Summary Information about Conformance with Fundamental Accounting Concept Relations

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The following is a summary of the results of testing 6,947 public companies who report to the SEC against a set of fundamental accounting concept relations. This set of entities excludes 2,062 entities which are funds or trusts, excludes 2,956 inactive filers who have not submitted a financial filing to the SEC in the past year, and excludes 5 "hybrid" filers who provide extremely unique financial reports. There are a total of approximately 11,970 entities.

The following is a screen shot of the validation results obtained from a commercial software tool provided by XBRL Cloud which was used to evaluate these 6,947 public company financial filings. The tests were run against the most current 10-Q or 10-K filing of the entity as of November 27, 2014.

#	Category	Signal	Failures	Pass %	Fail %
1	BS	usfac:BS1	104	98.50%	1.50%
2	BS	usfac:BS2	21	99.70%	0.30%
3	BS	usfac:BS3	244	96.49%	3.51%
4	BS	usfac:BS4	76	98.91%	1.09%
5	BS	usfac:BS5	280	95.97%	4.03%
6	CF	usfac:CF1	278	96.00%	4.00%
7	CF	usfac:CF2	210	96.98%	3.02%
8	CF	usfac:CF3	29	99.58%	0.42%
9	CF	usfac:CF4	31	99.55%	0.45%
10	CF	usfac:CF5	3	99.96%	0.04%
11	CF	usfac:CF6	5	99.93%	0.07%
12	IS	usfac:IS1	463	93.34%	6.66%
13	IS	usfac:IS2	294	95.77%	4.23%
14	IS	usfac:IS3	544	92.17%	7.83%
15	IS	usfac:IS4	45	99.35%	0.65%
16	IS	usfac:IS5	566	91.85%	8.15%
17	IS	usfac:IS6	543	92.18%	7.82%
18	IS	usfac:IS7	369	94.69%	5.31%
19	IS	usfac:IS8	29	99.58%	0.42%
20	SCI	usfac:IS10	247	96.44%	3.56%
21	SCI	usfac:IS9	135	98.06%	1.94%

This is an equivalent representation of the same information above in Excel, but adding a couple more details. This version adds a total for the "Failures" and renames that term to "Nonconforming issues count". I also added the column "Total filings" to explicitly show how the "Conforming" and "Nonconforming" percent columns are calculated.

#	Category	Rule	Non conforming issues count	Total filings	Conforming %	Non conforming %
1	BS	BS1	104	6,947	98.5%	1.5%
2	BS	BS2	21	6,947	99.7%	0.3%
3	BS	BS3	244	6,947	96.5%	3.5%
4	BS	BS4	76	6,947	98.9%	1.1%
5	BS	BS5	280	6,947	96.0%	4.0%
6	CF	CF1	278	6,947	96.0%	4.0%
7	CF	CF2	210	6,947	97.0%	3.0%
8	CF	CF3	29	6,947	99.6%	0.4%
9	CF	CF4	31	6,947	99.6%	0.5%
10	CF	CF5	3	6,947	100.0%	0.0%
11	CF	CF6	5	6,947	99.9%	0.1%
12	IS	IS1	463	6,947	93.3%	6.7%
13	IS	IS2	294	6,947	95.8%	4.2%
14	IS	IS3	544	6,947	92.2%	7.8%
15	IS	IS4	45	6,947	99.4%	0.7%
16	IS	IS5	566	6,947	91.9%	8.2%
17	IS	IS6	543	6,947	92.2%	7.8%
18	IS	IS7	369	6,947	94.7%	5.3%
19	IS	IS8	29	6,947	99.6%	0.4%
20	SCI	IS9	135	6,947	98.1%	1.9%
21	SCI	IS10	247	6,947	96.4%	3.6%
			4,516			

Each rule is one of the fundamental accounting concept relations[1] which empirical evidence shows that exists in US GAAP-based financial reporting. To state the obvious just to be clear, the goal would be that 100% of SEC XBRL-based financial filings conform to 100% of the conformance test. Said yet another way, ever value in the "Nonconforming issues count" above should be "0". That is the goal; every financial report conforms to these 21 basic tests.

[1] See the fundamental accounting concept relations, http://fundamentalaccountingconcepts.wikispaces.com/

The following table provides a summary of each fundamental accounting concept relation test performed and reconciles the "Code" such as *BS2*, to the "% Conforms" such as *99.7*, the "Rule Description" such as *Assets = Liabilities and Equity*, and any comments about the rule.

What one can see in the data is: given that such a high percentage of public companies conform to these relations it is clear that such relations do exist. However, it is another incremental step to say that every public company must comply with each of these relations.

Code	% Conforms	Rule description	Comments
BS1	98.5	Equity = Equity Attributable to Parent + Equity Attributable to Noncontrolling Interest	
BS2	99.7	Assets = Liabilities and Equity	
BS3	96.5	Assets = Current Assets + Noncurrent Assets (classified balance sheet)	
BS4	98.3	Liabilities = Current Liabilities + Noncurrent Liabilities (classified balance sheet)	
BS5	96.0	Liabilities and Equity = Liabilities + Commitments and Contingencies + Temporary Equity + Redeemable Noncontrolling Interest + Equity	
IS1	93.3	Gross Profit = Revenues - Cost Of Revenue (Multi-step approach)	Not applicable to all entities. Alternatively, entities can report using single step approach.
IS2	95.8	Operating Income (Loss) = Gross Profit - Operating Expenses + Other Operating Income (Expenses) (Multi-step approach)	Not applicable to all entities. Alternatively, entities can report using single step approach.
IS3	92.2	Income (Loss) from Continuing Operations Before Equity Method Investments = Operating Income (Loss) + Nonoperating Income (Loss) - Interest And Debt Expense	Not applicable to all entities. Alternatively, entities may not report Operating Income (Loss).
IS4	99.3	Income (Loss) from Continuing Operations Before Tax = Income (Loss) from Continuing Operations Before Equity Method Investments + Income (Loss) from Equity Method Investments	Not applicable to all entities. Alternatively, entities put Income (Loss) from Equity Method Investments after tax, within revenues, and a handful of other locations.
IS5	91.9	Income (Loss) from Continuing Operations after Tax = Income (Loss) from Continuing Operations Before Tax - Income Tax Expense (Benefit)	
IS6	92.2	Net Income (Loss) = Income (Loss) from Continuing Operations After Tax + Income (Loss) from Discontinued Operations, Net of Tax + Extraordinary Items, Gain (Loss)	
IS7	94.7	Net Income (Loss) = Net Income (Loss) Attributable to Parent + Net Income (Loss) Attributable to Noncontrolling Interest	
IS8	99.6	Net Income (Loss) Available to Common Stockholders, Basic = Net Income (Loss) Attributable to Parent - Preferred Stock Dividends and Other Adjustments	
IS9	98.1	Comprehensive Income (Loss) = Comprehensive Income (Loss) Attributable to Parent + Comprehensive Income (Loss) Attributable to Noncontrolling Interest	
IS10	96.4	Comprehensive Income (Loss) = Net Income (Loss) + Other Comprehensive Income (Loss)	
CF1	96.0	Net Cash Flow = Net Cash Flows, Operating + Net Cash Flows, Investing + Net Cash Flows, Financing + Exchange Gains (Losses)	Alternately, approximately 126 entities do not include Exchange Gains (Losses) within Net Cash Flow.
CF2	97.0	Net Cash Flows, Continuing = Net Cash Flows, Operating, Continuing + Net Cash Flows, Investing, Continuing + Net Cash Flows, Financing, Continuing	
CF3	99.6	Net Cash Flows, Discontinued = Net Cash Flows, Operating, Discontinued + Net Cash Flows, Investing, Discontinued + Net Cash Flows, Financing, Discontinued	
CF4	99.6	Net Cash Flows, Operating = Net Cash Flows, Operating, Continuing + Net Cash Flows, Operating, Discontinued	
CF5	99.9	Net Cash Flows, Investing = Net Cash Flows, Investing, Continuing + Net Cash Flows, Investing, Discontinued	
CF6	99.9	Net Cash Flows, Financing = Net Cash Flows, Financing, Continuing + Net Cash Flows, Financing, Discontinued	

Limitations of One Set of Fundamental Accounting Concept Relations

The distinction between a high level of conformance to some set of fundamental accounting concept relations and every financial filing being required to conform to such relations is important to understand. For now, please file that thought away.

