

Common Elements of Financial Statements

Building on the FASB and IASB conceptual frameworks to facilitate XBRL-based financial reporting

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“I skate to where the puck is going to be, not where it has been.” *Wayne Gretzky*,
legendary Canadian hockey star

Executive summary:

- FASB issued SFAC 6¹ which defines the elements of financial statements. Ten core high-level financial statements are defined.
- The elements of financial statements are the building blocks from which financial statements are constructed. The elements are the classes of items that comprise a financial statement. The interrelations between the classes of elements are also specified.
- Articulation is the notion that the four primary financial statements are interrelated.
- This document enhances those ten core element definitions in three ways. First, it puts these definitions in machine-readable form. Second, it puts the elements in context by showing the associations between the concepts. Third, it adds additional important concepts that are ultimately defined implicitly or explicitly by the FASB to provide a complete set of core high-level financial report elements.

¹ FASB, *Statement of Financial Reporting Concepts No. 6 (SFAC 6), Elements of Financial Statements*,
https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1218220132802

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FASB SFAC 6² explicitly defines 10 elements of a financial statement. Those elements are: assets, liabilities, equity, investments by owners, distributions to owners, comprehensive income, revenues, expenses, gains, losses.

The elements of financial statements are the building blocks from which financial statements are constructed. The elements are the classes of items that comprise a financial statement.

This document enhances those ten core element definitions in three ways. First, it puts these definitions in machine-readable form. Second, it puts the elements in context by showing the associations between the concepts. Third, it adds additional important common elements that are ultimately defined implicitly or explicitly by the FASB to provide a complete set of common high-level elements of financial statements.

Double-entry Accounting.

Single-entry accounting is how ‘everyone’ would do accounting. In fact, that is how accounting was done for about 4,000 years before double-entry accounting was invented. Double-entry accounting was the invention of medieval merchants and was first documented by the Italian mathematician and Franciscan Friar Luca Pacioli³ in 1494. The section related to double-entry accounting was translated into English in 1914⁴.

Double-entry accounting adds an additional important property to the accounting system, that of a clear strategy to identify errors and to remove the errors from the system. Even better, double-entry accounting has a side effect of clearly firewalling errors as either accident or fraud. This then leads to an audit strategy. Double-entry accounting is how professional accountants do accounting.

Which came first, double-entry accounting or the enterprise? It is hard to overstate the impact of double-entry accounting on the evolution of the complex global enterprise⁵.

² FASB, *Statement of Financial Reporting Concepts No. 6 (SFAC 6), Elements of Financial Statements*, https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1218220132802

³ Wikipedia, *Luca Pacioli*, https://en.wikipedia.org/wiki/Luca_Pacioli

⁴ J. B. Geijsbeek, *Ancient Double-Entry Bookkeeping*, <https://archive.org/details/ancientdoubleent00geij/page/n3>

⁵ Ian Grigg, *Triple Entry Accounting*, https://iang.org/papers/triple_entry.html

Foundational Mathematical Equation for Double-Entry Accounting

The foundational basis of double-entry accounting is straightforward. Quoting David Ellerman from his paper *The Math of Double-Entry Bookkeeping: Part I (scalars)*⁶:

“Given an equation $w + \dots + x = y + \dots + z$, it is not possible to change just one term in the equation and have it still hold. Two or more terms must be changed.”

And so, the left-hand side of the equation “ $w + \dots + x$ ” (the DEBIT side) must always equal the right-hand side of the equation “ $y + \dots + z$ ” (the CREDIT side) in double-entry accounting. The reason that double-entry accounting is used, as contrast to single-entry accounting, is double-entry accounting’s capability to detect errors and to distinguish an error from fraud.

Of course, there are a lot of details associated with setting up and operating an accounting system appropriately, but the fundamental feature is that DEBITS must equal CREDITS and if they don’t, then something is up which needs to be investigated and corrected.

If you desire to learn more about double-entry accounting, see Colin Dodd’s rap song, Debit Credit Theory (Accounting Rap Song)⁷.

The Accounting Equation: Framework for Financial Accounting

While the model “Debits = Credits” or the notion of basically using two single entry ledgers and synchronizing them to detect errors or fraud is useful; additional power is provided to double-entry accounting via the accounting equation⁸ which is:

$$\text{“Assets = Liabilities + Equity”}$$

The accounting equation within the double-entry accounting is the fundamental basis for financial accounting. By definition, every financial reporting scheme⁹ has this high-level model at its core.

