

```
Assets = CurrentAssets
             End If
 'BS-Impute-04:
             If NoncurrentAssets = 0 and Assets <> 0 and CurrentAssets <> 0 Then
                          NoncurrentAssets = Assets - CurrentAssets
             End If
 'BS-Impute-05:
             If LiabilitiesAndEquity = 0 and Assets <> 0 Then
                          LiabilitiesAndEquity = Assets
             End If
 'BS-Impute-06: If Equity was not reported but EquityAttributableToParent and EquityAttributableToNoncontrollingInterest were reported; then Equity must
equal the parent plus noncontrolling interest
             If Equity = 0 and EquityAttributableToNoncontrollingInterest <> 0 and EquityAttributableToParent <> 0 Then
                          {\tt Equity} = {\tt EquityAttributableToParent} \ + \ {\tt EquityAttributableToNoncontrollingInterest}
             End If
 'BS-Impute-07:
              \label{eq:controllingInterest}  \mbox{ = 0 and EquityAttributableToNoncontrollingInterest = 0 and EquityAttributableToParent <> 0 Then \\ \mbox{ Then } \m
                          Equity = EquityAttributableToParent
             End If
 'BS-Impute-08:
```

```
If Equity = 0 Then
       Equity = EquityAttributableToParent + EquityAttributableToNoncontrollingInterest
   End If
'BS-Impute-09: Impute EquityAttributableToParent based on existence of EquityAttributableToNoncontrollingInterest.
   If EquityAttributableToParent = 0 and Equity <> 0 and EquityAttributableToNoncontrollingInterest <> 0 Then
       EquityAttributableToParent = Equity - EquityAttributableToNoncontrollingInterest
   End If
'BS-Impute-10: Impute EquityAttributableToParent based on existence of EquityAttributableToNoncontrollingInterest.
   EquityAttributableToParent = Equity
   End If
'BS-Impute-11: If Liabilities was not reported; impute value based on LiabilitiesAndEquity
   If Liabilities = 0 and (Equity <> 0) Then
       ' (added redeemable noncontrolling interest to computation) Liabilities = LiabilitiesAndEquity - (CommitmentsAndContingencies + TemporaryEquity
+ Equity)
       Liabilities = LiabilitiesAndEquity - (CommitmentsAndContingencies + TemporaryEquity + RedeemableNoncontrollingInterest + Equity)
   End If
'BS-Impute-12: added noncurrent liabilities = 0 to if statement
   If NoncurrentLiabilities = 0 and Liabilities <> 0 and CurrentLiabilities <> 0 Then
       NoncurrentLiabilities = Liabilities - CurrentLiabilities
   End If
```

```
'BS-Impute-13:
   If Liabilities = 0 and CurrentLiabilities <> 0 and NoncurrentLiabilities = 0 Then
       Liabilities = CurrentLiabilities
   End If
'BS-Impute-14: Added to fix CRYSLER
   If Liabilities = 0 and CurrentLiabilities <> 0 and NoncurrentLiabilities <> 0 Then
       Liabilities = CurrentLiabilities + NoncurrentLiabilities
   End If
'BS-Impute-15: Added 2014-09-29 to try and fix BS1 type error where equity attributable to parent subtotal not reported, but equity and noncontrolling
interest are reported
   If EquityAttributableToParent <> 0 and Equity <> 0 and EquityAttributableToNoncontrollingInterest <> 0 and EquityAttributableToParent = Equity Then
       EquityAttributableToParent = Equity - EquityAttributableToNoncontrollingInterest
   End If
'BS-Impute-16: Added 2014-09-30 to try and fix BS4 type error where filer reports liabilities rather than current liabilities
   If CurrentLiabilities = 0 and NoncurrentLiabilities = 0 and Liabilities <> 0 Then
       CurrentLiabilities = Liabilities
