SIMCAT v4.2
(CODI FONT)

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Attribute VB_Name = "ThisWorkbook"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = True
Private Sub Workbook_Open()

Dim i1 As Integer, j1 As Integer, pantalla As Integer

Call COMUNS_0PANTALLA(1)

AVISSORTIR = False

If ALT_PANTALLA = 800 And AMP_PANTALLA = 600 Or ALT_PANTALLA = 960 And AMP_PANTALLA = 600 Or _
   ALT_PANTALLA = 1024 And AMP_PANTALLA = 768 Or ALT_PANTALLA = 1152 And AMP_PANTALLA = 864 Or _
   ALT_PANTALLA = 1280 And AMP_PANTALLA = 720 Or ALT_PANTALLA = 1280 And AMP_PANTALLA = 768 Or _
   ALT_PANTALLA = 1280 And AMP_PANTALLA = 800 Or ALT_PANTALLA = 1360 And AMP_PANTALLA = 768 Then pantalla = 1

If ALT_PANTALLA = 1280 And AMP_PANTALLA = 960 Or ALT_PANTALLA = 1280 And AMP_PANTALLA = 1024 Or _
   ALT_PANTALLA = 1440 And AMP_PANTALLA = 900 Or ALT_PANTALLA = 1600 And AMP_PANTALLA = 1200 Or _
   ALT_PANTALLA = 1680 And AMP_PANTALLA = 1050 Or ALT_PANTALLA = 1920 And AMP_PANTALLA = 1080 Then pantalla = 2

If pantalla = 1 And XTEXT Then
   MsgBox "La resolució actual és " & ALT_PANTALLA & "x" & AMP_PANTALLA & " píxels," & Chr(10) & _
          "incompatible amb una configuració PPP superior al 100%." & Chr(10) & _
          "L'aplicació es tancarà.", vbCritical, "SIMCAT v4.2"
   AVISSORTIR = True
   ThisWorkbook.Close
   Exit Sub
End If

i1 = ThisWorkbook.Worksheets.Count
For j1 = 1 To i1
    ThisWorkbook.Sheets(j1).Activate
    ThisWorkbook.Windows.Application.ActiveWindow.Zoom = Int(XZOOM * IIf(XTEXT, 0.646, 1))

Next j1

OBRIR = 1
NOM_IRPF_DADES = ThisWorkbook.Path & "\DADES\IRPF"
NOM_IRPF_SIMUL = ThisWorkbook.Path & "\SIMUL\IRPF\"
NOM_IS_DADES = ThisWorkbook.Path & "\DADES\IS"
NOM_IS_SIMUL = ThisWorkbook.Path & "\SIMUL\IS\"
NOM_ID_DADES = ThisWorkbook.Path & "\DADES\ISD"
NOM_ID_SIMUL = ThisWorkbook.Path & "\SIMUL\ISD\"
NOM_IT_DADES = ThisWorkbook.Path & "\DADES\IT"
NOM_IT_SIMUL = ThisWorkbook.Path & "\SIMUL\ITPOAJDOS\"
NOM_IPPF_DADES = ThisWorkbook.Path & "\DADES\IPPF"
NOM_IPPF_SIMUL = ThisWorkbook.Path & "\SIMUL\IPPF\"
Call COMUNS_0CREAR(1)

End Sub

Private Sub Workbook_BeforeClose(Cancel As Boolean)

If Not AVISSORTIR Then Call COMUNS_0ESBORRAR(1)
Application.Quit

End Sub
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Attribute VB_Name = "Inicial"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False

Option Explicit
Dim height1 As Integer, left1 As Integer, top1 As Integer, width1 As Integer
Private Sub Aceptar_Click()

Dim i As Integer, i1 As Integer, i2 As Integer, i3 As Integer, i4 As Integer, i5 As Integer, _
    j1 As Integer, k1 As Integer, avis As Boolean, nom1 As String, nom2 As String, _
    resposta As VbMsgBoxResult

If (Comparacio1 Or Comparacio2 Or Comparacio3 Or Comparacio4 Or Comparacio5) Then

   i1 = 0
   k1 = 0
   ERR_LEC = False
   If Comparacio1 Then i = 1
   If Comparacio2 Then i = 2
   If Comparacio3 Then i = 3
   If Comparacio4 Then i = 4
   If Comparacio5 Then i = 5
   For j1 = ISIMULS(i) To 1 Step -1
       If ListBox61.Selected(j1 - 1) Then
          If i = 1 Then i1 = CIRPF(ISIMULS(i) - (j1 - 1))
          If i = 2 Then i1 = CIS(ISIMULS(i) - (j1 - 1))
          If i = 3 Then i1 = CID(ISIMULS(i) - (j1 - 1))
          If i = 4 Then i1 = CIT(ISIMULS(i) - (j1 - 1))
          If i = 5 Then i1 = CIPPF(ISIMULS(i) - (j1 - 1))
          k1 = k1 + 1
       End If
   Next j1
   If k1 = 0 Then
      COMPARA = 0
      ERR_LEC = True
      Me.Hide
      MsgBox "Ha de seleccionar una simulació de la 1a. llista.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      Exit Sub
   End If
   If k1 > 1 Then
      COMPARA = 0
      ERR_LEC = True
      Me.Hide
      MsgBox "Només pot seleccionar una simulació de la 1a. llista.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      For j1 = 1 To ISIMULS(i)
          ListBox61.Selected(j1 - 1) = False
          ListBox62.Selected(j1 - 1) = False
      Next j1
      Exit Sub
   End If