⁶ David Ellerman, *The Math of Double-Entry Bookkeeping: Part I (scalars)*, <http://www.ellerman.org/the-math-ofdouble-entry-bookkeeping-part-i-scalars/>

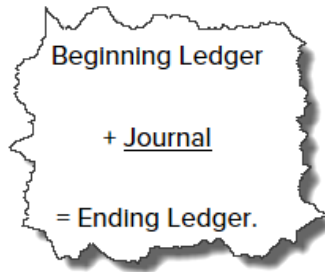
⁷ YouTube, Colin Dodd’s rap song, *Debit Credit Theory (Accounting Rap Song)*, <https://www.youtube.com/watch?v=j71Kmxv7smk>

⁸ Wikipedia, Accounting Equation, https://en.wikipedia.org/wiki/Accounting_equation

⁹ Charles Hoffman, CPA, *Comparison of Financial Reporting Schemes High Level Concepts*, <http://xbrrsite.azurewebsites.net/2018/Library/ReportingSchemes-2018-12-30.pdf>

Ledgers and Journals, Stocks and Flows

Another important piece of double-entry accounting is explained well in David Ellerman's article, *The Math of Double-Entry Bookkeeping: Part II (vectors)*, is ledgers and journals¹⁰. Many accountants use the terms "ledger" and "journal" incorrectly. This works the same for general and special ledgers and journals. This is the relationship between a ledger and a journal:


$$\text{Beginning Ledger} + \text{Journal} = \text{Ending Ledger.}$$

Ledgers summarized balances. For example, the general ledger summarizes account balances.

Journals record the transactions which make up the changes between ledger balances. Other terms used for the relationship shown above are "roll forward" or "movements" or "stocks and flows" or "account analysis". All three of these terms basically explain the following equation:

$$\text{"Beginning balance + Additions - Subtractions = Ending balance"}$$

Balance sheet accounts are stocks. Roll forwards of the beginning and ending balances of balance sheet accounts are flows. The income statement is a flow of net income (loss). The cash flow statement is a roll forward of the net change in cash and cash equivalents. The statement of changes in equity is a roll forward of equity accounts.

Many transactions, events, circumstances, and other phenomenon are recorded as transactions in a journal, make their way to a ledger, and then end up in the primary financial statements or within disclosures which detail the line items of the primary financial statements. Much of this information is part of the two trees which make up the roll ups of "Assets" and "Liabilities and Equity". However, other there are other trees that can make up the complete "forest" of a financial report. For more information about the "forest" and the "trees" of a financial report, see the document *Leveraging the Theoretical and Mathematical Underpinnings of a Financial*

¹⁰ David Ellerman, *The Math of Double-Entry Bookkeeping: Part II (vectors)*, <http://www.ellerman.org/the-math-of-double-entry-bookkeeping-part-ii-vectors/>

*Report*¹¹. That document also has some good information related to triple-entry accounting which I am not going to get into here.

As pointed out in the document *General Ledger Trial Balance to External Financial Report*¹², each balance sheet line item has a roll forward. While perhaps not reported externally, these roll forwards can be quite helpful internally to verify that a financial report has been created correctly.

Core Purpose of Financial Statement

The core purpose of a financial statement is to convey information. Consider the following scenario:

Two economic entities, A and B, each have information about their financial position and financial performance. They must communicate their information to an investor who is making investment decisions which will make use of the combined information so as to draw some conclusions. All three parties (economic entity A, economic entity B, investor) are using a **common set of basic logical principles** (facts, statements, deductive reasoning, inductive reasoning, etc.), **common financial reporting standard concepts and relations** (terms, relations, assertions for US GAAP, IFRS, IPSAS, etc.), and a **common world view** so they should be able to communicate this information fully, so that any inferences which, say, the investor draws from economic entity A's information should also be derivable by economic entity A itself using common basic logical principles, common financial reporting standards (terms, relations, assertions), and common world view; and vice versa; and similarly for the investor and economic entity B.

Building on the Accounting Equation: Elements of a Financial Report

And so now we have a framework for understanding the importance of the elements of a financial report.