   End If
```

'VERIFICATION RULES: Balance Sheet Concepts

```
BS1 = Equity - (EquityAttributableToParent + EquityAttributableToNoncontrollingInterest)

BS2 = Assets - LiabilitiesAndEquity

'IsClassifiedBalanceSheet = CurrentAssets = 0 and NoncurrentAssets = 0 and CurrentLiabilities = 0 and NoncurrentLiabilities = 0

If IsClassifiedBalanceSheet = 0 Then

'If current assets/liabilities are zero and noncurrent assets/liabilities; then don't do this test because the balance sheet is not classified

BS3 = 0

BS4 = 0

Else

'This is a classified balance sheet

BS3 = Assets - (CurrentAssets + NoncurrentAssets)

BS4 = Liabilities - (CurrentLiabilities + NoncurrentLiabilities)

End If

BS5 = LiabilitiesAndEquity - (Liabilities + CommitmentsAndContingencies + TemporaryEquity + RedeemableNoncontrollingInterest + Equity)
```

```
'Income statement:
           'Adjustments to income statement information
'IS-Impute-01: NonoperatingIncomeLossPlusInterestAndDebtExpense
          NonoperatingIncomeLossPlusInterestAndDebtExpense = NonoperatingIncomeLoss - InterestAndDebtExpense
'IS-Impute-02: NetIncomeLoss
          If IncomeLossFromContinuingOperationsAfterTax = 0 and NetIncomeLoss <> 0 Then
                     Income Loss From Continuing Operations After Tax = {\tt NetIncomeLoss} - {\tt IncomeLoss} From {\tt Discontinued} Operations {\tt NetOfTax} - {\tt IncomeLoss} From {\tt Discontinued} Operations {\tt NetOfTax} - {\tt IncomeLoss} From {\tt Discontinued} Operations {\tt NetOfTax} - {\tt IncomeLoss} From {\tt Discontinued} Operations {\tt NetOfTax} - {\tt Operation} Operations {\tt NetOfTax} - {\tt Operation} Operations {\tt Operation} Operation {\tt
ExtraordinaryItemsOfIncomeExpenseNetOfTax
          End If
'IS-Impute-03: Net income attributable to parent (if it was not reported)
          If NetIncomeLossAttributableToParent = 0 and NetIncomeLossAttributableToNoncontrollingInterest = 0 and NetIncomeLoss <> 0 Then
                    NetIncomeLossAttributableToParent = NetIncomeLoss
          End If
'IS-Impute-03A: FIX Caterpillar and IBM
          If NetIncomeLossAttributableToParent = 0 and NetIncomeLossAttributableToNoncontrollingInterest <> 0 and NetIncomeLoss <> 0 Then
                     NetIncomeLossAttributableToParent = NetIncomeLoss - NetIncomeLossAttributableToNoncontrollingInterest
          End If
'IS-Impute-04: Net income available to common stockholders (if it was not reported)
          If NetIncomeLossAvailableToCommonStockholdersBasic = 0 and PreferredStockDividendsAndOtherAdjustments = 0 and NetIncomeLossAttributableToParent <> 0
Then
```

NetIncomeLossAvailableToCommonStockholdersBasic = NetIncomeLossAttributableToParent End If 'IS-Impute-05: PreferredStockDividendsAndOtherAdjustments (if it was not reported) If PreferredStockDividendsAndOtherAdjustments = 0 and NetIncomeLossAttributableToParent <> 0 and NetIncomeLossAvailableToCommonStockholdersBasic <> 0 Then PreferredStockDividendsAndOtherAdjustments = NetIncomeLossAttributableToParent - NetIncomeLossAvailableToCommonStockholdersBasic End If 'IS-Impute-06: comprehensive income (if it was not reported) If ComprehensiveIncomeLoss = 0 and ComprehensiveIncomeLossAttributableToParent = 0 and ComprehensiveIncomeLossAttributableToNoncontrollingInterest = 0 and OtherComprehensiveIncomeLoss = 0 Then ComprehensiveIncomeLoss = NetIncomeLoss End If 'IS-Impute-07: other comprehensive income (if it was not reported) If OtherComprehensiveIncomeLoss = 0 and ComprehensiveIncomeLoss <> 0 Then OtherComprehensiveIncomeLoss = ComprehensiveIncomeLoss - NetIncomeLoss End If 'IS-Impute-08: comprehensive income attributable to parent (if it was not reported) If ComprehensiveIncomeLossAttributableToParent = 0 and ComprehensiveIncomeLossAttributableToNoncontrollingInterest = 0 and ComprehensiveIncomeLoss <> 0 Then ComprehensiveIncomeLossAttributableToParent = ComprehensiveIncomeLoss End If