I have performed testing of the conformance to the one set of fundamental accounting concepts above in the past using a similar and incrementally improving approach.

However, I have now refactored that approach and greatly improved the testing approach. First, I wanted to highlight this change and summarize how the prior testing was performed. After this, I will explain the new testing approach. Further, understanding the limitations of the prior testing approach helps one better understand the significant advantages of the new testing approach.

The first four periods of the following table summarizes the results of testing SEC XBRL-based financial filings against the fundamental accounting concept relations[2345] which I have been using. The testing results show a clear improvement in conformance to the fundamental accounting concept relations.

Period	Filings Count	Filings with 100% Conformance to Relations (i.e. no nonconforming items)	Sum Nonconforming items (all filings)	Average Nonconforming items per Filing	Total Percent of Filings with 100% Conformance to Relations (i.e. conforms to all 22 relations)
March 3, 2014	6,674	1,711	8,920	1.3	25.6%
September 22, 2014	7,274	3,863	5,810	.8	53.1%
October 19, 2014	6,998	4,334	4,295	.6	61.9%
November 1, 2014	7,018	4,428	4,020	.6	63.1%
November 28, 2014	6,947	4,167	4,516	.7	60.0%

The most current period, November 28, 2014, uses the new approach[6]. Rather than using only one set of fundamental accounting concept relations as in the prior three periods, I am now breaking the one set into currently 81 different sets of fundamental accounting concept

[2] March 3, 2014, http://xbrl.squarespace.com/journal/2014/4/3/summary-information-from-evaluating-sec-xbrl-financial-filin.html
[3] September 22, 2014, http://xbrl.squarespace.com/journal/2014/10/1/conformance-to-fundamental-accounting-concept-relations-doub.html
[4] October 19, 2014, http://xbrl.squarespace.com/journal/2014/10/19/public-company-conformance-to-fundamental-relations-grows-to.html
[5] November 1, 2014, http://xbrl.squarespace.com/journal/2014/11/1/public-company-conformance-to-fundamental-relations-grows-to.html
[6] November 28, 2014, http://xbrl.squarespace.com/journal/2014/12/1/new-approach-of-testing-public-company-conformance-to-fundam.html

relations. These 81 different sets of fundamental accounting concept relations, or what I refer to as *report frames* or *reporting palettes*, allows for a significantly better tuning of these relations for the variations in the ways filers report the 51 fundamental accounting concepts and the relations between those concepts.

Now, recall the distinction between *high conformance* and *every filing conforming* to fundamental accounting concept relations? Well, that distinction is no longer relevant. Why? The reason is that even if the set of entities which use some set of fundamental accounting concepts and relations between those concepts is only one entity; every entity can now conform to some specified set of fundamental accounting concepts and relations between those concepts even if that set contains only a single entity. The question now is this: How many report frames exist?

Understanding the Notion of Report Frames or Reporting Palettes

Testing on the first four occasions made it easy to see that not every public entity filing was going to conform to one single set of fundamental accounting concepts and relations between those concepts. When one looks into why a reporting entity conforms to the specified set of relations or why a financial report created by an entity does not conform, one starts to understand both the clearly identifiable and the subtleties and nuances of financial reports. Testing performed revealed a wealth of information about how public companies report[7]. While it is clear that differences such as some entities provide a classified balance sheet, others provide an unclassified balance sheet, some entities report using a single-step income statement and do not report gross profit, other entities report using a multi-step income statement and do report gross profit; other important but less obvious differences exist.

For example, consider the variability in where public companies report the line item *Income (Loss) from Equity Method Investments*[8]:

- 624 entities (60%) reported the line item before tax directly as part of income (loss) from continuing operations before tax
- 110 entities (10%) reported the line item after tax
- 128 entities (12%) reported the line item as part of nonoperating income (expense)
- 20 entities (2%) reported the line item as part of revenues

[7] See this web page for a summary of testing performed and testing for each individual test, http://xbrl.squarespace.com/understanding-sec-xbrl-financi/

[8] See a detailed analysis of this topic here, http://xbrl.squarespace.com/journal/2014/10/14/options-for-dealing-with-line-items-that-bounce-around-incom.html

- 22 entities (2%) reported the line item between income (loss) from continuing operations before and after tax
- 10 entities (less than 1%) reported the line item as part of costs and expenses
- 8 entities (less than 1%) reported the line item as part of operating expenses
- 60 entities (6%) created an extension concept and the line item rolls up to that extension concept
- 66 entities (5%) did something else which was not directly analyzed so exact placement is unknown

The blog post referenced above and the analysis of test IS4[9] elaborates on the detailed information and clearly shows variability in how public companies report *Income (Loss) from Equity Method Investments*. Whether all of this variability is good or bad, or even allowed or disallowed, is not the point. The point is that public companies report in this manner, there is nothing in US GAAP that currently prohibits this variability, and therefore the variability must be allowed for.

Comprehensive testing of all SEC XBRL financial filings at this very high level revealed a very limited amount of variability most of which occurs on the income statement. This variability is not random. The following is a summary of and a complete inventory of this variability[10] at this high-level of a financial report:

- Entities report using some accounting industry or activity
    - Commercial and industrial (standard approach)
    - Interest based revenues
    - Insurance based revenues
    - Securities based revenues
    - REIT (real estate investment trust)
    - Utility
- Balance sheets can be
    - Classified and report current and noncurrent assets and liabilities
    - Unclassified
    - Report using liquidity based reporting
- Income statements can be
    - Multi-step and report gross profit
    - Single-step and do not report gross profit

[9] See the analysis of IS4 here and note that similar analysis exist for each test as noted the above footnote, http://www.xbrlsite.com/2014/Reference/IS4-ReasonsWhyFundamentalAccountingConceptTestFails.pdf

[10] This Excel spreadsheet is helpful in understanding reporting variability, http://xbrl.squarespace.com/journal/2014/9/15/wonderful-things-xbrl-based-structured-information-enables.html

- Income statements can
    - Report operating income (loss)
    - Do not report operating income (loss)
- Income (loss) from equity method investments can be reported on the income statement
    - As part of revenues
    - As part of nonoperating income (loss)
    - Before taxes as a separate line item
    - After taxes as a separate line item
    - Between income (loss) from continuing operations before and after taxes
- Cash flow statements can report net cash flow as
    - Including exchange gains (losses)
    - Not including exchange gains (losses)

This is a comprehensive and complete inventory of the high level variability in public company financial filings. This information is not a statistical analysis or speculation. This is observable empirical evidence provided by the XBRL-based public company financial filings submitted to the SEC.

A coding scheme was developed to articulate this information in both human readable and machine readable form. Below is a brief description of that coding scheme. Each code has six parts: "COMID-BSC-CF1-ISS-IEMIB-OILY". This explains each part and the codes used for each part and shows the number of entities which have that characteristic (note that the totals add up to 6,943 and not 6,947; this relates to an issue with CIK numbers):

- **Part 1: Industry codes**: (Total 6,943)
    - COMID=Commercial and Industrial (5,985)
    - INTBX=Interest based revenues (632)
    - INSBX=Insurance based revenues (50)
    - SECBX=Securities based revenues (93)
    - REITX=Real estate investment trust (158)
    - UTILX=Utility (25)
- **Part 2: Balance sheet form codes**: (Total 6,943)
    - BSC=Classified balance sheet (5,527)
    - BSU=Unclassified balance sheet (1,412)
    - BSL=Liquidity based balance sheet (4)
- **Part 3: Cash flow statement exchange gains codes**: (Total 6,943)
    - CF1=Exchange gains (losses) part of net cash flow or does not report line item (6,845)