Every professional accountant is exposed to the conceptual framework of financial reporting and the elements of a financial report in intermediate accounting. The accounting students

¹¹ Charles Hoffman, CPA, *Leveraging the Theoretical and Mathematical Underpinnings of a Financial Report*, <http://xbrlsite.azurewebsites.net/2018/Library/TheoreticalAndMathematicalUnderpinningsOfFinancialReport.pdf#page=6>

¹² Charles Hoffman, CPA, *General Ledger Trial Balance to External Financial Report*, <http://xbrlsite.azurewebsites.net/2018/RoboticFinance/TrialBalanceToReport.pdf>

might be exposed to different conceptual frameworks, US GAAP¹³ in the United States and International Financial Reporting Standards (IFRS)¹⁴ in the rest of the world. Pretty much any significant or useful financial reporting scheme provides a conceptual framework that helps users of that framework understand the framework.

In addition, others publish interpretations of the conceptual framework of reporting schemes and interpretations of the standards that make up a reporting scheme. Two popular interpretations of IFRS are provided by Deloitte via IASPLUS¹⁵ and IFRSBOX¹⁶.

One issue with all of these resources is that they are published in books or using e-paper like HTML and PDF. They are not machine-readable.

Essentially, the elements of a financial statement defined by the FASB¹⁷ and by the IASB¹⁸ are extremely similar but use slightly different terms. I will treat them as similar.

Elements of a Financial Statement

In order to better enable XBRL-based financial reporting and the effective audit of XBRL-based financial reports¹⁹, I enhanced the elements of a financial statement defined by the FASB. The enhancements included explicitly defining those elements in machine-readable XBRL, articulating the important associations between those elements, and appending that list of ten elements of a financial reports with other critically important elements that are necessary to construct a complete machine-readable model of a financial report. This particular instantiation is being created for US GAAP. These same ideas can be used for IFRS and other financial reporting schemes. In fact, it is incredibly hard to create a useful or even correct XBRL taxonomy for any financial reporting scheme if you do not provide this sort of high-level framework which form the keystones of the financial reporting scheme.

The FASB defines the following ten interrelated elements of a financial report:

- Assets
- Liabilities

¹³ FASB, *Conceptual Framework*, <https://www.fasb.org/jsp/FASB/Page/BridgePage&cid=1176168367774>

¹⁴ IFRS Foundation, *Conceptual Framework for Financial Reporting*, <https://www.ifrs.org/issued-standards/list-of-standards/conceptual-framework/>

¹⁵ Deloitte, IASPLUS, <https://www.iasplus.com/en/news/2018/03/cf>

¹⁶ IFRSBOX, *Conceptual Framework for the Financial Reporting*, <https://www.ifrsbox.com/ifrs-conceptual-framework-2018/>

¹⁷ Elements of Financial Statement Defined by FASB, <http://xbrlsite.azurewebsites.net/2019/Core/core-sfac6/>

¹⁸ Elements of Financial Statement Defined by IASB, <http://xbrlsite.azurewebsites.net/2019/Core/core-ifrs/>

¹⁹ Charles Hoffman, CPA, *Auditing XBRL-based Financial Reports*, <http://xbrlsite.azurewebsites.net/2019/Library/AuditingXBRLBasedFinancialReports.pdf>

- Equity
- Investments by Owners
- Distributions to Owners
- Comprehensive Income
- Revenues
- Expenses
- Gains
- Losses

The FASB uses the analogy of a “photograph” and a “motion picture” to differentiate the two types of elements²⁰. Three elements like a photograph are “assets”, “liabilities” and “equity” and are for a point in time. In XBRL terms, they are instants. The others are like “motion pictures”, over a period of time, in XBRL terms they are durations.

The FASB explicitly states the components of comprehensive income which include: revenues, expenses, gains, and losses²¹.

Note that the balance types, “debit” or “credit”, of each of the ten core elements of a financial statement are not articulated by the FASB. However, professional accountants understand these relations implicitly. However, I am specifying the balance types explicitly in my XBRL representation.