```
'IS-Impute-08A:
        If ComprehensiveIncomeLossAttributableToNoncontrollingInterest = 0 and ComprehensiveIncomeLossAttributableToParent <> 0 and ComprehensiveIncomeLossAttributableToParent
                  {\tt ComprehensiveIncomeLossAttributableToNoncontrollingInterest = ComprehensiveIncomeLoss - ComprehensiveIncomeLossAttributableToParent}}
        End If
'IS-Impute-09: IncomeFromContinuingOperations*Before*Tax (if it was not reported)
        If IncomeLossFromContinuingOperationsBeforeTax = 0 and IncomeLossBeforeEquityMethodInvestments <> 0 and IncomeLossFromEquityMethodInvestments <> 0
Then
                  Income Loss From Continuing Operations Before Tax = Income Loss Before Equity Method Investments + Income Loss From Equity Method Investments + Income Los
         End If
'IS-Impute-10: IncomeFromContinuingOperations*Before*Tax2 (if it was not reported)
          \label{eq:continuingOperationsBeforeTax} \ = \ 0 \ \ \text{and IncomeLossFromContinuingOperationsAfterTax} \ <> \ 0 \ \ \text{Then} 
                  IncomeLossFromContinuingOperationsBeforeTax = IncomeLossFromContinuingOperationsAfterTax + IncomeTaxExpenseBenefit
         End If
'IS-Impute-11: IncomeFromContinuingOperations*After*Tax (if it was not reported)
         If IncomeLossFromContinuingOperationsAfterTax = 0 and (IncomeTaxExpenseBenefit <> 0 Or IncomeTaxExpenseBenefit = 0 and
IncomeLossFromContinuingOperationsBeforeTax <> 0) Then
                  IncomeLossFromContinuingOperationsAfterTax = IncomeLossFromContinuingOperationsBeforeTax - IncomeTaxExpenseBenefit
        End If
'IS-Impute-12: GrossProfit (if it was not reported)
         If GrossProfit = 0 and (Revenues <> 0) and CostOfRevenue <> 0) Then
```

```
GrossProfit = Revenues - CostOfRevenue
   End If
'IS-Impute-13: GrossProfit (if it was not reported)
   If GrossProfit = 0 and (Revenues <> 0) and CostOfRevenue <> 0) Then
       GrossProfit = Revenues - CostOfRevenue
   End If
'IS-Impute-14: Revenues (if it was not reported)
   If GrossProfit <> 0 and (Revenues = 0 and CostOfRevenue <> 0) Then
       Revenues = GrossProfit + CostOfRevenue
   End If
'IS-Impute-15: CostOfRevenue (if it was not reported)
   If GrossProfit <> 0 and (Revenues <> 0 and CostOfRevenue = 0) Then
       CostOfRevenue = GrossProfit + Revenues
   End If
'IS-Impute-16: CostsAndExpenses (if it was not reported)
   If GrossProfit = 0 and CostsAndExpenses = 0 and (CostOfRevenue <> 0) and (CostOfRevenue <> 0) Then
       CostsAndExpenses = CostOfRevenue + OperatingExpenses
   End If
'IS-Impute-17: CostsAndExpenses based on existance of both costs of revenues and operating expenses (if it was not reported)
   If CostsAndExpenses = 0 and OperatingExpenses <> 0 and (CostOfRevenue <> 0) Then
```

```
CostsAndExpenses = CostOfRevenue + OperatingExpenses
   End If
'IS-Impute-18: CostsAndExpenses (if it was not reported)