    - CF2=Exchange gains (losses) part of cash roll forward (98)
- **Part 4: Income statement form codes**: (Total 6,943)
    - ISS=Single step income statement (4,255)
    - ISM=Multi step income statement (2,688)
- **Part 5: Income (loss) from equity method investments location codes**: (Total 6,943)
    - IEMIX=Income (loss) from equity method investments not reported (5,290)
    - IEMIB=Income (loss) from equity method investments reported BEFORE tax (1,402)
    - IEBIA=Income (loss) from equity method investments reported AFTER tax (113)
    - IEMIN=Income (loss) from equity method investments reported within nonoperating income (loss) (122)
    - IEMIR=Income (loss) from equity method investments reported within revenues (16)
    - IEMIT=Income (loss) from equity method investments reported between income (loss) from continuing operations before and after taxes (0, not working yet)
- **Part 6: Operating income (loss) codes**: (Total 6,943)
    - OILY=Operating income (loss) reported (5,120)
    - OILN=Operating income (loss) not reported (1,823)

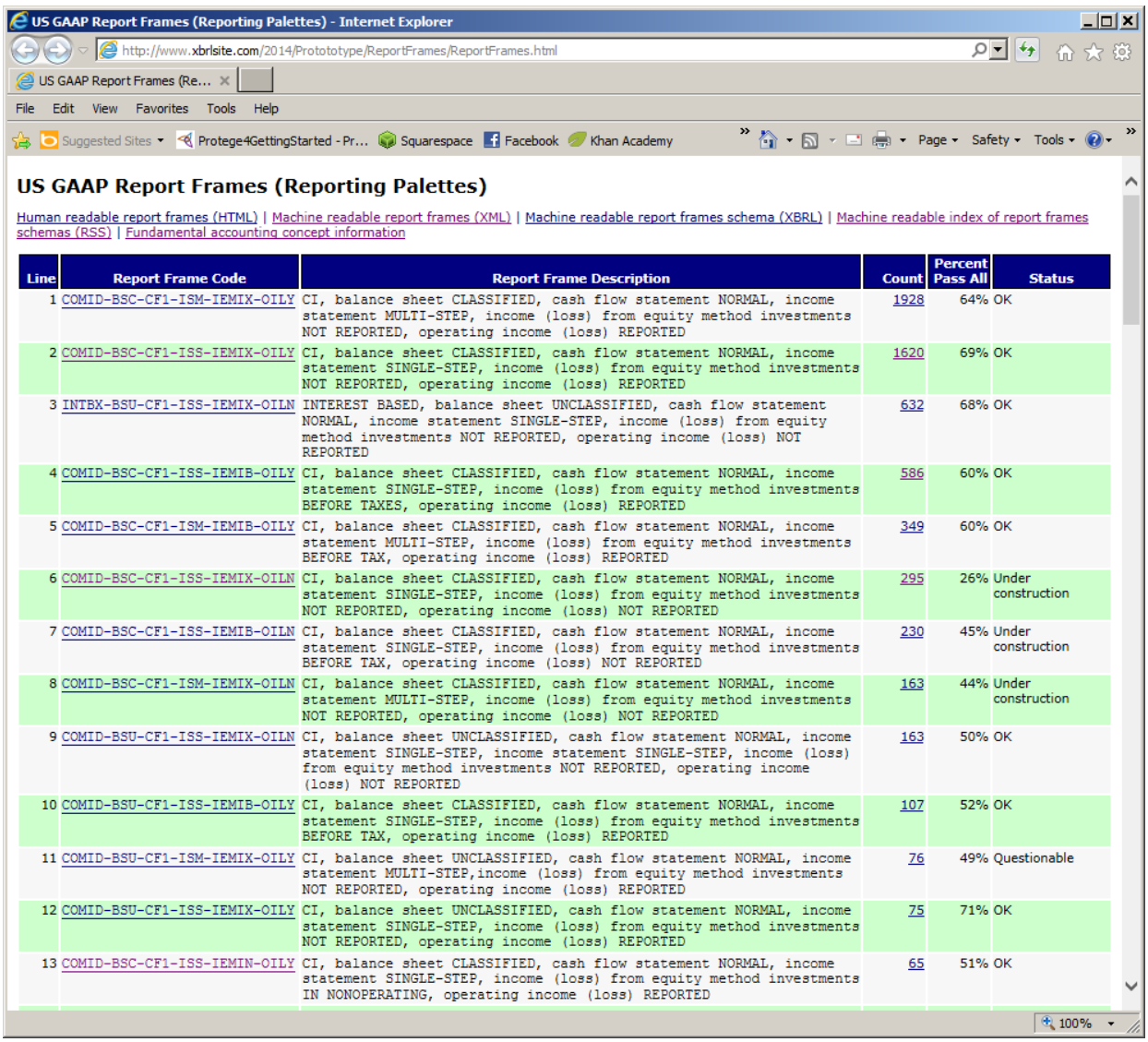
While the complete set of codes and report frames cannot be known until the process of breaking public company filings into these sets and testing each filing and set as to their conformance to the fundamental accounting concepts and relations within the set and the success of this process is verified by 100% conformance by each reporting entity to 100% of the fundamental accounting concepts and relations between those concepts within each set; this is achievable.

In fact, testing shows that this objective has already been achieved for 98.7% of relations and 60.0% of all public company financial reports submitted to the SEC using the XBRL format. Further, which reporting entities do not conform to these concepts and relations and why they do not conform is easy to observe.

Another possibility which exists in order to manage this process is simply to remove sets of reporting entities from scope. For example, I have already removed entities which are funds and trusts from scope because I personally have no interest in such entities. Also, there are five entities which I classify as “hybrids” because they report using significantly more complex reporting schemes. Basically, certain report frames can be simply removed from scope.

Entity Report Frames or Reporting Palettes

A report frame or reporting palette is the set of attributes that make up how a public company reports, the fundamental structure of the reporting entities financial report. I have created web pages which explain each report frame, provide examples of entities which use the report frame. Report frames information is articulated in both human readable and machine readable forms[11].

