September 3, 2015

- Emil Efthimides, global regulatory monitor, Bloomberg
- Pranav Ghai, Co-Founder, Calcbench
- Campbell Pryde, President and CEO, XBRL US
- Mike Starr, Chair, XBRL US Data Quality Committee; Vice President, Governmental and Regulatory Affairs, Workiva
Get Involved in Public Review

Agenda

• The Data Quality Committee
• Review of Data Quality Issues in XBRL Filings
• Demonstration of the Public Review & Comment – How Filers Can Contribute
Situation Today

- Input errors in filings
- Use of extensions
- Multiple ways to tag the same data
Mission of the Committee

To develop freely available guidance and validation rules to eliminate inconsistencies and errors in XBRL data in order to enable automated analysis of the data.
Data Quality Committee

- Merrill Corporation
- RDG Filings
- RR Donnelley
- Vintage, a division of PR Newswire
- XBRL US
- Workiva (chair)
- FASB (observer)
- AICPA
- Bloomberg
- Calcbench
- CFA Institute
- Credit Suisse
- S&P Capital IQ
- Craig Lewis, former SEC Economist
Activities of the Data Quality Committee

- Develop unambiguous guidance on how to tag financial data using XBRL and freely available, automated validation rules to verify compliance with its guidance and to prevent or detect tagging errors.
- Obtain input through public exposure of its proposed guidance and validation rules for a sixty day period and incorporate the input, as appropriate, in the final approved guidance and validation rules.
- Regularly scheduled meetings with SEC staff.
Public Review

• 60 day review & comment period
• Materials posted: Guidance, English-language version of rules, test cases, reference implementation of rules
• Final rules & guidance
  – Freely available in Arelle open source platform and
  – For incorporation in software tools for XBRL
Analyst Perspective

- Emil Efthimides, global regulatory monitor, Bloomberg
- Pranav Ghai, Co-Founder, Calcbench
Analyst Perspective from Calcbench

- Examples of Quality problems that we see at Calcbench?
  - Errors with signs
  - Filing from 8/31/2015
  - Uncertain Tax Position
  - Note the raw xml

<table>
<thead>
<tr>
<th>Effective Tax Reconciliation (Detail) - USD ($)</th>
<th>12 Months Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax Disclosure [Abstract]</td>
<td>$2,469</td>
</tr>
<tr>
<td>Income tax expense at federal statutory rate</td>
<td></td>
</tr>
<tr>
<td>Decrease (increase) in income tax expense</td>
<td>(41)</td>
</tr>
<tr>
<td>resulting from:</td>
<td></td>
</tr>
<tr>
<td>State tax, net of federal benefit</td>
<td>81</td>
</tr>
<tr>
<td>Effect of lower tax rate on foreign income</td>
<td>(604)</td>
</tr>
<tr>
<td>Other permanent items</td>
<td>1,600</td>
</tr>
<tr>
<td>Research and development expenditure</td>
<td></td>
</tr>
<tr>
<td>credits</td>
<td></td>
</tr>
<tr>
<td>Changes in uncertain tax positions</td>
<td>(143)</td>
</tr>
<tr>
<td>Other</td>
<td>59</td>
</tr>
<tr>
<td>Transaction expense</td>
<td>(680)</td>
</tr>
<tr>
<td>Goodwill impairment</td>
<td>(6,903)</td>
</tr>
<tr>
<td>Valuation allowance</td>
<td>(1,661)</td>
</tr>
<tr>
<td>Income tax (expense) benefit</td>
<td>$ (520)</td>
</tr>
</tbody>
</table>

ChangesInUncertainTaxPositions id="F_000937" contextRef="C_00014221" unitRef="U_iso4217USD">-787000</mfg:ChangesInUncertainTaxPositions>

ChangesInUncertainTaxPositions id="F_000938" contextRef="C_00014221"

<us-gaap:OtherTaxExpenseBenefit id="F_000939" contextRef="C_0001422862_21"
<us-gaap:OtherTaxExpenseBenefit id="F_000940" contextRef="C_0001422862_21"
Sign switch!!
Calculate something now??
Analyst Perspective from Calcbench