   If GrossProfit = 0 and CostsAndExpenses = 0 and Revenues <> 0 and OperatingIncomeLoss <> 0 and OtherOperatingIncomeExpenses <> 0 Then
       CostsAndExpenses = Revenues - OperatingIncomeLoss - OtherOperatingIncomeExpenses
   End If
'IS-Impute-19: OperatingExpenses based on existance of costs and expenses and cost of revenues (if it was not reported)
   If OperatingExpenses = 0 and CostOfRevenue <> 0 and CostsAndExpenses <> 0 Then
       OperatingExpenses = CostsAndExpenses - CostOfRevenue
   End If
'IS-Impute-20: CostOfRevenues single-step method (if it was not reported)
   If CostOfRevenue = 0 and Revenues <> 0 and GrossProfit = 0 and (Revenues - CostsAndExpenses = OperatingIncomeLoss and OperatingExpenses = 0 and
OtherOperatingIncomeExpenses = 0) Then
       CostOfRevenue = CostsAndExpenses - OperatingExpenses
   End If
'IS-Impute-21: IncomeLossBeforeEquityMethodInvestments (if it was not reported)
   IncomeLossBeforeEquityMethodInvestments = IncomeLossFromContinuingOperationsBeforeTax - IncomeLossFromEquityMethodInvestments
   End If
'IS-Impute-22: IncomeLossBeforeEquityMethodInvestments (if it was not reported)
```

```
If InterestAndDebtExpense = 0 and OperatingIncomeLoss <> 0 and (NonoperatingIncomeLoss <> 0 and IncomeLossBeforeEquityMethodInvestments <> 0) Then
                                            InterestAndDebtExpense = IncomeLossBeforeEquityMethodInvestments - (OperatingIncomeLoss + NonoperatingIncomeLoss)
                     End If
'IS-Impute-23: OtherOperatingIncomeExpenses (if it was not reported)
                    If OtherOperatingIncomeExpenses = 0 and GrossProfit <> 0 and (OperatingExpenses <> 0 and OperatingIncomeLoss <> 0) Then
                                           OtherOperatingIncomeExpenses = OperatingIncomeLoss - (GrossProfit - OperatingExpenses)
                    End If
'IS-Impute-24: Move IncomeLossFromEquityMethodInvestments (if it was not reported)
                     If IncomeLossFromEquityMethodInvestments <> 0 and IncomeLossBeforeEquityMethodInvestments <> 0 and IncomeLossBeforeEquityMethodInvestments <>
{\tt IncomeLossFromContinuingOperationsBeforeTax\ Then}
                                           Income Loss Before Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From Equity Method Investments = Income Loss From Continuing Operations Before Tax - Income Loss From C
                                                                                                          'CSH Disabled
                                                                                                                                                                                                                             OperatingIncomeLoss = OperatingIncomeLoss - IncomeLossFromEquityMethodInvestments
                     End If
'DANGEROUS!!
'IS-Impute-25: OperatingIncomeLoss
                     If OperatingIncomeLoss = 0 and IncomeLossBeforeEquityMethodInvestments <> 0 Then
                                            OperatingIncomeLoss = IncomeLossBeforeEquityMethodInvestments + NonoperatingIncomeLoss - InterestAndDebtExpense
                     End If
'IS-Impute-26:
                     If \ Nonoperating IncomePlusInterestAndDebtExpensePlusIncomeFrom Equity MethodInvestments = 0 \ Then \ Nonoperating IncomePlusInterestAndDebtExpensePlusIncomeFrom Equity MethodInvestments = 0 \ Then \ Nonoperating IncomePlusInterestAndDebtExpensePlusIncomeFrom Equity MethodInvestments = 0 \ Then \ Nonoperating IncomePlusInterestAndDebtExpensePlusIncomeFrom Equity MethodInvestments = 0 \ Then \ Nonoperating IncomePlusInterestAndDebtExpensePlusIncomeFrom Equity MethodInvestments = 0 \ Then \ Nonoperating IncomePlusInterestAndDebtExpensePlusIncomeFrom Equity MethodInvestments = 0 \ Then \ Nonoperating IncomePlusInterestAndDebtExpensePlusIncomeFrom Equity MethodInvestments = 0 \ Then \ Nonoperating IncomePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInterestAndDebtExpensePlusInte
                                                                                             Nonoperating IncomePlusInterest \texttt{A} nd \texttt{D} ebt \texttt{E} x pensePlusIncomeFrom \texttt{E} quity \texttt{M} ethod \texttt{I} nvestments = \texttt{I} ncomeLoss \texttt{F} rom \texttt{C} ontinuing \texttt{O} perations \texttt{B} e fore \texttt{T} ax - \texttt{D} row \texttt{C} ax - \texttt{D} row 
OperatingIncomeLoss
```

End If 'IS-Impute-27: NonoperatingIncomeLossPlusInterestAndDebtExpense If NonoperatingIncomeLossPlusInterestAndDebtExpense = 0 and NonoperatingIncomePlusInterestAndDebtExpensePlusIncomeFromEquityMethodInvestments <> 0 Then Nonoperating Income Loss Plus Interest And Debt Expense = Nonoperating Income Plus Interest And Debt Expense Plus Income From Equity Method Investments - Income Plus Interest And Debt Expense Plus Interest And Debt ${\tt IncomeLossFromEquityMethodInvestments}$ End If 'Determine if income statement is multi-step or single-step IsMultiStepIncomeStatement = GrossProfit 'VERIFICATION RULES: Income statement 'Rules IS2, IS3, IS4, and IS11 are disabled until more is learned about the pieces of operating income (loss) If IsMultiStepIncomeStatement = 0 Then IS1 = 0IS2 = 0Else 'Multi-step only IS1 = GrossProfit - (Revenues - CostOfRevenue) IS2 = OperatingIncomeLoss - (GrossProfit - OperatingExpenses + OtherOperatingIncomeExpenses) End If

IS3 = IncomeLossBeforeEquityMethodInvestments - (OperatingIncomeLoss + NonoperatingIncomeLossPlusInterestAndDebtExpense)

```
IS4 = IncomeLossFromContinuingOperationsBeforeTax - (IncomeLossBeforeEquityMethodInvestments + IncomeLossFromEquityMethodInvestments)

IS5 = IncomeLossFromContinuingOperationsAfterTax - (IncomeLossFromContinuingOperationsBeforeTax - IncomeTaxExpenseBenefit)

IS6 = NetIncomeLoss - (IncomeLossFromContinuingOperationsAfterTax + IncomeLossFromDiscontinuedOperationsNetOfTax + ExtraordinaryItemsOfIncomeExpenseNetOfTax)

IS7 = NetIncomeLoss - (NetIncomeLossAttributableToParent + NetIncomeLossAttributableToNoncontrollingInterest)

IS8 = NetIncomeLossAvailableToCommonStockholdersBasic - (NetIncomeLossAttributableToParent - PreferredStockDividendsAndOtherAdjustments)

IS9 = ComprehensiveIncomeLoss - (ComprehensiveIncomeLossAttributableToParent + ComprehensiveIncomeLossAttributableToNoncontrollingInterest)

IS10 = ComprehensiveIncomeLoss - (NetIncomeLoss + OtherComprehensiveIncomeLoss)

If IsMultiStepIncomeStatement = 0 Then

'Single-step only

IS11 = OperatingIncomeLoss - (Revenues - CostsAndExpenses + OtherOperatingIncomeExpenses)

Else

IS11 = 0

End If
```

```
'Cash flow statement
'CF-Impute-00: Added 2014-09-25
   If NetCashFlow = 0 and NetCashFlowContinuing <> 0 and NetCashFlowDiscontinued <> 0 Then
       NetCashFlow = NetCashFlowContinuing + NetCashFlowDiscontinued + ExchangeGainsLosses
    End If
'CF-Impute-01: NetCashFlowDiscontinued if not reported
   If NetCashFlowDiscontinued = 0 Then
