Did Codification Result in Improved Readability?

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Abstract

Financial reporting complexity costs money. The process of developing and promulgating financial reporting standards is costly. The Financial Accounting Standards Board (FASB), Securities and Exchange Commission (SEC), and the International Accounting Standards staff spend time, expertise, and funds writing detailed financial reporting standards. Reporting companies spend money studying and applying these financial reporting standards. Investors, financial analysts, and creditors, while knowledgeable in financial accounting, spend time and resources interpreting and analyzing the resulting financial reports. While there are a number of factors that contribute to the complexity in financial reporting, the level of reading complexity, or readability, is an essential element of a clear, easy-to-understand accounting standard. Recently the FASB adopted a process to bring about a Codification for U.S. Generally Accepted Accounting Principles (GAAP). What impact, if any, did the
FASB’s Codification have on the level of reading complexity or readability in U.S. GAAP? The results of several readability tests reported in this article indicate the impact of Codification on the level of reading complexity or readability is not a positive one.

**Keywords:** readability, accounting standards, codification, complexity

1. The Complexity Issue

Beginning in the 1930s, a number of organizations or groups were involved in the development of the accounting reporting standard setting process and in the writing of GAAP. Two of the main players were the Committee on Accounting Procedure and the Accounting Principles Board. These organizations promulgated many rules and ‘clarifications,’ resulting in a proliferation of GAAP (Murphy, Maria, “Will Simpler Also be Better?,” *Journal of Accountancy*, April/May 2015, pp. 30-34). This led to myriad locations of related reporting standards and an environment that fostered reading complexity and confusion. These myriad locations of related topics created an environment where research of financial reporting topics was difficult and sometimes exceedingly difficult. This was good for some businesses, especially those answering research questions on financial reporting issues. This added reading complexity, however, generated considerable criticism from accounting constituents, and there is much finger-pointing as to who is responsible for this current level of reading complexity in U.S. GAAP. Ramona Dzinkowski (Dzinkowski, Ramona, “The Road to Simplicity,” *Strategic Finance*, February 2006, pp. 41-43.) stated that:

The auditors blame their fixation on bright lines and rules on the Public Company Accounting Oversight Board (PCAOB), the SEC, and the lawyers. The SEC is pointing its finger at the fraudsters who are making life miserable for us all. The FASB points to the preparer and audit committees, who are asking for too much guidance. The preparers blame everyone, including the volumes of verbiage that are still being produced by the FASB… (Dzinkowski, 2006, p.43)

The primary objective of financial reporting is to provide information useful for existing and potential investors and creditors. Useful statements should be understandable by rational, informed users. To develop useful statements it seems intuitive that the rules used to develop financial statements also be understandable. Proponents of detailed financial standards argue that such detailed standards are necessary to reduce or eliminate opportunity for manipulation of financial statements. Baruch Lev (Testimony of Baruch Lev, Before the Committee on Energy and Commerce, U.S. House of Representatives, Concerning the Report of the Board of Directors of the Federal Home Loan Mortgage Corporation, September 25, 2003) disagrees. He testified that

The extreme complexity, detail, and the constant change of GAAP have various unintended consequences. One of the most serious is that the complexity gives significant advantage to those… who intend to misuse the rules, because those people and entities have sufficient incentives to invest the time and money required to comprehend GAAP. It is well known that crooks thrive in complex environments.
What aspects of GAAP result in an increase in reading complexity? The following is at least a partial list.

- GAAP rules make unnecessary work.
- There is a proliferation of accounting rules, with many details.
- GAAP complexity is the result of more complex business transactions.
- GAAP are sometimes ambiguous.
- The technical level of the writing can be complex. Complexity in the writing occurs due to the use of large words, long sentences, passive voice, and convoluted statements.

A 2008 study presented the results of a survey of CPAs on GAAP complexity. While the survey participants considered GAAP complex, some respondents saw a need for complex GAAP because business transactions are complex. Survey respondents found that complex GAAP resulted from the technical level of the writing and ambiguity of the writing as the number one and two reasons, respectively (Wells, S., Barney, D. K., & Tschopp, D. J. 2008. Complexity in U.S. GAAP. Journal of Business, Industry and Economics, 10, 57-80). The survey respondents recognized the negative impact of GAAP complexity, most notably on layman’s understanding of financial statements, cost of financial reporting, and layman’s confidence in financial statements. Eighty-five percent of respondents did not think that the benefits of GAAP complexity (before the Code) justified the cost of developing and implementing the standards. Ninety percent of the respondents thought U.S. GAAP should be less complex. The four items respondents listed as most causing GAAP complexity, in decreasing order, were topic addressed by the standard, length of the standard, ambiguity of the standard, and technical level of the writing. A conclusion was that a future codification could reduce three of these four possible causes. Survey respondents suggested the best way to simplify GAAP would be a combination of rewriting standards, eliminating standards, and adopting a concepts-based approach (e.g. IFRS) to standard setting.

