

Distinguishing Between Properly and Improperly Functioning Logical Systems

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SFAC 6 Elements of Financial
Statements
Logical System

State #1: Consistent, Complete, Precise (properly functioning)

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **complete** because no statements are missing from the system. *(Note that this is deemed to be a specification for a properly functioning logical system by definition for these examples.)*

Consistent

Complete

Precise

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

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

$$\text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	3,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #2: Incomplete Coverage by Rules

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. However, the system is **incomplete** because the rules “Assets = Liabilities + Equity” and “Equity^{T1} = Equity^{T0} + Comprehensive Income^{P1} + Investments by Owners^{P1} - Distributions to Owners^{P1}” are missing from the system.

Consistent

Incomplete

Precise

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

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

$$\text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

(Lack of rules makes it so you have to rely on luck to make sure reported facts are correct.)

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	3,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #2': Incomplete Coverage by Rules (Corrected)

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is now **complete** because the rules “Assets = Liabilities + Equity” and “Equity^{T1} = Equity^{T0} + Comprehensive Income^{P1} + Investments by Owners^{P1} - Distributions to Owners^{P1}” are **ADDED to the system**.

Consistent

Complete

Precise

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

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

$$\text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	3,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #3: Consistent, Incomplete, Imprecise

The fact for Assets^{T1} is **imprecise** because it is wrong (the properly functioning real world says it is 3,500); it is **incomplete** because the rule “Assets = Liabilities + Equity” is missing from the system therefore the imprecise fact goes undetected. The system is internally **consistent** (but imprecise) because there are not contradictory statements.

Consistent

Incomplete

Imprecise

(Note that there is no way for the software to detect the fact that Assets of 8,500 was reported as opposed to the correct value of 3,500 because there is NO RULE “Assets = Liabilities + Equity” to detect the inconsistency.)

$$\text{Assets} = 8,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

$$\begin{aligned} \text{Comprehensive Income} = \\ \text{Revenues} - \text{Expenses} + \text{Gains} - \text{Losses} \end{aligned}$$

$$\begin{aligned} \text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive} \\ \text{Income}^{P1} + \text{Investments by Owners}^{P1} - \\ \text{Distributions to Owners}^{P1} \end{aligned}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	8,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #3': Inconsistent, Complete, Imprecise

The fact for Assets^{T1} is **imprecise** because it is wrong (the real world says it is 3,500 by definition per the properly functioning system). The system is **inconsistent** because the rule makes the statement "Assets = Liabilities + Equity" and the facts for Assets^{T1}, Liabilities^{T1}, and Equity^{T1} make statements that contradict the rule. But, the system is **complete** as no statements are missing from the system.

Inconsistent

Complete

Imprecise

(Note that software CAN detect the imprecise value reported for Assets (8,500 rather than the correct value of 3,500) and the software reports an inconsistency per the rule "Assets = Liabilities + Equity" used to detect that inconsistency.)

$$\text{Assets} = 8,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

$$\begin{aligned} \text{Comprehensive Income} = \\ \text{Revenues} - \text{Expenses} + \text{Gains} - \text{Losses} \end{aligned}$$

$$\begin{aligned} \text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive} \\ \text{Income}^{P1} + \text{Investments by Owners}^{P1} - \\ \text{Distributions to Owners}^{P1} \end{aligned}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	8,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #3'': Consistent, Complete, Precise

The fact for Assets^{T1} is **precise** because the inconsistency was detected and corrected. The system is **consistent** because the rule makes the statement "Assets = Liabilities + Equity" and the facts for Assets^{T1}, Liabilities^{T1}, and Equity^{T1} is consistent with that rule. This was achieved because the system is **complete** as no statements are now missing from the system.

Consistent

Complete

Precise

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

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

$$\text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

(The point of this is to show that the rules allowed the error to be detected and then corrected and this state is now 100% consistent with the properly functioning logical system.)