Note the term “interrelated”. If you read the definitions you can implicitly understand the specific interrelations. The FASB uses the term “articulation” to describe the notion that financial statements are fundamentally interrelated²². They result in financial statements that are fundamentally interrelated and connected mathematically. The following two equations articulate the fundamental relationships between all these elements of a financial report. First, as the FASB stated;

$$\text{“Comprehensive Income} = \text{Revenues} - \text{Expenses} + \text{Gains} - \text{Losses”}$$

The equation above defines the relationship between comprehensive income and its components and the equation below define the relations between the other concepts.

$$0 = (\text{Equity}^{T0} + \text{Revenue}^{P1} - \text{Expenses}^{P1} + \text{Gains}^{P1} - \text{Losses}^{P1} + \text{InvestmentsByOwners}^{P1} - \text{DistributionsToOwners}^{P1}) + \text{Liabilities}^{T1} - \text{Assets}^{T1}$$

²⁰ FASB, SFAC 6, page 21, paragraph 20

²¹ FASB, SFAC 6, page 21, paragraph 20

²² FASB, SFAC 6, page 21 and 22, paragraph 21

And so, using both equations, the relations between each of the concepts is crystal clear as long as you understand the balance type (debit, credit) of each of the core elements.

Common Elements of Financial Statement

In order to better create a full set of financial statements it is important to further enhance the core elements of a financial statement with a few more details. As such, the additional core elements were added to this model:

- Current Assets
- Noncurrent Assets
- Current Liabilities
- Noncurrent Liabilities
- Equity Attributable to Controlling Interests
- Equity Attributable to Noncontrolling Interests
- Liabilities and Equity
- Net Cash Flow
- Net Cash Flow from Operating Activities
- Net Cash Flow from Investing Activities
- Net Cash Flow from Financing Activities
- Net Assets
- Net Income
- Income from Ordinary Activities of Entity
- Income from Peripheral or Incidental Transactions of Entity
- Other Comprehensive Income

With these additional elements of a financial statements it is possible to create the four primary financial statements such that they resemble at least shell statements.

Common Structures of Financial Statements

Given the 26 common elements of a financial statement, there are six structures that are apparent.

- Statement of Financial Position (Balance sheet)
- Statement of Financial Performance (Income Statement)
- Statement of Cash Flow
- Statement of Changes in Equity
- Statement of Comprehensive Income

- Statement of Net Assets

These structures are explicitly defined in this model.

Four Statement Model with Shell Statements

As such, we can now create the four statements that make up a set of financial statements. Note that these are not yet intended to resemble actual financial statements. Rather, the purpose of this step is simply to show the connections between the four statements.

Statement of Financial Position (Balance sheet):

Balance Sheet [Abstract]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Abstract]		
Assets [Roll Up]		
Current Assets	3,500	0
Noncurrent Assets	0	0
Assets	3,500	0
Liabilities and Equity [Roll Up]		
Liabilities [Roll Up]		
Current Liabilities	0	0
Noncurrent Liabilities	0	0
Liabilities	0	0
Equity [Roll Up]		
Equity Attributable to Controlling Interest	3,500	0
Equity Attributable to Noncontrolling Interest	0	0
Equity	3,500	0
Liabilities and Equity	3,500	0

Statement of Financial Performance (Comprehensive income):

Comprehensive Income Statement [Abstract]	Period [Axis]
	2020-01-01 - 2020-12-31
Comprehensive Income Statement [Abstract]	
Comprehensive Income [Roll Up]	
Revenues	7,000
(Expenses)	(3,000)
Gains	1,000
(Losses)	(2,000)
Comprehensive Income	3,000

Statement of Cash Flow:

	Period [Axis]
Cash Flow Statement [Abstract]	2020-01-01 - 2020-12-31
Cash Flow Statement [Abstract]	
Net Cash Flow [Roll Up]	
Net Cash Flow from Operating Activities	3,000
Net Cash Flow from Investing Activities	0
Net Cash Flow from Financing Activities	500
Net Cash Flow	3,500
Assets [Roll Forward]	
Assets, Beginning	0
Net Cash Flow	3,500
Assets, Ending	3,500

Note that on a cash flow statement normally the roll forward is for Cash and Cash Equivalents. As we are not yet down to that level of detail, we are using Assets to provide the roll forward.