        NetCashFlowDiscontinued = NetCashFlowFromOperatingActivitiesDiscontinued + NetCashFlowFromInvestingActivitiesDiscontinued +
NetCashFlowFromFinancingActivitiesDiscontinued
    End If
    'CF-Impute-02: NetCashFlowFromOperatingActivitiesContinuing if not reported
   If NetCashFlowFromOperatingActivities <> 0 and NetCashFlowFromOperatingActivitiesContinuing = 0 Then
       NetCashFlowFromOperatingActivitiesContinuing = NetCashFlowFromOperatingActivities - NetCashFlowFromOperatingActivitiesDiscontinued
    End If
'CF-Impute-03: NetCashFlowFromInvestingActivitiesContinuing if not reported
     If \ {\tt NetCashFlowFromInvestingActivities} \ <> \ 0 \ {\tt and} \ {\tt NetCashFlowFromInvestingActivitiesContinuing} \ = \ 0 \ {\tt Then} 
       NetCashFlowFromInvestingActivitiesContinuing = NetCashFlowFromInvestingActivities - NetCashFlowFromInvestingActivitiesDiscontinued
    End If
'CF-Impute-04: NetCashFlowFromFinancingActivitiesContinuing if not reported
   If NetCashFlowFromFinancingActivities <> 0 and NetCashFlowFromFinancingActivitiesContinuing = 0 Then
```

| NetCashFlowFromFinancingActivitiesContinuing = NetCashFlowFromFinancingActivities - NetCashFlowFromFinancingActivitiesDiscontinued |
|--|
| End If |
| 'CF-Impute-05: NetCashFlowFromOperatingActivities if not reported |
| If NetCashFlowFromOperatingActivities = 0 and NetCashFlowFromOperatingActivitiesContinuing <> 0 and NetCashFlowFromOperatingActivitiesDiscontinued = 0 Then |
| NetCashFlowFromOperatingActivities = NetCashFlowFromOperatingActivitiesContinuing |
| End If |
| 'CF-Impute-06: NetCashFlowFromInvestingActivities if not reported |
| If NetCashFlowFromInvestingActivities = 0 and NetCashFlowFromInvestingActivitiesContinuing <> 0 and NetCashFlowFromInvestingActivitiesDiscontinued = 0 Then |
| NetCashFlowFromInvestingActivities = NetCashFlowFromInvestingActivitiesContinuing |
| End If |
| 'CF-Impute-07: NetCashFlowFromFinancingActivities if not reported |
| If NetCashFlowFromFinancingActivities = 0 and NetCashFlowFromFinancingActivitiesContinuing <> 0 and NetCashFlowFromFinancingActivitiesDiscontinued = 0 Then |
| NetCashFlowFromFinancingActivities = NetCashFlowFromFinancingActivitiesContinuing |
| End If |
| 'CF-Impute-08: NetCashFlowContinuing if not reported |
| If NetCashFlowContinuing = 0 Then |
| NetCashFlowContinuing = NetCashFlowFromOperatingActivitiesContinuing + NetCashFlowFromInvestingActivitiesContinuing + NetCashFlowFromFinancingActivitiesContinuing |
| End If |

```
'CF-Impute-10: If total = continuing; then impute discontinued to be zero
    If NetCashFlowFromOperatingActivitiesDiscontinued = 0 and NetCashFlowFromOperatingActivities = NetCashFlowFromOperatingActivitiesContinuing Then
       NetCashFlowFromOperatingActivitiesDiscontinued = 0
    End If
'CF-Impute-11: If total = continuing; then impute discontinued to be zero
    If NetCashFlowFromInvestingActivitiesDiscontinued = 0 and NetCashFlowFromInvestingActivities = NetCashFlowFromInvestingActivitiesContinuing Then
       NetCashFlowFromInvestingActivitiesDiscontinued = 0
    End If
'CF-Impute-12: If total = continuing; then impute discontinued to be zero
   If NetCashFlowFromFinancingActivitiesDiscontinued = 0 and NetCashFlowFromFinancingActivities = NetCashFlowFromFinancingActivitiesContinuing Then
        NetCashFlowFromFinancingActivitiesDiscontinued = 0
    End If
'CF-Impute-13: 'ADDED 2014-03-08 to fix cash flow CF4, CF5, CF6