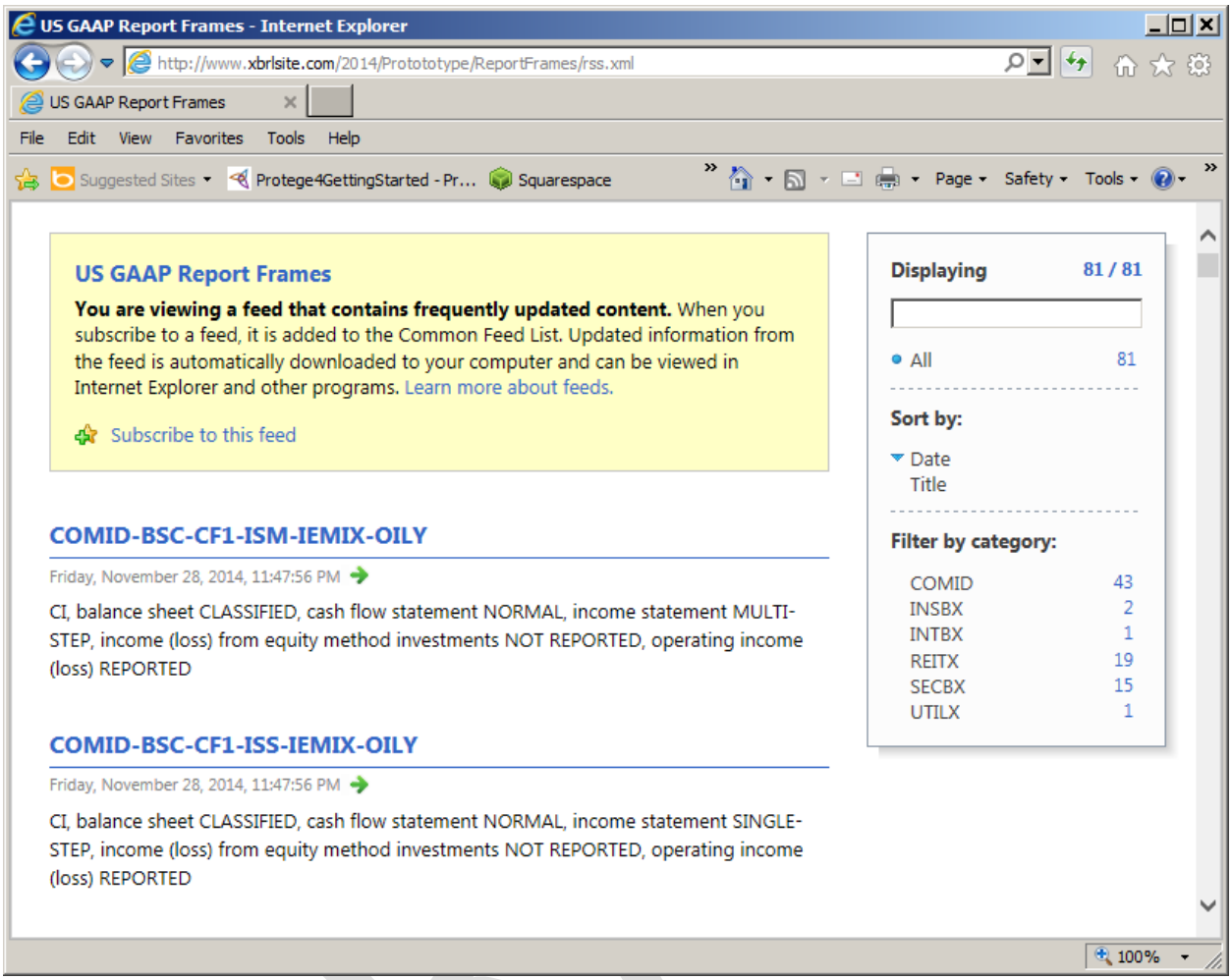


Line	Report Frame Code	Report Frame Description	Count	Percent Pass All	Status
1	COMID-BSC-CF1-ISM-IEMIX-OILY	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement MULTI-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) REPORTED	1928	64%	OK
2	COMID-BSC-CF1-ISS-IEMIX-OILY	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) REPORTED	1620	69%	OK
3	INTBX-BSU-CF1-ISS-IEMIX-OILN	INTEREST BASED, balance sheet UNCLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) NOT REPORTED	632	68%	OK
4	COMID-BSC-CF1-ISS-IEMIB-OILY	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments BEFORE TAXES, operating income (loss) REPORTED	586	60%	OK
5	COMID-BSC-CF1-ISM-IEMIB-OILY	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement MULTI-STEP, income (loss) from equity method investments BEFORE TAX, operating income (loss) REPORTED	349	60%	OK
6	COMID-BSC-CF1-ISS-IEMIX-OILN	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) NOT REPORTED	295	26%	Under construction
7	COMID-BSC-CF1-ISS-IEMIB-OILN	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments BEFORE TAX, operating income (loss) NOT REPORTED	230	45%	Under construction
8	COMID-BSC-CF1-ISM-IEMIX-OILN	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement MULTI-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) NOT REPORTED	163	44%	Under construction
9	COMID-BSU-CF1-ISS-IEMIX-OILN	CI, balance sheet UNCLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income statement SINGLE-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) NOT REPORTED	163	50%	OK
10	COMID-BSU-CF1-ISS-IEMIB-OILY	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments BEFORE TAX, operating income (loss) REPORTED	107	52%	OK
11	COMID-BSU-CF1-ISM-IEMIX-OILY	CI, balance sheet UNCLASSIFIED, cash flow statement NORMAL, income statement MULTI-STEP,income (loss) from equity method investments NOT REPORTED, operating income (loss) REPORTED	76	49%	Questionable
12	COMID-BSU-CF1-ISS-IEMIX-OILY	CI, balance sheet UNCLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) REPORTED	75	71%	OK
13	COMID-BSC-CF1-ISS-IEMIN-OILY	CI, balance sheet CLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments IN NONOPERATING, operating income (loss) REPORTED	65	51%	OK

The page above shows a human readable index of report frames. There is a machine readable index of report frames provided in the form of an RSS feed[12]:

[11] See the human and machine readable forms here, http://www.xbrlsite.com/2014/Prototype/ReportFrames/ReportFrames.html

[12] Machine readable RSS feed, http://www.xbrlsite.com/2014/Prototype/ReportFrames/rss.xml



Each report frame has an XBRL taxonomy schema, a mapping file expressed in the form of XBRL definition relations, and a set of impute rules. Using the report frame *COMID-BSC-CF1-ISM-IEMIX-OILY* as an example, this shows the machine readable location of each file supporting the report frame:

- http://www.xbrlsite.com/2014/Prototype/ReportFrames/COMID-BSC-CF1-ISM-IEMIX-OILY/ReportFrame.xsd
- http://www.xbrlsite.com/2014/Prototype/ReportFrames/COMID-BSC-CF1-ISM-IEMIX-OILY/ImputeRules.txt
- http://www.xbrlsite.com/2014/Prototype/ReportFrames/COMID-BSC-CF1-ISM-IEMIX-OILY/mapping-definition.xml (note that this mapping is connected to the taxonomy schema above)
- http://www.xbrlsite.com/2014/Prototype/ReportFrames/COMID-BSC-CF1-ISM-IEMIX-OILY/COMID-BSC-CF1-ISM-IEMIX-OILY.html
- http://www.xbrlsite.com/2014/Prototype/ReportFrames/COMID-BSC-CF1-ISM-IEMIX-OILY/ReportFrame_ModelStructure.html

Each of the report frames has similar information, both human and machine readable[13].

[13] Basically just substitute the report frame code above with the code you want to use.

This is an example of the model structure of the balance sheet of one report frame.

Model structure for report frame: COMID-BSC-CF1-ISM-IEMIX-OILY

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Line	Label	Object Class	Period Type	Balance	
1	**http://www.xbrlsite.com/2014/Prototype/fac/BalanceSheetClassified**	Network			http://www.xbrlsite
2	**Balance Sheet, Classified [Table]**	Table			fac:BalanceSheet
3	**Balance Sheet [Line Items]**	LineItems			fac:BalanceSheetL
4	Assets [Roll Up]	Abstract			fac:AssetsRollUp
5	Current Assets	Concept (Monetary)	As Of	Debit	fac:CurrentAssets
6	Noncurrent Assets	Concept (Monetary)	As Of	Debit	fac:NoncurrentAss
7	Assets	Concept (Monetary)	As Of	Debit	fac:Assets
8	Liabilities and Equity [Roll Up]	Abstract			fac:LiabilitiesEquityR
9	Liabilities [Roll Up]	Abstract			fac:LiabilitiesRollUp
10	Current Liabilities	Concept (Monetary)	As Of	Credit	fac:CurrentLiabilit
11	Noncurrent Liabilities	Concept (Monetary)	As Of	Credit	fac:NoncurrentLia
12	Liabilities	Concept (Monetary)	As Of	Credit	fac:Liabilities
13	Commitments and Contingencies	Concept (Monetary)	As Of	Credit	fac:CommitmentsA
14	Temporary Equity	Concept (Monetary)	As Of	Credit	fac:TemporaryEqu
15	Redeemable Noncontrolling Interest	Concept (Monetary)	As Of	Credit	fac:RedeemableN
16	Equity [Roll Up]	Abstract			fac:EquityRollUp
17	Equity Attributable to Parent	Concept (Monetary)	As Of	Credit	fac:EquityAttributab
18	Equity Attributable to Noncontrolling Interest	Concept (Monetary)	As Of	Credit	fac:EquityAttributa
19	Equity	Concept (Monetary)	As Of	Credit	fac:Equity
20	Liabilities and Equity	Concept (Monetary)	As Of	Credit	fac:LiabilitiesAndEq
21	**http://www.xbrlsite.com/2014/Prototype/fac/CashFlowStatement**	Network			http://www.xbrlsite
22	**Cash Flow Statement [Table]**	Table			fac:CashFlowSta
23	**Cash Flow Statement [Line Items]**	LineItems			fac:CashFlowStatel
24	Net Cash Flow [Roll Up]	Abstract			fac:NetCashFlowR
25	Net Cash Flow from Operating Activities [Roll Up]	Abstract			fac:NetCashFlowFr
26	Net Cash Flow from Operating Activities, Continuing	Concept (Monetary)	For Period	Debit	fac:NetCashFlowFr
27	Net Cash Flow from Operating Activities, Discontinued	Concept	For	Debit	fac:NetCashFlo

Each report frame lists the public companies which make use of that report frame. For example, the graphic below shows the 632 entities which use the report frame for entities which using interest based reporting[14]:

Report Frame: INTBX-BSU-CF1-ISS-IEMIX-OILN

INTEREST BASED, balance sheet UNCLASSIFIED, cash flow statement NORMAL, income statement SINGLE-STEP, income (loss) from equity method investments NOT REPORTED, operating income (loss) NOT REPORTED