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	3,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #4: Unreported Fact

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **incomplete** because the statement about the fact for Assets^{T1} is missing from the system. (*It is assumed that the specified properly functioning system that all facts must be explicitly reported.*)

Consistent

Incomplete

Precise

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

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

$$\text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	3,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #4': Unreported Fact (Corrected)

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **complete** because the statement about the fact for Assets^{T1} is missing from the system but there is a rule that indicates how to derive that fact if that fact is missing. *(It is assumed that it is specified in the properly functioning logical system that it is allowable to not report the fact Assets.)*

Consistent

Complete

Precise

$$\text{Assets} = 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

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

$$\text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

IF Liabilities exists and if Equity exists; THEN Assets = Liabilities + Equity

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	3,500	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #5: Incomplete

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **incomplete** because the statement about the fact for Assets^{T1} is missing from the system and the rule “Assets = Liabilities + Equity” is also missing. *(There is not enough information to write a rule to derive the value of the unreported fact Assets.)*

Consistent

Incomplete

Precise

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Equity} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

$$\begin{aligned} \text{Comprehensive Income} = \\ \text{Revenues} - \text{Expenses} + \text{Gains} - \text{Losses} \end{aligned}$$

$$\begin{aligned} \text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive} \\ \text{Income}^{P1} + \text{Investments by Owners}^{P1} - \\ \text{Distributions to Owners}^{P1} \end{aligned}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets		0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #6: Imprecise

The system is **imprecise** because the statement “Assets = Liabilities” is inconsistent with reality (where we know that Assets = Liabilities + Equity by definition per the properly functioning system). The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. (Even though the facts are imprecise) The system is **complete** because no statements are missing from the system.

Consistent

Complete

Imprecise

$$\begin{aligned} \text{Assets} &= 0^{T1}; 0^{T0} \\ \text{Liabilities} &= 0^{T1}; 0^{T0} \\ \text{Equity} &= 3,500^{T1}; 0^{T0} \end{aligned}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

$$\text{Assets} = \text{Liabilities}$$

$$\begin{aligned} \text{Comprehensive Income} &= \\ &\text{Revenues} - \text{Expenses} + \text{Gains} - \text{Losses} \end{aligned}$$

$$\begin{aligned} \text{Equity}^{T1} &= \text{Equity}^{T0} + \text{Comprehensive} \\ &\text{Income}^{P1} + \text{Investments by Owners}^{P1} - \\ &\text{Distributions to Owners}^{P1} \end{aligned}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	0	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #7: Extension Concept, Incomplete

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **incomplete** because the term “Net Assets” is not defined to be part of the balance sheet structure nor is the relation of Net Assets to Liabilities and Equity defined. *(Note that SFAC 6 defines Net Assets however it is not included in the specification of a properly functioning system.)*

Consistent

Incomplete

Precise

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Net Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

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

$$\begin{aligned} \text{Comprehensive Income} = \\ \text{Revenues} - \text{Expenses} + \text{Gains} - \text{Losses} \end{aligned}$$

$$\begin{aligned} \text{Equity}^{T1} = \text{Equity}^{T0} + \text{Comprehensive} \\ \text{Income}^{P1} + \text{Investments by Owners}^{P1} - \\ \text{Distributions to Owners}^{P1} \end{aligned}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	3,500	0
Liabilities	0	0
Net Assets	3,500	0

Changes in Equity

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

Income Statement

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

State #7': Extension Concept, Completed

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **complete** because the term "Net Assets" is defined, it is defined that Net Assets can be part of an alternative balance sheet structure, and the relation of Net Assets to Liabilities and Equity defined.

Consistent

Complete

Precise

Assets = $3,500^{T1}; 0^{T0}$

Liabilities = $0^{T1}; 0^{T0}$

Net Assets = $3,500^{T1}; 0^{T0}$

Revenues = 7,000

Expenses = 3,000

Gains = 1,000

Losses = 2,000

Comprehensive income = 3,000

Investments by Owners = 1,000

Distributions to Owners = 500

Net Assets = Assets + Liabilities

**Comprehensive Income =
Revenues - Expenses + Gains - Losses**

**Net Assets^{T1} = Net Assets^{T0} + Comprehensive
Income^{P1} + Investments by Owners^{P1} -
Distributions to Owners^{P1}**

Net Assets is equivalent to Equity

(Note that this is like terms being defined for a reporting scheme but they are not included in a base XBRL taxonomy and a reporting economic entity represents this information in their extension XBRL taxonomy. This is not a perfect example; the changes in net assets statement needs modification.)