2. The FASB and “Codification” of GAAP

In 2009 when Codification became effective the FASB became the sole authority to develop U.S. GAAP, subject to SEC purview, and produces one type of standard – accounting standard updates. What were previously many disparate publications addressing the varied topics and detailed rules of GAAP are now organized, similar to the manner in which the U.S. tax code organizes tax law. Organizing what was a muddled morass of accounting rules into a systematic, cohesive unit required considerable organization. This organization may well have resulted in increased readability, intentional or otherwise.

According to the AICPA, the Code “…will reduce the risk of noncompliance with standards, provide real-time updates, assist with international convergence and serve as the authoritative reference source for the U.S. GAAP XBRL taxonomy.” AICPA Chairman Randy Fletchall concludes that “…[the Code is] one of the ways in which complexity in the US financial reporting system can be reduced” (Fletchall, 2008). In addition, the volume of GAAP writing decreased. Since related topics start with preambles on that topic, there is no longer a need to
repeat that material at each location of topic discussion in the Code. Both the reduction of volume and the centralization of related topics serve to reduce the research complexity of GAAP. Did codification, however, intentionally or unintentionally, also impact the readability of GAAP?

3. GAAP Level of Reading Complexity or Readability Prior to Codification

In the 2008 study, Wells, Barney, and Tschopp examined readability of FASB standards compared with other important historical and business documents. That study found that FASB pronouncements varied dramatically in readability with some standards written in a complex style. The Financial Accounting Standards (FASs) were not easily readable, and some were downright difficult to understand. Wells, Barney, and Tschopp analyzed readability of numerous documents, including all the FASs issued at that time using the Flesch Reading Ease measure and the Flesch-Kincaid Grade Level measure. The Flesch Reading Ease measure provides a numerical score ranging from 0 to 100 of the reading ease or difficulty of a document with 0 being incredibly difficult to read and 100 incredibly easy to read (See below for a more complete description of both readability measures). Wells, Barney, Tschopp found that all 154 FASs on average scored 17.2 on this scale. According to that study FAS #94 “Consolidation of All Majority-Owned Subsidiaries” was the most difficult FAS to read with a score of zero. Surprisingly two of the three least difficult FASs to read were #27 “Classification of Renewals or Extensions of Existing Sales-Type or Direct Financing Leases” (29.1 score) and #48 “Revenue Recognition When Right of Return Exists” (29.0 score). The Flesch-Kincaid Grade Level measure determines the education level needed to understand a document. All 154 FASs required at least a 12th grade education for understanding (the highest level then available on that measure).

4. Level of Reading Complexity or “Readability” Following Codification

This study updates that previous study by examining the GAAP Codification (Code) to determine if codifying the FASs also resulted in improved readability and how the Code readability compares with IFRS. Codification alone was seen as one step in the direction to simplified GAAP (Wells, Barney, Tschopp, 2008). Did that codification actually simplify GAAP, through improved readability? We selected 5 FAS topics to examine this.

Five financial reporting topics were selected for comparison. These were:

FAS 13 – Reporting on Leases
FAS 35 – Accounting and Reporting by Defined Benefit Pension Plans
FAS 95 – Statement of Cash Flows
FAS 148 – Accounting for Stock-Based Compensation
FAS 157 – Fair Value Measurement

Each of the selected topics met the following criteria:

- A topic clearly identified in an original FAS Code section
• FAS Codification Cross Reference identified specific topics in the 3 locations
• Accounting industry has generally identified the topic as a complex issue
• Readily identifiable topic in accounting industry
• Topic of adequate length to support readability tests

While a number of topics meet the above, five were selected as appropriate and sufficient for the readability tests:

Table 1. Reporting topics selected for analysis

<table>
<thead>
<tr>
<th>FINANCIAL ACCOUNTING STANDARD</th>
<th>CODIFICATION TOPIC</th>
<th>INTERNATIONAL ACCOUNTING STANDARD (INTERNATIONAL FINANCIAL REPORTING STANDARD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAS 13 Accounting for Leases</td>
<td>Topic 840 Leases</td>
<td>IAS17 Leases</td>
</tr>
<tr>
<td>FAS 35 Accounting and Reporting by Defined Benefit Pension Plans</td>
<td>Topic 960 Plan Accounting—Defined Benefit Pension Plans</td>
<td>IAS26 Accounting and Reporting by Retirement Benefit Plans</td>
</tr>
<tr>
<td>FAS 148 Accounting for Stock-Based Compensation—Transition and Disclosure, an amendment of FASB Statement No. 123</td>
<td>Topic 718 Compensation—Stock Compensation</td>
<td>IFRS2 Share-based Payment</td>
</tr>
<tr>
<td>FAS 157 Fair Value Measurements</td>
<td>Topic 820 Fair Value Measurement</td>
<td>IFRS 13 Fair Value Measurement</td>
</tr>
</tbody>
</table>
The researchers examined the readability of each of these standards using three measures – passive sentences, Flesch Reading Ease, and Flesch-Kincaid:

**Passive Sentences**

Passive sentences are not as clear and concise as active sentences. In a passive sentence the subject of the sentence does not perform the action identified by the verb. Therefore writers should use passive sentences sparingly.

Passive sentence from FAS 13

“If the lease term has been extended because of that provision, the related penalty shall not be included in minimum lease payments.”

Active voice - recommended

If that provision extended the lease term, minimum lease payments shall not include the related penalty.

**Flesch Reading Ease**

rates text on a 100-point scale; the higher the score, the easier it is to understand the document. For most standard documents, aim for a score of approximately 60 to 70. The formula for the Flesch Reading Ease score is:

\[
206.835 - (1.015 \times ASL) - (84.6 \times ASW)
\]

where:

ASL = average sentence length (the number of words divided by the number of sentences)

ASW = average number of syllables per word (the number of syllables divided by the number of words) Retrieved September 29, 2015 from the Word Help Screen.

Wordiness of sentence from FAS 13:

“The present value at the beginning of the lease term of the minimum lease payments (as defined in paragraph 5(j)), excluding that portion of the payments representing executory costs such as insurance, maintenance, and taxes to be paid by the lessor, including any profit thereon, equals or exceeds 90 percent of the excess of the fair value of the lease property (as defined in paragraph 5(c)) to the lessor at the inception of the lease over any related investment tax credit retained by the lessor and expected to be realized by him.”

5. Results

The present value at the beginning of the lease term of the minimum lease payments equals or exceeds 90 percent of the excess of the fair value of the leased property to the lessor at the inception of the lease over certain credits. Exclude executory costs (insurance, maintenance,
and taxes paid to the lessor) from this calculation. The credits referred to are related investment tax credits the lessor retained and the lessor expects to realize.

Flesch-Kincaid measures the education level needed by readers as a necessary requirement to understand the document. This test rates text on a U.S. school grade level. For example, a score of 8.0 means that an eighth grader can understand the document. For most documents, aim for a score of approximately 7.0 to 8.0.

The formula for the Flesch-Kincaid Grade Level score is:

\[(0.39 \times \text{ASL}) + (11.8 \times \text{ASW}) - 15.59\]

Where:

\(\text{ASL} = \) average sentence length (the number of words divided by the number of sentences)

\(\text{ASW} = \) average number of syllables per word (the number of syllables divided by the number of words)


Results

<table>
<thead>
<tr>
<th></th>
<th>Percentage passive sentences</th>
<th>Flesch Reading Ease (FRE) measure</th>
<th>Flesch-Kincaid Grade Level (FK) measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- FAS 13</td>
<td>41%</td>
<td>28.5</td>
<td>17.1</td>
</tr>
<tr>
<td>- Topic 840</td>
<td>29%</td>
<td>17.4</td>
<td>18.2</td>
</tr>
<tr>
<td>- IAS 17</td>
<td>41%</td>
<td>37.2</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Pension Plans</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- FAS 35</td>
<td>30%</td>
<td>22.0</td>
<td>16.5</td>
</tr>
<tr>
<td>- Topic 960</td>
<td>17%</td>
<td>14.1</td>
<td>16.6</td>
</tr>
<tr>
<td>- IAS 26</td>
<td>38%</td>
<td>28.0</td>
<td>14.7</td>
</tr>
<tr>
<td><strong>Cash Flows</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- FAS 95</td>
<td>17%</td>
<td>23.8</td>
<td>17.0</td>
</tr>
<tr>
<td>- Topic 230</td>
<td>20%</td>
<td>30.8</td>
<td>13.6</td>
</tr>
<tr>
<td>- IAS 7</td>
<td>36%</td>
<td>29.8</td>
<td>15.0</td>
</tr>
<tr>
<td><strong>Stock Compensation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- FAS 148</td>
<td>16%</td>
<td>17.6</td>
<td>17.3</td>
</tr>
<tr>
<td>- Topic 718</td>
<td>37%</td>
<td>14.7</td>
<td>18.3</td>
</tr>
<tr>
<td>- IFRS 2</td>
<td>33%</td>
<td>24.5</td>
<td>17.2</td>
</tr>
<tr>
<td><strong>FV Measurement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- FAS 157</td>
<td>14%</td>
<td>32.1</td>
<td>13.6</td>
</tr>
<tr>
<td>- Topic 820</td>
<td>24%</td>
<td>19.7</td>
<td>17.5</td>
</tr>
<tr>
<td>- IFRS 13</td>
<td>22%</td>
<td>30.0</td>
<td>15.3</td>
</tr>
</tbody>
</table>
Above are the results of the three tests for the five topics in the three settings (FAS, CODE, IFRS). The averages were:

<table>
<thead>
<tr>
<th></th>
<th>FAS</th>
<th>Code</th>
<th>IFRS</th>
<th>Desired Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive %</td>
<td>23.6</td>
<td>25.4</td>
<td>34.0^</td>
<td>lower</td>
</tr>
<tr>
<td>Flesch Reading Ease</td>
<td>24.8</td>
<td>19.3^^</td>
<td>29.9</td>
<td>higher</td>
</tr>
<tr>
<td>Flesch-Kincaid</td>
<td>16.3</td>
<td>16.8^^^</td>
<td>15.2</td>
<td>lower</td>
</tr>
</tbody>
</table>

^IFRS mean was significantly higher than FAS (p<.05) and Code (p<.10).
^^Code mean was significantly lower than FAS (p<.10) and IFRS (p<.10).
^^^Code mean was significantly higher than IFRS (p<.10).

A lower score for percent passive sentences indicates easier reading. IFRS used significantly more passive sentences than did FAS or the Code. This factor would lead to increased reading difficulty for IFRS.

The Flesch Reading Ease score can range from 0 to 100 with an easier read having a higher score. As a benchmark, The Clean Air Act has a Flesch Reading Ease score of 0 and John Grisham’s novel, A Time to Kill, has an FRE of 78.2. The original 154 FASs had an overall average FRE of 17.2. (Wells et al, 2008) Therefore, the five FASs selected for this study were actually slightly easier to read, per the FRE, than all FASs on average. None of the three sets of documents examined however could be considered easy reads, with the best score among the three earning not even half the score of the Grisham novel.

The range of the three Flesch-Kincaid scores was about 1.6 grade levels. What is remarkable about this measure is that all three forms of financial reporting require at least the equivalent of a junior year of college (FK of 15) to understand the documents.

For both the Flesch Reading Ease and Flesch-Kincaid measures complexity of U.S. GAAP increased with development of the Code. In addition, IFRS were easier to read than the Code. Unfortunately, according to these results, simplification of U.S. GAAP took a step backward with Codification.

6. Conclusion

This study examined readability of accounting standards. Overall, the results do not show improved GAAP readability due to codification. In fact, these results show that GAAP readability declined with codification. While codification certainly provides the ability for systematic GAAP research, it appears FASB missed an opportunity to enhance the readability and therefore reduce the complexity of GAAP with implementation of the Code. Alternately, would conversion to IFRS reduce complexity? Possibly. While IFRS made greater use of passive sentences, IFRS had significantly better readability scores than the Code for both Flesch Reading Ease and Flesch-Kincaid measures.
In a 2013 letter to the FASB, Deloitte Partner Robert Uhl (Uhl, Robert. Letter to Russell Gordon, FASB Chairman, December 19, 2013) identified several areas of complexity in U.S. GAAP that he proposed FASB could rectify with little effort. While his letter focused on the complexity of the rules aside from the complexity of the writing, several of his thoughts on the topic are germane. According to Uhl, “potential root causes of unnecessary complexity are numerous…the issue of reducing unnecessary complexity is itself a complex issue with no simple solution.” Uhl notes that “greater progress on a journey towards improvement can be made in smaller steps.” Perhaps that is what might be proposed: that in the future the FASB make a small step toward reducing complexity by considering the reading complexity of its output.

References


Murphy, M. (2015, April/May). Will Simpler Also be Better?. Journal of Accountancy, 30-34.


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