Home || (Model: HTML | XML | XBRL) | (Impute rules: TXT) | (Concept Mapping: XBRL | HTML)

Line	Entity Registrant Name	SIC	SIC Description	Sector	Activity	FAC Nonconforming Items	SEC Filing Page
1	1st Century Bancshares, Inc.	6022	STATE COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	1	SEC Filing Page
2	1ST CONSTITUTION BANCORP	6035	SAVINGS INSTITUTION, FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
3	1st Financial Services CORP	6022	STATE COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	1	SEC Filing Page
4	1ST SOURCE CORP	6022	STATE COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	2	SEC Filing Page
5	1st United Bancorp, Inc.	6022	STATE COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
6	ABINGTON BANCORP, INC./PA	6036	SAVINGS INSTITUTIONS, NOT FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
7	ACCESS NATIONAL CORP	6035	SAVINGS INSTITUTION, FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
8	ACNB CORP	6022	STATE COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
9	Admiral Financial Corp	6035	SAVINGS INSTITUTION, FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	1	SEC Filing Page
10	AJS Bancorp, Inc.	6021	NATIONAL COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	1	SEC Filing Page
11	ALAMOGORDO FINANCIAL CORP	6035	SAVINGS INSTITUTION, FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
12	ALASKA PACIFIC BANCSHARES INC	6035	SAVINGS INSTITUTION, FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	1	SEC Filing Page
13	ALERE INC.	2835	IN VITRO AND IN VIVO DIAGNOSTIC SUBSTANCES	Chemicals/Allied Products	CommercialAndIndustrial	3	SEC Filing Page
14	Alliance Bancorp, Inc. of Pennsylvania	6036	SAVINGS INSTITUTIONS, NOT FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
15	ALLIANCE FINANCIAL CORP /NY/	6021	NATIONAL COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
16	AMERIANA BANCORP	6035	SAVINGS INSTITUTION, FEDERALLY CHARTERED	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
17	AMERICA FIRST MULTIFAMILY INVESTORS, L.P.	6199	FINANCE SERVICES	Nondepository Credit Institutions	InterestBasedRevenue	3	SEC Filing Page
18	AMERICAN EXPRESS COMPANY	6199	FINANCE SERVICES	Nondepository Credit Institutions	InterestBasedRevenue	0	SEC Filing Page
19	AMERICAN EXPRESS CREDIT CORPORATION	6153	SHORT-TERM BUSINESS CREDIT INSTITUTIONS	Nondepository Credit Institutions	CommercialAndIndustrial	2	SEC Filing Page
20	AMERICAN FIRST FINANCIAL INC	6162	MORTGAGE BANKERS AND LOAN CORRESPONDENTS	Nondepository Credit Institutions	InterestBasedRevenue	2	SEC Filing Page
21	American Heritage International Inc.	4950	SANITARY SERVICES	Electric/Gas/Waste Services	CommercialAndIndustrial	2	SEC Filing Page
22	AMERICAN NATIONAL BANKSHARES INC.	6021	NATIONAL COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
23	AMERICAN RIVER BANKSHARES	6022	STATE COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	2	SEC Filing Page
24	Ameris Bancorp	6022	STATE COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page
25	AMERISERV FINANCIAL INC /PA/	6021	NATIONAL COMMERCIAL BANKS	Depository Institutions	InterestBasedRevenue	0	SEC Filing Page

[14] See the interest based reporting report frame here, http://www.xbrlsite.com/2014/Prototype/ReportFrames/INTBX-BSU-CF1-ISS-IEMIX-OILN/INTBX-BSU-CF1-ISS-IEMIX-OILN.html

Each report frame is clearly supported by the entities which actually make use of that report frame which can be seen below using a commercial software product[15]:

Income Statement [Line Items]	Period [Axis]: 2013-01-01 - 2013-12-31	
	Fact	
	Value	Origin
Net Income (Loss) [Roll Up]		
Income (Loss) from Continuing Operations After Tax [Roll Up]		
Income (Loss) from Continuing Operations Before Tax [Roll Up]		
Interest Income (Expense), After Provision for Losses [Roll Up]		
Interest Income (Expense), Net [Roll Up]		
Interest and Dividend Income, Operating	22,952,000	fac:InterestAndDividendIncomeOperating[us-gaap:InterestAndDividendIncomeOperating[22,952,000]]
Interest Expense, Operating	4,194,000	fac:InterestExpenseOperating[us-gaap:InterestExpense[4,194,000]]
Interest Income (Expense), Operating, Net	18,758,000	fac:InterestIncomeExpenseOperatingNet[us-gaap:InterestIncomeExpenseNet[18,758,000]]
Provision for Loan, Lease, and Other Losses	(681,000)	fac:ProvisionForLoanLeaseAndOtherLosses[us-gaap:ProvisionForLoanAndLeaseLosses[-681,000]]
Interest Income (Expense) After Provision for Losses	19,439,000	fac:InterestIncomeExpenseAfterProvisionForLosses[us-gaap:InterestIncomeExpenseAfterProvisionForLoanLoss[19,439,000]]
Noninterest Income	8,034,000	fac:NoninterestIncome[us-gaap:NoninterestIncome[8,034,000]]
Noninterest Expense	25,394,000	fac:NoninterestExpense[us-gaap:NoninterestExpense[25,394,000]]
Income (Loss) from Equity Method Investments	0	fac:IncomeLossFromEquityMethodInvestments[0] = 0
Income (Loss) from Continuing Operations Before Tax	2,079,000	fac:IncomeLossFromContinuingOperationsBeforeTax[us-gaap:IncomeLossFromContinuingOperationsBeforeIncomeTaxesMinorityInterestAndIncomeLossFromEquityMethodInvestments[2,079,000]]
Income Tax Expense (Benefit)	625,000	fac:IncomeTaxExpenseBenefit[us-gaap:IncomeTaxExpenseBenefit[625,000]]
Income (Loss) from Continuing Operations After Tax	1,454,000	fac:IncomeLossFromContinuingOperationsAfterTax[1,454,000] = fac:NetIncomeLoss[us-gaap:NetIncomeLoss[1,454,000]] - fac:IncomeLossFromDiscontinuedOperationsNetOfTax[0] - fac:ExtraordinaryItemsOfIncomeExpenseNetOfTax[0]
Income (Loss) from Discontinued Operations, Net of Tax	0	fac:IncomeLossFromDiscontinuedOperationsNetOfTax[0] = 0
Extraordinary Items of Income (Expense), Net of Tax	0	fac:ExtraordinaryItemsOfIncomeExpenseNetOfTax[0] = 0
Net Income (Loss)	1,454,000	fac:NetIncomeLoss[us-gaap:NetIncomeLoss[1,454,000]]

This is all a work in progress, but usable today. The existing report frames clearly show the opportunity. As errors are discovered, new report frames will be created, existing report frames corrected, entities might be moved from one report frame set to another. Any other software bugs or errors will be corrected over time. The goal is 100% of reporting entities in conformance with 100% of the fundamental accounting concept relations. Today 60% of entities conform to 100% of the fundamental accounting concept relations and 98.7% of relations are conformed with.

Conformance to Fundamental Accounting Concepts Relations Using Report Frames

You can think of each report frame as its own specific set of fundamental accounting concepts and relations between those concepts. A report frame could have thousands of reporting entities which make use of the report frame or it could be that the report frame is unique to one reporting entity.