Statement of Changes in Equity:

	Period [Axis]
Changes in Equity [Abstract]	2020-01-01 - 2020-12-31
Changes in Equity [Abstract]	
Equity [Roll Forward]	
Equity, Beginning	0
Comprehensive Income	3,000
Investments by Owners	1,000
(Distributions to Owners)	(500)
Equity, Ending	3,500

The four statements above show the details of the statement line items; the graphic below shows the interrelationships between the four primary financial statements:

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Balance Sheet [Abstract]		Period [Axis]	
		2020-12-31	2019-12-31
Assets [Roll Up]			
Current Assets		3,500	0
Noncurrent Assets		0	0
	Assets	3,500	0
Liabilities and Equity [Roll Up]			
Liabilities [Roll Up]			
Current Liabilities		0	0
Noncurrent Liabilities		0	0
	Liabilities	0	0
Equity [Roll Up]			
Equity Attributable to Controlling Interest		3,500	0
Equity Attributable to Noncontrolling Interest		0	0
	Equity	3,500	0
	Liabilities and Equity	3,500	0

Cash Flow Statement [Abstract]		Period [Axis]	
		2020-01-01 - 2020-12-31	
Cash Flow Statement [Abstract]			
Net Cash Flow [Roll Up]			
Net Cash Flow from Operating Activities		3,000	
Net Cash Flow from Investing Activities		0	
Net Cash Flow from Financing Activities		500	
	Net Cash Flow	3,500	
Assets [Roll Forward]			
Assets, Beginning		0	
	Net Cash Flow	3,500	
	Assets, Ending	3,500	

Comprehensive Income Statement [Abstract]		Period [Axis]	
		2020-01-01 - 2020-12-31	
Comprehensive Income Statement [Abstract]			
Comprehensive Income [Roll Up]			
Revenues		7,000	
(Expenses)		(3,000)	
Gains		1,000	
(Losses)		(2,000)	
	Comprehensive Income	3,000	

Changes in Equity [Abstract]		Period [Axis]	
		2020-01-01 - 2020-12-31	
Changes in Equity [Abstract]			
Equity [Roll Forward]			
Equity, Beginning		0	
Comprehensive Income		3,000	
Investments by Owners		1,000	
(Distributions to Owners)		(500)	
	Equity, Ending	3,500	

The details and the relationships can be tested by running the supporting XBRL taxonomy and XBRL instance that define the elements, the associations between the elements, and the assertions which show mathematical relations between the elements processed by an XBRL formula processor:

id	satisfied	message
ASSERTION_elements_Equality_AccountingEquation (evaluation 1)	satisfied	$\$Assets=0 = \$Liabilities=0 + \$Equity=0$
ASSERTION_elements_Equality_AccountingEquation (evaluation 2)	satisfied	$\$Assets=3500 = \$Liabilities=0 + \$Equity=3500$
ASSERTION_elements_Equality_AccountingEquation_NetAssetsApproach (evaluation 1)	satisfied	$\$NetAssets=0 = \$Assets=0 - \$Liabilities=0$
ASSERTION_elements_Equality_AccountingEquation_NetAssetsApproach (evaluation 2)	satisfied	$\$NetAssets=3500 = \$Assets=3500 - \$Liabilities=0$
ASSERTION_elements_ROLLUP_ComprehensiveIncome (evaluation 1)	satisfied	$\$ComprehensiveIncome=3000 = (\$Revenues=7000 + \$Gains=1000 - \$Expenses=3000 - \$Losses=2000)$
ASSERTION_elements_ROLLFORWARD_Equity (evaluation 1)	satisfied	$\$Equity_BalanceStart=0 + \$ComprehensiveIncome=3000 + \$InvestmentsByOwners=1000 - \$DistributionsToOwners=500 = \$Equity_BalanceEnd=3500$
ASSERTION_elements_ROLLFORWARD_Assets (evaluation 1)	satisfied	$\$Assets_BalanceStart=0 + \$NetCashFlow=3500 = \$Assets_BalanceEnd=3500$
ASSERTION_elements_CONCEPTUAL_FRAMEWORK_RECONCILIATION (evaluation 1)	satisfied	$0 = ((\$Equity_BalanceStart=0 + ((\$Revenues=7000 - \$Expenses=3000) + (\$Gains=1000 - \$Losses=2000))) + (\$InvestmentsByOwners=1000 - \$DistributionsToOwners=500)) + (\$Liabilities_BalanceEnd=0 - \$Assets_BalanceEnd=3500))$

This verifies that the XBRL-based report and the logical relations articulated via that report are as would be expected. Further, other structures that are not part of the four common statements also proven to be correct and do not conflict with or contradict the four core financial statements.