- Fix it
- Let filers know it was an issue

<table>
<thead>
<tr>
<th>File Date</th>
<th>File Type</th>
<th>Sign Switch Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/31/2015</td>
<td>10-K</td>
<td>5</td>
</tr>
</tbody>
</table>

**ChangesInUncertainTaxPositions:**
- $787,000 (Filed: 9/6/2013) → -$787,000 (Filed: 8/31/2015)
- $91,000 (Filed: 9/10/2014) → $91,000 (Filed: 8/31/2015)

**ForeignCurrencyTransactionGainLossBeforeTax:**
- $135,000 (Filed: 9/6/2013) → $135,000 (Filed: 8/31/2015)

**OtherTaxExpenseBenefit:**
- $35,000 (Filed: 9/10/2014) → -$35,000 (Filed: 8/31/2015)
- $60,000 (Filed: 9/6/2013) → $60,000 (Filed: 8/31/2015)
• Countries processed via XBRL: Japan, Korea, China, Israel, Brazil
• In the works: US, Mexico
• Non-US: Face of statement, standard chart
• Process entire market, Japan and China STP
• Japan has added tables beyond statements
• Brazil and Korea more analyst intervention
• Processed first 1,128 US tickers
## Analyst Perspective from Bloomberg

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Unique Elements</th>
<th>Country Level Elements</th>
<th>GAAP Level Elements</th>
<th>Custom Level Elements</th>
<th>Elements Not Captured by BB</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>170007</td>
<td>32618</td>
<td>98205</td>
<td>39184</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total Unique Elements</th>
<th>Industry Level Elements</th>
<th>GAAP Level Elements</th>
<th>Custom Level Elements</th>
<th>Elements Not Captured by BB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>16815</td>
<td>3372</td>
<td>7161</td>
<td>6282</td>
<td>0</td>
</tr>
<tr>
<td>Communications</td>
<td>10861</td>
<td>3366</td>
<td>5674</td>
<td>1621</td>
<td>0</td>
</tr>
<tr>
<td>Consumer, Cyclical</td>
<td>24322</td>
<td>6586</td>
<td>13144</td>
<td>4592</td>
<td>0</td>
</tr>
<tr>
<td>Consumer, Non-cyclical</td>
<td>27234</td>
<td>7202</td>
<td>16434</td>
<td>3576</td>
<td>0</td>
</tr>
<tr>
<td>Technology</td>
<td>14640</td>
<td>4419</td>
<td>8679</td>
<td>1542</td>
<td>0</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>9252</td>
<td>2460</td>
<td>5191</td>
<td>1601</td>
<td>0</td>
</tr>
<tr>
<td>Energy</td>
<td>24063</td>
<td>5832</td>
<td>14483</td>
<td>3748</td>
<td>0</td>
</tr>
<tr>
<td>Industrial</td>
<td>21476</td>
<td>5310</td>
<td>12900</td>
<td>3266</td>
<td>0</td>
</tr>
<tr>
<td>Financial</td>
<td>53279</td>
<td>9560</td>
<td>27246</td>
<td>15373</td>
<td>0</td>
</tr>
<tr>
<td>Diversified</td>
<td>1125</td>
<td>542</td>
<td>468</td>
<td>115</td>
<td>0</td>
</tr>
</tbody>
</table>
Questions

Emil Efthimides, global regulatory monitor

Pranav Ghai, Co-Founder
Public Review & Comment

July 15 – September 14, 2015

Public Exposure of Guidance and Validation Rules

Public review and comment is a critical part of the process of improving the usability of XBRL filed with the SEC. The following proposed rules address common XBRL input errors and are currently available for public exposure until September 14, 2015.

Click the title of the rule to review its comprehensive documentation. To post your comments, you will need to login and complete the Terms and Conditions for Public Comments. Comments received can be reviewed without logging in.

When providing feedback about guidance or a rule, please consider the following:

- What is the concern with the proposed rule? Please be as specific as possible and include examples using data submitted to the SEC.
- How should the rule be revised?
- How does the revision to the rule improve the usability of the data?

Use this link for general feedback on all rules and guidance.

Data Quality

XBRL US Center for Data Quality
Data Quality Committee
Public Exposure of Guidance and Validation Rules

Developer Resources

Global Rule Logic
Reference Implementation Code
Testcase Documentation
Testcases Instances (zip)
Testcases Index (xlsx)
What’s available for review & comment?