[15] Human readable information about report frame, http://www.xbrlsite.com/2014/Demos/evidence-package_InterestBasedRevenues/#RenderingSummary.html

Below is the current complete set of report frames, a “Filings Count” which shows the number of entities which use that report frame, “Filings With No Errors” which shows the number of entities with 100% conformance to the report frame, “Sum Errors (all filings)” which shows the total number of errors for all filings using that report frame, “Average Errors per filing” which is the sum of all errors divided by the filing count:

1	Report Frame Code	Filings Count	Filings With No Errors	Sum Errors (all filings)	Average Errors per Filing	Percent Without Error	Industry	Balance sheet form	Income statement form	Income (loss) from equity method investments location	Operating income (loss) reported	Cash flow statement exchange gains location
2	COMID-BSC-CF2-ISM-IEMIX-OILN	1	1	0	.0	100%	COMID	BSC	ISM	IEMIX	OILN	CF2
3	COMID-BSL-CF1-ISS-IEMIX-OILN	4	4	0	.0	100%	COMID	BSL	ISS	IEMIX	OILN	CF1
4	COMID-BSU-CF1-ISM-IEMIA-OILY	1	1	0	.0	100%	COMID	BSU	ISM	IEMIA	OILY	CF1
5	COMID-BSU-CF1-ISM-IEMIN-OILY	1	1	0	.0	100%	COMID	BSU	ISM	IEMIN	OILY	CF1
6	COMID-BSU-CF2-ISS-IEMIB-OILY	1	1	0	.0	100%	COMID	BSU	ISS	IEMIB	OILY	CF2
7	INSBX-BSU-CF1-ISS-IEMIR-OILN	2	2	0	.0	100%	INSBX	BSU	ISS	IEMIR	OILN	CF1
8	REITX-BSC-CF1-ISS-IEMIB-OILN	1	1	0	.0	100%	REITX	BSC	ISS	IEMIB	OILN	CF1
9	REITX-BSC-CF1-ISS-IEMIB-OILY	1	1	0	.0	100%	REITX	BSC	ISS	IEMIB	OILY	CF1
10	SECBX-BSC-CF1-ISS-IEMIB-OILN	1	1	0	.0	100%	SECBX	BSC	ISS	IEMIB	OILN	CF1
11	SECBX-BSU-CF1-ISS-IEMIA-OILN	1	1	0	.0	100%	SECBX	BSU	ISS	IEMIA	OILN	CF1
12	SECBX-BSU-CF1-ISS-IEMIR-OILN	2	2	0	.0	100%	SECBX	BSU	ISS	IEMIR	OILN	CF1
13	COMID-BSU-CF1-ISS-IEMIN-OILY	5	4	1	.2	80%	COMID	BSU	ISS	IEMIN	OILY	CF1
14	SECBX-BSU-CF1-ISS-IEMIX-OILY	14	10	9	.6	71%	SECBX	BSU	ISS	IEMIX	OILY	CF1
15	SECBX-BSU-CF1-ISS-IEMIX-OILN	45	32	22	.5	71%	SECBX	BSU	ISS	IEMIX	OILN	CF1
16	COMID-BSU-CF1-ISS-IEMIX-OILY	75	53	42	.6	71%	COMID	BSU	ISS	IEMIX	OILY	CF1
17	COMID-BSC-CF1-ISM-IEMIN-OILY	37	26	13	.4	70%	COMID	BSC	ISM	IEMIN	OILY	CF1
18	COMID-BSC-CF1-ISS-IEMIA-OILY	33	23	12	.4	70%	COMID	BSC	ISS	IEMIA	OILY	CF1
19	INSBX-BSU-CF1-ISS-IEMIX-OILN	48	33	19	.4	69%	INSBX	BSU	ISS	IEMIX	OILN	CF1
20	COMID-BSC-CF1-ISS-IEMIX-OILY	1,620	1,113	789	.5	69%	COMID	BSC	ISS	IEMIX	OILY	CF1
21	INTBX-BSU-CF1-ISS-IEMIX-OILN	632	431	310	.5	68%	INTBX	BSU	ISS	IEMIX	OILN	CF1
22	COMID-BSC-CF1-ISS-IEMIA-OILN	3	2	1	.3	67%	COMID	BSC	ISS	IEMIA	OILN	CF1
23	COMID-BSC-CF1-ISS-IEMIN-OILN	3	2	1	.3	67%	COMID	BSC	ISS	IEMIN	OILN	CF1
24	COMID-BSC-CF2-ISS-IEMIA-OILY	3	2	1	.3	67%	COMID	BSC	ISS	IEMIA	OILY	CF2
25	REITX-BSU-CF1-ISS-IEMIR-OILN	3	2	9	3.0	67%	REITX	BSU	ISS	IEMIR	OILN	CF1
26	COMID-BSC-CF1-ISM-IEMIA-OILY	34	22	18	.5	65%	COMID	BSC	ISM	IEMIA	OILY	CF1
27	COMID-BSC-CF1-ISM-IEMIX-OILY	1,929	1,238	1,026	.5	64%	COMID	BSC	ISM	IEMIX	OILY	CF1
28	COMID-BSC-CF1-ISM-IEMIB-OILY	349	211	219	.6	60%	COMID	BSC	ISM	IEMIB	OILY	CF1
29	COMID-BSC-CF1-ISS-IEMIR-OILN	5	3	3	.6	60%	COMID	BSC	ISS	IEMIR	OILN	CF1
30	COMID-BSC-CF1-ISS-IEMIB-OILY	586	350	378	.6	60%	COMID	BSC	ISS	IEMIB	OILY	CF1
31	COMID-BSU-CF1-ISS-IEMIB-OILN	63	36	46	.7	57%	COMID	BSU	ISS	IEMIB	OILN	CF1
32	COMID-BSU-CF1-ISM-IEMIX-OILN	11	6	11	1.0	55%	COMID	BSU	ISM	IEMIX	OILN	CF1
33	COMID-BSU-CF1-ISS-IEMIB-OILY	107	56	97	.9	52%	COMID	BSU	ISS	IEMIB	OILY	CF1
34	COMID-BSC-CF1-ISS-IEMIN-OILY	65	33	54	.8	51%	COMID	BSC	ISS	IEMIN	OILY	CF1
35	COMID-BSU-CF1-ISS-IEMIX-OILN	163	82	132	.8	50%	COMID	BSU	ISS	IEMIX	OILN	CF1
36	COMID-BSC-CF1-ISS-IEMIR-OILY	4	2	5	1.3	50%	COMID	BSC	ISS	IEMIR	OILY	CF1
37	COMID-BSU-CF1-ISS-IEMIA-OILY	2	1	1	.5	50%	COMID	BSU	ISS	IEMIA	OILY	CF1
38	REITX-BSC-CF1-ISS-IEMIX-OILY	8	4	5	.6	50%	REITX	BSC	ISS	IEMIX	OILY	CF1
39	SECBX-BSC-CF1-ISS-IEMIB-OILY	2	1	1	.5	50%	SECBX	BSC	ISS	IEMIB	OILY	CF1
40	SECBX-BSC-CF1-ISS-IEMIN-OILY	2	1	1	.5	50%	SECBX	BSC	ISS	IEMIN	OILY	CF1
41	COMID-BSU-CF1-ISM-IEMIX-OILY	76	37	74	1.0	49%	COMID	BSU	ISM	IEMIX	OILY	CF1
42	COMID-BSC-CF1-ISS-IEMIB-OILN	230	104	219	1.0	45%	COMID	BSC	ISS	IEMIB	OILN	CF1
43	COMID-BSC-CF1-ISM-IEMIX-OILN	163	72	179	1.1	44%	COMID	BSC	ISM	IEMIX	OILN	CF1
44	COMID-BSC-CF2-ISS-IEMIX-OILN	14	6	13	.9	43%	COMID	BSC	ISS	IEMIX	OILN	CF2
45	COMID-BSU-CF1-ISM-IEMIB-OILY	15	6	10	.7	40%	COMID	BSU	ISM	IEMIB	OILY	CF1
46	COMID-BSC-CF2-ISM-IEMIX-OILY	44	17	41	.9	39%	COMID	BSC	ISM	IEMIX	OILY	CF2
47	COMID-BSC-CF2-ISS-IEMIX-OILY	16	6	18	1.1	38%	COMID	BSC	ISS	IEMIX	OILY	CF2
48	REITX-BSC-CF1-ISM-IEMIX-OILY	8	3	12	1.5	38%	REITX	BSC	ISM	IEMIX	OILY	CF1