   If NetCashFlowFromOperatingActivities = 0 and NetCashFlowFromOperatingActivitiesContinuing <> 0 and NetCashFlowFromOperatingActivitiesDiscontinued <>
0 Then
        NetCashFlowFromOperatingActivities = NetCashFlowFromOperatingActivitiesContinuing + NetCashFlowFromOperatingActivitiesDiscontinued
    End If
'CF-Impute-14: 'ADDED 2014-03-08 to fix cash flow CF4, CF5, CF6
   If NetCashFlowFromInvestingActivities = 0 and NetCashFlowFromInvestingActivitiesContinuing <> 0 and NetCashFlowFromInvestingActivitiesDiscontinued <>
0 Then
       {\tt NetCashFlowFromInvestingActivities = NetCashFlowFromInvestingActivitiesContinuing + NetCashFlowFromInvestingActivitiesDiscontinued} \\
   End If
```

```
'CF-Impute-15: 'ADDED 2014-03-08 to fix cash flow CF4, CF5, CF6
   If NetCashFlowFromFinancingActivities = 0 and NetCashFlowFromFinancingActivitiesContinuing <> 0 and NetCashFlowFromFinancingActivitiesDiscontinued <>
0 Then
       NetCashFlowFromFinancingActivities = NetCashFlowFromFinancingActivitiesContinuing + NetCashFlowFromFinancingActivitiesDiscontinued
   End If
'CF-Impute-16: NetCashFlow if not reported; If NetCashFlow is missing, then this tries to figure out the value by adding up the detail
   If NetCashFlow = 0 and (NetCashFlowFromOperatingActivities <> 0 or NetCashFlowFromInvestingActivities <> 0)
Then
       NetCashFlow = NetCashFlowFromOperatingActivities + NetCashFlowFromInvestingActivities + NetCashFlowFromFinancingActivities + ExchangeGainsLosses
   End If
'VERIFICATION RULES: Cash flow statement
   CF1 = NetCashFlow - (NetCashFlowFromOperatingActivities + NetCashFlowFromInvestingActivities + NetCashFlowFromFinancingActivities +
ExchangeGainsLosses)
   If CF1 <> 0 and (NetCashFlow - (NetCashFlowFromOperatingActivities + NetCashFlowFromInvestingActivities + NetCashFlowFromFinancingActivities +
ExchangeGainsLosses)) = (ExchangeGainsLosses * -1) Then
     'NetCashFlow DOES NOT include ExchangeGainsLosses for about 128 SEC filers, it does for about 7040 SEC filers
       CF1 = NetCashFlow - (NetCashFlowFromOperatingActivities + NetCashFlowFromInvestingActivities + NetCashFlowFromFinancingActivities)
   End If
```

```
CF2 = NetCashFlowContinuing - (NetCashFlowFromOperatingActivitiesContinuing + NetCashFlowFromInvestingActivitiesContinuing +
NetCashFlowFromFinancingActivitiesContinuing)
   CF3 = NetCashFlowDiscontinued - (NetCashFlowFromOperatingActivitiesDiscontinued + NetCashFlowFromInvestingActivitiesDiscontinued +
NetCashFlowFromFinancingActivitiesDiscontinued)
   CF4 = NetCashFlowFromOperatingActivities - (NetCashFlowFromOperatingActivitiesContinuing + NetCashFlowFromOperatingActivitiesDiscontinued)
   CF5 = NetCashFlowFromInvestingActivities - (NetCashFlowFromInvestingActivitiesContinuing + NetCashFlowFromInvestingActivitiesDiscontinued)
   CF6 = NetCashFlowFromFinancingActivities - (NetCashFlowFromFinancingActivitiesContinuing + NetCashFlowFromFinancingActivitiesDiscontinued)
'Key ratios
   If (Assets <> 0) and (Equity <> 0) and (Revenues <> 0) Then
        SustainableGrowthRate = ((NetIncomeLoss / Revenues) * (1+((Assets - Equity) / Equity))) / ((1 / (Revenues / Assets))-(((NetIncomeLoss / Revenues)
* (1+(((Assets - Equity) / Equity))))))
   End If
   If Assets <> 0 Then
       ReturnOnAssets = NetIncomeLoss / Assets
   End If
   If Equity <> 0 Then
       ReturnOnEquity = NetIncomeLoss / Equity
   End If
```

If Revenues <> 0 Then

ReturnOnSales = NetIncomeLoss / Revenues

End If