Consistent, Precise, Complete

Similar to the accounting equation and SFAS 6, the common elements of financial statement; this system can be proven to be properly functioning. Again, the number of terms, structures, assertions, and facts increases but the logical system still fundamentally functions like the accounting equation logical system and the SFAC 6 logical system. The types of things that can go wrong are similar to the accounting equation and SFAC 6 logical systems.

Consistent	Assets = 3,500 (T1); 0 (T0)
	Current Assets = 3,500 (T1); 0 (T0)
	Noncurrent Assets = 0 (T1); 0 (T0)
Complete	Liabilities = 0 (T1); 0 (T0)
	Current Liabilities = 0 (T1); 0 (T0)
	Noncurrent Liabilities = 0 (T1); 0 (T0)
Precise	Equity = 3,500 (T1); 0 (T0)
	Equity Attributable to Controlling Interests = 3,500 (T1); 0 (T0)
	Equity Attributable to Noncontrolling Interests = 0 (T1); 0 (T0)
	Revenues = 7,000 (P1)
	Expenses = 3,000 (P1)
	Gains = 1,000 (P1)
	Losses = 2,000 (P1)
	Comprehensive Income = 3,000 (P1)
	Investments by Owners = 1,000 (P1)
	Distributions to Owners = 500 (P1)
	Net Cash Flow = 3,500 (P1)
	Net Cash Flow from Operating Activities = 3,000 (P1)
	Net Cash Flow from Investing Activities = 0 (P1)
	Net Cash Flow from Financing Activities = 0 (P1)
	Assets = Liabilities + Equity
	Comprehensive Income = Revenues - Expenses + Gains - Losses
	$0 = (\text{Equity}^{T1} + \text{Revenue}^{P1} - \text{Expenses}^{P1} + \text{Gains}^{P1} - \text{Losses}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}) + \text{Liabilities}^{T1} - \text{Assets}^{T1}$
	Net Cash Flow = Net Cash Flow from Operating Activities + Net Cash Flow from Investing Activities + Net Cash Flow from Financing Activities
	$\text{Assets}^{T1} = \text{Assets}^{T0} + \text{Net Cash Flow}^{P1}$

Balance Sheet

Income Statement

Changes in Equity

Cash Flow Statement

Balance Sheet (Abstract)	Period (Units)
	2020-01-01 - 2020-12-31
Balance Sheet (Abstract)	
Assets (Full Top)	
Current Assets	3,500
Noncurrent Assets	0
Assets	3,500
Liabilities and Equity (Full Top)	
Liabilities (Full Top)	0
Current Liabilities	0
Noncurrent Liabilities	0
Liabilities	0
Equity (Full Top)	
Equity Attributable to Controlling Interests	3,500
Equity Attributable to Noncontrolling Interests	0
Equity	3,500
Liabilities and Equity	3,500

Comprehensive Income Statement (Abstract)	Period (Units)
	2020-01-01 - 2020-12-31
Comprehensive Income Statement (Abstract)	
Comprehensive Income (Full Top)	
Revenues	7,000
Expenses	(3,000)
Gains	1,000
Losses	(2,000)
Comprehensive Income	3,000

Changes in Equity (Abstract)	Period (Units)
	2020-01-01 - 2020-12-31
Changes in Equity (Abstract)	
Equity (Full Forward)	
Equity, Beginning	0
Comprehensive Income	3,000
Investments by Owners	1,000
Distributions to Owners	(500)
Equity, Ending	3,500

Cash Flow Statement (Abstract)	Period (Units)
	2020-01-01 - 2020-12-31
Cash Flow Statement (Abstract)	
Net Cash Flow (Full Top)	
Net Cash Flow from Operating Activities	3,000
Net Cash Flow from Investing Activities	0
Net Cash Flow from Financing Activities	0
Net Cash Flow	3,500
Assets (Full Forward)	
Assets, Beginning	0
Net Cash Flow	3,500
Assets, Ending	3,500

Four Statement Model (Common Elements of Financial Report)	Period (Units)
	2020-01-01 - 2020-12-31
Four Statement Model (Common Elements of Financial Report)	
Balance Sheet (Abstract)	
Income Statement (Abstract)	
Changes in Equity (Abstract)	
Cash Flow Statement (Abstract)	

Four Statement Model (Common Elements of Financial Report)

Framework for Adding Further Details

This enhanced set of financial report elements provides for a framework for adding additional details within the framework. The framework would likely best be expanded further to include other pieces of a financial report that do not run through the double-entry accounting ledgers and journals.