1	Report Frame Code	Filings Count	Filings With No Errors	Sum Errors (all filings)	Average Errors per Filing	Percent Without Error	Industry	Balance sheet form	Income statement form	Income (loss) from equity method investments location	Operating income (loss) reported	Cash flow statement exchange gains location
49	SECBX-BSC-CF1-ISS-IEMIX-OILY	14	5	20	1.4	36%	SECBX	BSC	ISS	IEMIX	OILY	CF1
50	COMID-BSC-CF2-ISS-IEMIB-OILY	3	1	5	1.7	33%	COMID	BSC	ISS	IEMIB	OILY	CF2
51	REITX-BSC-CF1-ISS-IEMIX-OILN	6	2	10	1.7	33%	REITX	BSC	ISS	IEMIX	OILN	CF1
52	REITX-BSU-CF1-ISS-IEMIA-OILY	3	1	3	1.0	33%	REITX	BSU	ISS	IEMIA	OILY	CF1
53	REITX-BSU-CF1-ISS-IEMIX-OILY	30	10	40	1.3	33%	REITX	BSU	ISS	IEMIX	OILY	CF1
54	SECBX-BSC-CF1-ISS-IEMIX-OILN	7	2	6	.9	29%	SECBX	BSC	ISS	IEMIX	OILN	CF1
55	COMID-BSC-CF1-ISS-IEMIX-OILN	295	77	372	1.3	26%	COMID	BSC	ISS	IEMIX	OILN	CF1
56	COMID-BSC-CF2-ISM-IEMIB-OILY	4	1	6	1.5	25%	COMID	BSC	ISM	IEMIB	OILY	CF2
57	UTILX-BSC-CF1-ISS-IEMIA-OILN	25	6	28	1.1	24%	UTILX	BSC	ISS	IEMIA	OILN	CF1
58	REITX-BSU-CF1-ISS-IEMIX-OILN	62	12	88	1.4	19%	REITX	BSU	ISS	IEMIX	OILN	CF1
59	REITX-BSU-CF1-ISS-IEMIB-OILN	8	1	16	2.0	13%	REITX	BSU	ISS	IEMIB	OILN	CF1
60	REITX-BSU-CF1-ISS-IEMIB-OILY	17	2	48	2.8	12%	REITX	BSU	ISS	IEMIB	OILY	CF1
61	COMID-BSC-CF1-ISM-IEMIB-OILN	9	1	18	2.0	11%	COMID	BSC	ISM	IEMIB	OILN	CF1
62	COMID-BSC-CF1-ISM-IEMIA-OILN	1	0	2	2.0	0%	COMID	BSC	ISM	IEMIA	OILN	CF1
63	COMID-BSC-CF2-ISM-IEMIN-OILY	1	0	3	3.0	0%	COMID	BSC	ISM	IEMIN	OILY	CF2
64	COMID-BSU-CF1-ISM-IEMIB-OILN	1	0	3	3.0	0%	COMID	BSU	ISM	IEMIB	OILN	CF1
65	COMID-BSU-CF1-ISS-IEMIA-OILN	2	0	3	1.5	0%	COMID	BSU	ISS	IEMIA	OILN	CF1
66	COMID-BSU-CF2-ISM-IEMIX-OILN	1	0	3	3.0	0%	COMID	BSU	ISM	IEMIX	OILN	CF2
67	COMID-BSU-CF2-ISS-IEMIX-OILN	4	0	3	.8	0%	COMID	BSU	ISS	IEMIX	OILN	CF2
68	COMID-BSU-CF2-ISS-IEMIX-OILY	2	0	3	1.5	0%	COMID	BSU	ISS	IEMIX	OILY	CF2
69	REITX-BSC-CF1-ISM-IEMIA-OILY	1	0	3	3.0	0%	REITX	BSC	ISM	IEMIA	OILY	CF1
70	REITX-BSC-CF1-ISM-IEMIX-OILN	1	0	3	3.0	0%	REITX	BSC	ISM	IEMIX	OILN	CF1
71	REITX-BSC-CF1-ISS-IEMIA-OILY	1	0	2	2.0	0%	REITX	BSC	ISS	IEMIA	OILY	CF1
72	REITX-BSU-CF1-ISS-IEMIA-OILN	2	0	3	1.5	0%	REITX	BSU	ISS	IEMIA	OILN	CF1
73	REITX-BSU-CF1-ISS-IEMIN-OILN	1	0	3	3.0	0%	REITX	BSU	ISS	IEMIN	OILN	CF1
74	REITX-BSU-CF1-ISS-IEMIN-OILY	3	0	3	1.0	0%	REITX	BSU	ISS	IEMIN	OILY	CF1
75	REITX-BSU-CF2-ISS-IEMIB-OILN	1	0	3	3.0	0%	REITX	BSU	ISS	IEMIB	OILN	CF2
76	REITX-BSU-CF2-ISS-IEMIB-OILY	1	0	3	3.0	0%	REITX	BSU	ISS	IEMIB	OILY	CF2
77	SECBX-BSU-CF1-ISM-IEMIX-OILN	1	0	4	4.0	0%	SECBX	BSU	ISM	IEMIX	OILN	CF1
78	SECBX-BSU-CF1-ISS-IEMIA-OILY	1	0	3	3.0	0%	SECBX	BSU	ISS	IEMIA	OILY	CF1
79	SECBX-BSU-CF1-ISS-IEMIB-OILY	1	0	2	2.0	0%	SECBX	BSU	ISS	IEMIB	OILY	CF1
80	SECBX-BSU-CF1-ISS-IEMIN-OILN	3	0	5	1.7	0%	SECBX	BSU	ISS	IEMIN	OILN	CF1
81	SECBX-BSU-CF2-ISS-IEMIB-OILY	1	0	3	3.0	0%	SECBX	BSU	ISS	IEMIB	OILY	CF2
82	SECBX-BSU-CF2-ISS-IEMIN-OILY	1	0	4	4.0	0%	SECBX	BSU	ISS	IEMIN	OILY	CF2
83		6,947	4,167	4,516	.7							
84	Fund or trust	2,062										
85	Unknown	5										
86	Inactive filers	2,956										
87	Total Entities in EDGAR System	11,970										
88												
89		60.0%										

Again, note that not all report frames are complete, many are still under construction. However, all the information to make each report frame does operate currently. It may need adjustment and the results might be no better than, or perhaps even worse than, the older single fundamental accounting concepts process. Again, these are still under construction. Each report frame has its own set of mappings to US GAAP XBRL Taxonomy concepts and impute rules to imply facts which were not explicitly reported.

And so, while the screen shot below might look very similar to the older approach to verifying conformance to the fundamental accounting concepts by software product or filing agent, it is actually quite different. Rather than each filing being validated against one set of mappings and one set of impute rules, each filing has been validated using one of the current 81 different report frames appropriate for the reporting used by that specific entity.

Here are the validation results in format which I have been using for the past year by each generator (a generator being a software produce or filing agent):

Generator	Filings Count	Filings With No Errors	Sum Errors (all filings)	Average Errors per Filing	Percent Without Error
Trintech	2	2	0	.0	100%
SAP Disclosure Management	4	3	1	.3	75%
P3 Data Systems	209	146	89	.4	70%
RR Donnelley	994	694	445	.4	70%
DataTracks	417	277	216	.5	66%
CompSci	439	283	233	.5	64%
Compliance Xpressware	91	58	52	.6	64%
Ez-XBRL	346	219	196	.6	63%
Accelus	207	129	124	.6	62%
Novaworks Software	581	341	406	.7	59%
GoXBRL	286	166	205	.7	58%
Rivet	239	138	170	.7	58%
Merrill	480	275	311	.6	57%
WebFilings	1,888	1,064	1,390	.7	56%
NeoClarus	98	52	91	.9	53%
IBM Cognos	98	50	91	.9	51%
QXi	171	87	138	.8	51%
Oracle	2	1	2	1.0	50%
SmartXBRL	4	2	9	2.3	50%
Advanced Computer Innovations	359	170	312	.9	47%
Unknown	21	7	27	1.3	33%
Fujitsu	11	3	8	.7	27%
	6,947	4,167	4,516	.7	
Percent of all filings conforming to all FAC relations		60.0%			

Note that the grand totals and total conforming percentages are the same values as the totals for the breakdown by report frame. The report frame breakdown and the generator breakdown are simply two different views of exactly the same detailed information.