Net Assets Statement

Net Assets [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Net Assets [Roll Up]		
Assets	3,500	0
Liabilities	0	0
Net Assets	3,500	0

Changes in Net Assets

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

Income Statement

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

State #7'': Base Taxonomy Concept, Completed

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **complete** because the term "Net Assets" is defined (base taxonomy). The relation between Net Assets, Liabilities, and Assets is **defined in the reporting entity extension taxonomy**. The Net Assets Statement structure is **defined in the extension taxonomy**.

Consistent

Complete

Precise

(Note that this is like a base XBRL taxonomy defining a balance sheet but NOT DEFINING a net assets statement or the related rules within that base taxonomy. This forces the economic entity to define structures but use the base taxonomy terms. This is not a perfect example.)

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Net Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

$$\text{Net Assets} = \text{Assets} + \text{Liabilities}$$

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

$$\text{Net Assets}^{T1} = \text{Net Assets}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

Net Assets is equivalent to Equity

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	0	0
Liabilities	0	0
Equity	3,500	0

Changes in Equity

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

Income Statement

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

State #7''': Defining a Completely New STRUCTURE

The system is **precise** because all statements made are consistent with reality. The system is **consistent** because no fact in the system contradicts or is inconsistent with any other fact in the system. The system is **complete** because the term "Net Assets" is defined, it is defined that Net Assets can be part of an alternative balance sheet structure, and the relation of Net Assets to Liabilities and Equity defined. *(all in the base taxonomy)*

Consistent

Complete

Precise

(Note that this is like a base XBRL taxonomy defining all the necessary terms, structures, associations, and assertions within that base taxonomy. Then, reporting economic entities have no need to create extension structures.)

$$\text{Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Liabilities} = 0^{T1}; 0^{T0}$$

$$\text{Net Assets} = 3,500^{T1}; 0^{T0}$$

$$\text{Revenues} = 7,000$$

$$\text{Expenses} = 3,000$$

$$\text{Gains} = 1,000$$

$$\text{Losses} = 2,000$$

$$\text{Comprehensive income} = 3,000$$

$$\text{Investments by Owners} = 1,000$$

$$\text{Distributions to Owners} = 500$$

$$\text{Net Assets} = \text{Assets} + \text{Liabilities}$$

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

$$\text{Net Assets}^{T1} = \text{Net Assets}^{T0} + \text{Comprehensive Income}^{P1} + \text{Investments by Owners}^{P1} - \text{Distributions to Owners}^{P1}$$

$$\text{Net Assets is equivalent to Equity}$$

Balance Sheet

Balance Sheet [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Balance Sheet [Arithmetic Expression]		
Assets	0	0
Liabilities	0	0
Equity	3,500	0

Net Assets Statement

Net Assets [Line Items]	Period [Axis]	
	2020-12-31	2019-12-31
Net Assets [Roll Up]		
Assets	3,500	0
Liabilities	0	0
Net Assets	3,500	0

Income Statement

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

Changes in Net Assets

Changes in Net Assets [Line Items]	Period [Axis]	
	2020-01-01 - 2020-12-31	
Changes in Net Assets [Roll Up]		
Revenues	7,000	
(Expenses)	(3,000)	
Gains	1,000	
(Losses)	(2,000)	
Change in Net Assets	3,000	

Changes in Equity

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

Changes in Fund Balance

Changes in Fund Balance [Line Items]	Period [Axis]	
	2020-01-01 - 2020-12-31	
Changes in Fund Balance [Roll Forward]		
Fund Balance, Beginning Balance	0	
Change in Net Assets	3,000	
Other Increases (Decreases) in Fund Balance	500	
Fund Balance, Ending Balance	3,500	