The document Introduction to the Fact Ledger²³ explains

²³ Charles Hoffman, CPA and Andrew Noble, PNA, BBus, *Introduction to the Fact Ledger*, <http://xbrlsite.azurewebsites.net/2018/Library/IntroductionToTheFactLedger.pdf>

Machine-readable Information is Reusable

All of this information is both readable by humans²⁴ and machine-readable²⁵. Information in one machine-readable format such as XBRL presentation relations²⁶ can be processed into other human-readable formats²⁷ or other machine-readable formats²⁸.

The XBRL is also a global standard syntax. Others can easily append the machine-readable information to enhance it even more. For example, commentary²⁹ can be added to supplement and enhance what I have created. Extensions can be created using XBRL to add additional details. All one needs is a standard off-the-shelf XBRL taxonomy creation tool.

Variability

As is explained in SFAS 6, the elements of financial statements are appropriate for economic entities that are enterprises (businesses) or not-for-profit organizations. While some financial report elements might be appropriate for one type of economic entity, they might not be appropriate for the other. The conceptual framework anticipates these differences. For example, here are two alternative balance sheet shell formats:

Balance sheet alternative 1³⁰: (elements:StatementOfFinancialPositionTable)

²⁴ Human-readable, <http://xbrl.azurewebsites.net/2019/Core/core-usgaap/evidence-package/contents/index.html#Rendering-Core-Implied.html>

²⁵ Machine-readable, <http://xbrl.azurewebsites.net/2019/Core/core-usgaap/instance.xml>

²⁶ Machine-readable XBRL presentation relations, <http://xbrl.azurewebsites.net/2019/Core/core-usgaap/core-presentation.xml>

²⁷ Human-readable HTML model structure, http://xbrl.azurewebsites.net/2019/Core/core-usgaap/core_ModelStructure.html

²⁸ Machine-readable XML infoset, http://xbrl.azurewebsites.net/2019/Core/core-usgaap/core_ModelStructure.xml

²⁹ Commentary and references demonstration, <http://xbrl.squarespace.com/journal/2018/6/6/commentary-and-references-demonstration.html>

³⁰ Statement of Financial Position, http://xbrl.azurewebsites.net/2019/Core/master-elements/evidence-package/contents/index.html#Rendering-BS-elements_StatementFinancialPositionTable.html

Balance Sheet [Abstract]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Abstract]		
Assets [Roll Up]		
Current Assets	3,500	0
Noncurrent Assets	0	0
Assets	3,500	0
Liabilities and Equity [Roll Up]		
Liabilities [Roll Up]		
Current Liabilities	0	0
Noncurrent Liabilities	0	0
Liabilities	0	0
Equity [Roll Up]		
Equity Attributable to Controlling Interest	3,500	0
Equity Attributable to Noncontrolling Interest	0	0
Equity	3,500	0
Liabilities and Equity	3,500	0

Balance sheet alternative 2³¹: (elements:StatementOfNetAssets)

Balance Sheet [Abstract]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Abstract]		
Net Assets [Roll Up]		
Assets	3,500	0
Liabilities	0	0
Net Assets	3,500	0

Note that the second balance sheet both uses the net assets approach and is an unclassified balance sheet (i.e. it does not differentiate between current and noncurrent assets and liabilities).

³¹ Statement of Net Assets, http://xbrlsite.azurewebsites.net/2019/Core/master-elements/evidence-package/contents/index.html#Rendering-BS2-elements_StatementNetAssetsTable.html

Typically, one financial report will not use both of the above structures for the same information. Typically, one permissible model is used or some other permissible model is used.

Financial statements are not arbitrary or random. Some model is used to represent a financial report within the boundaries specified by some reporting scheme. But any financial statement can both have the appropriate variability that they need but at the same time conform to the conceptual framework of the reporting scheme.

I refer to the approaches an economic entity organizes the elements of a financial statement reporting styles. An analysis of public companies that report to the SEC reveal reporting style³² patterns used by economic entities that report using US GAAP.