Additional Breakdowns of Information

Below are some additional breakdowns which provide additional insight into the information reported by SEC XBRL-based financial filings:

The breakdown below shows the Filing Count, Sum of Errors, and Average Errors per Filing broken down by Entity Filer Category (note that the amount of filings with no nonconforming items is not shown):

Entity Filer Category	Filings Count	Sum Errors (all filings)	Average Errors per Filing
Smaller Reporting Company	3,202	1,990	.6
Large Accelerated Filer	1,668	1,299	.8
Accelerated Filer	1,264	661	.5
Non-accelerated Filer	786	537	.7
Not reported	20	26	1.1
Smaller Reporting Accelerated Filer	3	3	1.0
	6,943	4,516	.7

This breakdown of conformance to fundamental accounting concept relations above by entity filer category shows the average errors per filing (nonconformance to the fundamental accounting concept relations) of each entity filer category.

The breakdown below shows an educated guess as to the cause of the nonconforming item. This educated guess is based on patterns of why filings do not conform based on the results seen from other tests[16]:

Probable Cause of Nonconforming Issue (educated estimate)	Issues	Percent
Filer error	3,067	67.9%
US GAAP XBRL Taxonomy (missing concept)	290	6.4%
Impute rules error	1,159	25.7%
Total Nonconforming items	4,516	100.0%

The reasoning used to support these estimates goes like this: Of the total 4,516 current nonconforming relations in SEC XBRL-based financial filings, 3,067 nonconforming items relate

[16] See documentation for each individual test here, http://xbrl.squarespace.com/understanding-sec-xbrl-financi/

to filer error. This is determined by taking the sum of all the balance sheet tests (B1 to B5), all the cash flow statement tests (CF1 to CF6), and specific income statement tests which are all very high in reliability and conformance and simply adding them up. There is very high probability that 67.9% of nonconforming items are the result of filer error given the accurate results obtained from these specific conformance tests.

The 290 nonconforming items, or 6.4% of all nonconforming items, are the result of three missing concepts which should exist and must exist in the US GAAP XBRL Taxonomy in order to successfully conform to these tests. The missing US GAAP XBRL Taxonomy concepts are the following:

- **Operating and Nonoperating Revenues**: This total does not currently exist in the US GAAP XBRL Taxonomy and filers must create an extension concept as a result and therefore cannot currently conform to all fundamental relations as a result.
- **Operating and Nonoperating Costs and Expenses:** This total does not currently exist in the US GAAP XBRL Taxonomy and filers must create an extension concept as a result and therefore cannot currently conform to all fundamental relations as a result.
- **Nonoperating Income (Expenses) Including Income (Loss) from Equity Method Investments:** This total does not currently exist in the US GAAP XBRL Taxonomy and filers must create an extension concept as a result and therefore cannot currently conform to all fundamental relations as a result.

All of the above issues can be observed by analyzing the entities which make use of specific report frames.

The remaining 1,159 items are more likely than not errors in the impute rules or mapping rules which exist for the report frames. Those errors/bugs in the process will be detected and corrected over time. As the number of filer errors goes down, the effort necessary to find and correct these impute rule and mapping errors will become easier to find.

The following two graphics put the nonconforming items into perspective. While there are 4,516 nonconforming items; the vast majority of relations in SEC XBRL-based financial filings do conform to the approximately 51 fundamental accounting concepts and 21 relations between those concepts.

Conforming Relative to Nonconforming Items	Items	Percent
Nonconforming items	4,516	1.3%
Conforming items	349,781	98.7%
Total possible items (51 concepts times 6,947 filings)	354,297	100.0%

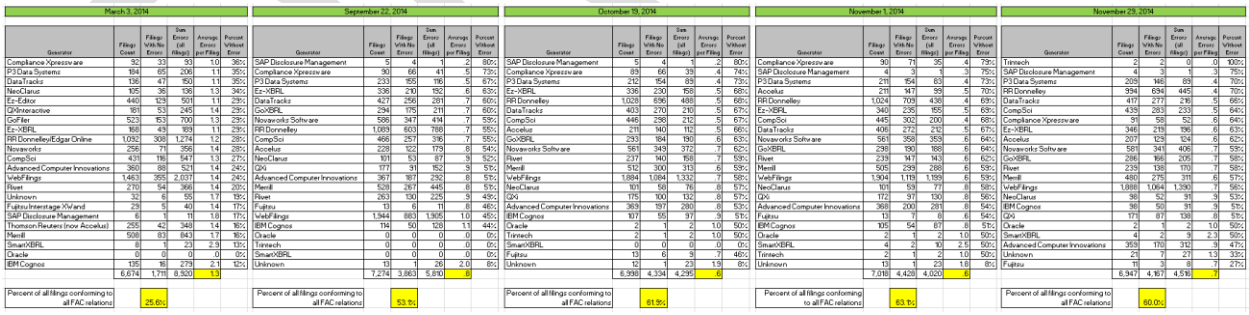
Conforming Relative to Nonconforming Items	Items	Percent
Nonconforming items	4,516	3.1%
Conforming items	141,371	96.9%
Total possible items (21 relations times 6,947 filings)	145,887	100.0%

There are two ways that you can look at the relative conforming and nonconforming items, both approaches are shown. The first approach is by fundamental accounting concept. This can be deemed an inappropriate approach because it is easy to comply with this test because many fundamental accounting concepts have no relations to other concepts. By contrast the 21 specific tests are not really all the relations tested. It is each concept which exists in the relations and not just the number of relations which are tested. And so, the two approaches show two possible extremes. The correct measurement of conformance to these fundamental accounting concepts is likely somewhere between the low of 96.9% conformance and 98.7% conformance. The point is this: either way, conformance is very, very high.

But the necessary result is 100% conformance and that is why the number of SEC XBRL-based financial filings which pass all of these conformance tests is tracked. Currently, the best estimate is that conformance to individual tests is between 96.9% and 98.7% as mentioned above; conformance to all conformance test by a filing is at a level of 60.0% currently but has been increasing rapidly.

Impact of Software of Filing Agent to Fundamental Accounting Concept Conformance

The graphic below shows how different generators (software vendors or filing agents) in terms of complying with the fundamental accounting concept relations[17]:



Conformance to the fundamental accounting concept relations has grown from 25.6% in March 2014 to the current conformance rate of 60.0%. Average nonconforming items per filing have dropped from 1.3 nonconforming items per filing to .7 nonconforming items per filing. The sum of all nonconforming items for all entities as dropped from 8,920 to the current 4,516 nonconforming items.

[17] For a larger image please see, http://www.xbrlsite.com/2014/Library/FAC_Compare_November29.jpg

Consider two questions. First, why would the conformance to fundamental accounting concept relations differ so significantly by software vendor or filing agent? What would cause a correlation or causal relationship between the two? The answer to this question is clearly the quality level that a software vendor or filing agent is capable of achieving. It is highly unlikely that the SEC XBRL-based financial filings themselves would differ in terms of conformance to some set of fundamental accounting concept relations. It is the ability of software products or filing agents to achieve some level of quality which determines their conformance or nonconformance, not what is reported in the filing.

The second question is: What is the difference between a software product or filing agents with say a 95% conformance rate to a software vendor or filing agent which has a 100% conformance rate? The answer is systemic quality achievable by the system or process. The ability of a process used by a software product or filing agent is crucial to deliver the same result over and over. Some software products or filing agents will achieve systemic quality sooner than others. But eventually, systemic quality will be achieved by all software products and filing agents.

Concluding remarks

The purpose of this document is to explain what a report frame is and explain the difference between conformance testing done related to fundamental accounting concepts and relations between those concepts previously and the new approach which I have developed and will use going forward.

This document is not reporting any new insight related to accounting; it is simply making an observation of the empirical evidence provided by public company financial reports which have been examined. What the document does show is that the consistency of common practices of financial reporting arrived at over the past 100 years of financial reporting can be leveraged.

While the previous report was restricted to one set of fundamental accounting concepts and relations between those concepts, the new approach eliminates that restriction. As such, *it is possible to support any set of fundamental accounting concepts and relations between those concepts*.

Contemplate that statement: *it is possible to support any set of fundamental accounting concepts and relations between those concepts*. If, as mentioned previously, the goal is 100% conformance of all entities to 100% of all fundamental accounting concepts and relations between those concepts; and if any set of fundamental accounting concepts could be supported using this approach; then what does that mean about extensibility? Are report frames a method of controlling extensibility? The answer to that question is yes. The importance of report frames or report pallets will be further discussed in another paper.