); except for column (5) which compares column (4) and column (5).

has lower measures than IAS 23R. FAS 34 and FAS 34R employ more other (non-*Framework*) concepts as justification, particularly linking to measurement concepts. This is also evident from the word count in Table 3 Panel C.
If the number of sentences and phrases is a reasonable measure of verbosity, and if the level of internal and external cross-referencing and the use of non-*Framework* concepts contribute to complexity, then the propositions that principles-based standards are relatively less verbose and less complex are supported.

5. Conclusion

By using content analysis to compare the FRSB and IASB standards relating to interest costs, this paper provides empirical evidence on the distinction between rules-based and principles-based standards. We choose the interest cost accounting because it enables us to compare the same accounting outcome (capitalisation or expense) within and across jurisdictions.

The results show that there are (statistical) differences in the components (i.e., rules, justification, guidance, and application phrases) of principles-based standards (FAS 34R, IAS 23R and IAS 23AT) relative to rules-bases standards (FAS 34). In particular, principles-based standards have fewer rules (Bennett et al., 2006; Schipper, 2003), more emphasis on professional judgement (Bennett et al., 2006; Benston et al., 2006), fewer bright-line thresholds (FASB, 2004; SEC, 2003), and fewer scope exceptions (FASB, 2002; Schipper, 2003; SEC, 2003). The level of conceptual framework justification is low in both principles-based and rules-based standards. Rules-based standards have higher levels justification from non-conceptual framework concepts. There is more guidance in principles-based standards. Finally, rules-based standards are more verbose and complex (Benston et al., 2006).

Our empirical analysis complements the conceptual enquiry undertaken by Dennis (2008). The analysis has not uncovered 'sufficient and necessary' conditions that can be used to identify principles-based standards. Hence, we agree with Dennis (2008) that a better approach would be to clarify the characteristics that make standards useful. A limitation of this study is that it based on a relatively small set of accounting standards. We do not think this is a major weakness as the comparison involves standards specifically developed to be principles-based (i.e., FAS 34R). However, it is possible that analysis of different accounting standards might yield additional insights. While it is problematic to compare accounting standards across jurisdictions that have different accounting outcomes or different scope exceptions we note there are no statistical differences between IAS 23AT and IAS 23BT.

Our study also identifies four policy implications. First, in all standards there is very low level of justification using the conceptual framework qualitative characteristics, relative to non-framework concepts. Alexander (1999) argues that conventions (Type B principles) are inadequate as a benchmark, as all attempts at conceptual frameworks are internally inconsistent. The results suggest that conceptual framework conventions are incomplete as a basis for justifying accounting rules.

Second, a major difference between rules-based versus principles-based standards is the way definitions are drafted. FAS 34, uses an extensional definition (of 'qualifying assets') in which the members of a category are identified by specifying a list and exceptions to the list. Hence, FAS 34 has more rules and exceptions. IAS 23R and IAS 23AT use an intensional definition, in which membership of a category is identified by specifying a set of properties. Penno (2008) argues that vague rules (e.g., intensional definitions) may be criticised for lack of precision, but the practical ability to use discretion can be effective as it mimics binary search algorithms.

The principles-based standard FRS 34R, which has not been through due process, also employs intensional definitions with regard to qualifying assets. This reduces the number of rules and exceptions relative to FAS 34. However, FRS 34R does not have the same level of guidance on definitions as IAS 23R. This raises the issue of whether the lower level of guidance in FAS 34R is deliberate or an over-sight.

Third, the converged standard IAS 23R is more verbose than IAS 23AT. While IAS 23AT was statistically different from FAS 34 in terms of phrases, additional phrases and combined phrases, IAS 23BT was not. This suggests the IASB will need to consider drafting issues to maintain the appearance of being more principles-based.

Fourth, for judgement phrases and the use of exceptions, there are significant differences between IASB standards (IAS 23AT and IAS 23R) and the FASB standard (FAS 34). However, for these features there is no difference between FAS 34 and FAS 34R. This suggests that the use of judgement phrases and exceptions is a more fundamental difference between FASB and IASB standards. If so, this may be a major impediment to the convergence of FASB and IASB accounting standards.

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