Variability Caused by Alternative Intermediate Components of Comprehensive Income

By far, the most variability that exists within a set of financial statements exists on the income statement. SFAS 6 discusses the notion of intermediate components³³ of comprehensive income:

“Examples of intermediate components in business enterprises are gross margin, income from continuing operations before taxes, income from continuing operations, and operating income. Those intermediate components are, in effect, subtotals of comprehensive income and often of one another in the sense that they can be combined with each other or with the basic components to obtain other intermediate measures of comprehensive income.”

Basically, variability can be caused by choosing to report different common subtotals. Again, this variability is not random or completely arbitrary. There are patterns.

Of the four concepts “revenues”, “expenses”, “gains”, and “losses” there are themes. One them is the notion of something related to an “entity’s ongoing major or central operations” (i.e. revenues, expenses) and something “from peripheral or incidental transactions” (i.e. gains, losses).

The bottom line here is that 87% of all public companies that report to the SEC use one of only nine different sets of intermediate components, i.e. subtotals, to do so.

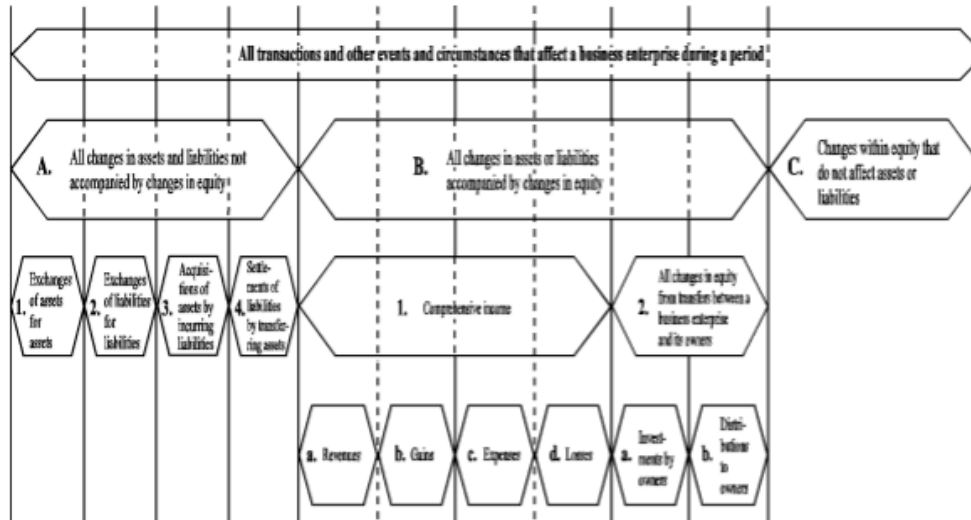
Transactions

SFAC 6 provides the following diagram³⁴ which essentially breaks transactions down into a number of specific categories.

³² US GAAP Reporting Styles, <http://www.xbrlsite.com/2018/10K/US-GAAP-Reporting-Styles.pdf>

³³ FASB, SFAC 6, page 47, paragraph 77.

³⁴ FASB, SFAC 6, page 41, paragraph 64.



Every transaction which flows through a journal and into a ledger fits into one of these categories. Further, ultimately every transaction flow through some balance sheet account and can be grouped into some category. For example, below you see the roll forward of cash and cash equivalents and the categories of transactions such as “Collection of Receivables” or “Payment of Accounts Payable” that flow through the general ledger account “Cash and Cash Equivalents”:

Cash and Cash Equivalents [Roll Forward]	Period [Axis]
	2018-01-01 - 2018-12-31
Cash and Cash Equivalents [Roll Forward]	
Cash and Cash Equivalents, Beginning Balance	3,000
Collection of Receivables	3,000
Payment of Accounts Payable	(2,000)
Additional Long-term Borrowings	6,000
Repayment of Long-term Borrowings	(1,000)
Capital Additions of Property, Plant and Equipment	(5,000)
Proceeds from Sale of Property, Plant, and Equipment	0
Cash and Cash Equivalents, Ending Balance	4,000

Every transaction works in this manner. Basically, transactions fall into patterns. Some transaction patterns are common, some transaction patterns are less common, and some transaction patterns are cause for investigation. For example, a transaction that affects, say, “Property, Plant, and Equipment” and “Retained Earnings” would be suspicious.