- Seven rules

- A rule is an assertion that can be run over one or many sets of elements
  - Only addresses known issues in as-filed data
  - Only fires when the element is present in the filing
  - ‘False positive’ messages are rare

- Error messages triggered by a rule identify
  - the rule number that fired,
  - the identifier for the element(s)
  - element name(s)
What’s available for review & comment?

For Filers, Filing Agents, Data providers, Investors & Analysts

Rules are posted on http://publicreview.xbrl.us.

Authoritative guidance will be posted if available

Element Values Are Equal

Rule ID: DQC_0004 - comment period closes Monday, September 14, 2015.
6 comments to date - subscribe to comments via RSS

Rule function

This rule tests that the value reported for the element Assets equals the value reported for the element Liabilities and Equity.

Problem solved by the rule

This rule can detect where companies have incorrect values (e.g., different rounding) for the standard element for Assets or the standard element for Liabilities and Equity. This is a problem for consumption because the data for these elements will be extracted incorrectly for analysis.

Example rule message

Assets with a value of 340,000,000 is not equal to the total of Liabilities and Equity with a value of 350,000,000. These values should be equal.

The properties of this us-gaap:Assets fact are:

- Period: 2014-12-31
- Dimensions: none
- Unit: USD
- Rule version: 1.0
What’s available for review & comment?

For Developers
Rules, test cases and code in GitHub are accessible on http://publicreview.xbrl.us

Developer Resources
Global Rule Logic
Reference Implementation Code
Testcase Documentation
Testcases Instances (zip)
Testcases Index (xlsx)
What’s available for review & comment?

<table>
<thead>
<tr>
<th>Element Values Are Equal</th>
<th>Negative Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets equal liabilities plus shareholders’ equity.</td>
<td>Elements that should not be reported with negative values. Documentation includes a list of elements tested.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Context Dates After Period End Date</th>
<th>Document Period End Date Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dates that end after reporting period end dates are limited to subsequent events, forecasts and Entity Common Stock, Shares Outstanding.</td>
<td>Document and entity information dates should match the document period end date.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DEI and Block Tag Date Contexts</th>
<th>Document Period End Date Context / Fact Value Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document and entity information, footnotes, tables, and accounting policy concepts must use reporting period dates that are consistent with the fiscal period focus of the filing (e.g. Q1, Q2, Q3 or FY).</td>
<td>The document period end date should match the date tagged with the document period end date element.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element A must be less than or equal to Element B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value for element A should be less than or equal to the value for element B. Documentation includes a list of elements where this comparison is tested.</td>
<td></td>
</tr>
</tbody>
</table>

XBRL US: The national consortium for the business reporting standard.
What do we need from you?

• Filers, filing agents, data providers, investors & analysts
  – What is the concern with the proposed rule? Please be as specific as possible and include examples using data submitted to the SEC.
  – How should the rule be revised?
  – How does the revision to the rule improve the usability of the data?

• Developers
  – Does the code accurately address all filing situations?
  – Does the code accurately represent the rule as written in plain English?
How can you participate?

Accept terms & conditions

Terms and Conditions for Public Comments

Terms and Conditions: XBRL US Center for Data Quality Public Review

In order to provide comments that will be considered by the Center for Data Quality Committee as part of the Public Review process, you must read this page, complete the form below and click the "Accept" button.

No Restrictions on Dissemination or Use of Information or Technology Submitted in XBRL US Center for Data Quality Public Review
How can you participate?

Post a comment related to a specific rule

Leave a Reply

Logged in as Michelle Savage. Log out?

Use the Comment box below for your feedback. If you’re also uploading a file using the "Browse..." or "Choose File" button, please type a brief comment in the box (ie. see attached). When you’re ready to share feedback click "Post Comment". (Allowed file types: pdf, doc, docx. maximum file size: 5MB.

Choose File No file chosen

Comment

☐ Participate in this conversation via email

Post Comment

XBRL US The national consortium for the business reporting standard.
What’s Ahead

• Upcoming committee meetings
  – September 29
  – October 21
• Initial set of rules published - October
Questions?