   i2 = 0
   k1 = 0
   For j1 = ISIMULS(i) To 1 Step -1
       If ListBox62.Selected(j1 - 1) Then
          If i = 1 Then i2 = CIRPF(ISIMULS(i) - (j1 - 1))
          If i = 2 Then i2 = CIS(ISIMULS(i) - (j1 - 1))
          If i = 3 Then i2 = CID(ISIMULS(i) - (j1 - 1))
          If i = 4 Then i2 = CIT(ISIMULS(i) - (j1 - 1))
          If i = 5 Then i2 = CIPPF(ISIMULS(i) - (j1 - 1))
          k1 = k1 + 1
       End If
   Next j1
   If k1 = 0 Then
      COMPARA = 0
      ERR_LEC = True
      Me.Hide
      MsgBox "Ha de seleccionar una simulació de la 2a. llista.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      Exit Sub
   End If
   If k1 > 1 Then
      COMPARA = 0
      ERR_LEC = True
      Me.Hide
      MsgBox "Només pot seleccionar una simulació de la 2a. llista.", vbCritical, _
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              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      For j1 = 1 To ISIMULS(i)
          ListBox61.Selected(j1 - 1) = False
          ListBox62.Selected(j1 - 1) = False
      Next j1
      Exit Sub
   End If

   If i1 = i2 Then
      COMPARA = 0
      ERR_LEC = True
      Me.Hide
      MsgBox "Ha de seleccionar una simulació de cada llista, però diferent.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      For j1 = 1 To ISIMULS(i)
          ListBox61.Selected(j1 - 1) = False
          ListBox62.Selected(j1 - 1) = False
      Next j1
      Exit Sub
   End If

   COMP(1) = i1
   COMP(2) = i2
   For j1 = 1 To ISIMULS(i)
       ListBox61.Selected(j1 - 1) = False
       ListBox62.Selected(j1 - 1) = False
   Next j1
   If i = 1 Then Comparacio1.Value = False
   If i = 2 Then Comparacio2.Value = False
   If i = 3 Then Comparacio3.Value = False
   If i = 4 Then Comparacio4.Value = False
   If i = 5 Then Comparacio5.Value = False
   COMPARA = i
   Unload Me

End If

If Consulta1 Or Consulta2 Or Consulta3 Or Consulta4 Or Consulta5 Then

   i1 = 0
   i2 = 0
   i3 = 0
   i4 = 0
   i5 = 0
   avis = False
   ERR_LEC = False
   If Consulta1 Then i = 1
   If Consulta2 Then i = 2
   If Consulta3 Then i = 3
   If Consulta4 Then i = 4
   If Consulta5 Then i = 5

   For j1 = ISIMULS(i) To 1 Step -1
       If ListBox71.Selected(j1 - 1) Then
          If i = 1 Then i1 = CIRPF(ISIMULS(i) - (j1 - 1))
          If i = 2 Then i1 = CIS(ISIMULS(i) - (j1 - 1))
          If i = 3 Then i1 = CID(ISIMULS(i) - (j1 - 1))
          If i = 4 Then i1 = CIT(ISIMULS(i) - (j1 - 1))
          If i = 5 Then i1 = CIPPF(ISIMULS(i) - (j1 - 1))
          Exit For
       End If
   Next j1
   If ISIMULS(i) > 1 Then
      For j1 = ISIMULS(i) To 1 Step -1
          If ListBox72.Selected(j1 - 1) Then
             If i = 1 Then i2 = CIRPF(ISIMULS(i) - (j1 - 1))
             If i = 2 Then i2 = CIS(ISIMULS(i) - (j1 - 1))
             If i = 3 Then i2 = CID(ISIMULS(i) - (j1 - 1))
             If i = 4 Then i2 = CIT(ISIMULS(i) - (j1 - 1))
             If i = 5 Then i2 = CIPPF(ISIMULS(i) - (j1 - 1))
             Exit For
          End If
      Next j1
      If ISIMULS(i) > 2 Then
         For j1 = ISIMULS(i) To 1 Step -1
             If ListBox73.Selected(j1 - 1) Then
                If i = 1 Then i3 = CIRPF(ISIMULS(i) - (j1 - 1))
                If i = 2 Then i3 = CIS(ISIMULS(i) - (j1 - 1))
                If i = 3 Then i3 = CID(ISIMULS(i) - (j1 - 1))
                If i = 4 Then i3 = CIT(ISIMULS(i) - (j1 - 1))
                If i = 5 Then i3 = CIPPF(ISIMULS(i) - (j1 - 1))
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               Exit For
            End If
         Next j1
         If ISIMULS(i) > 3 Then
            For j1 = ISIMULS(i) To 1 Step -1
                If ListBox74.Selected(j1 - 1) Then
                   If i = 1 Then i4 = CIRPF(ISIMULS(i) - (j1 - 1))
                   If i = 2 Then i4 = CIS(ISIMULS(i) - (j1 - 1))
                   If i = 3 Then i4 = CID(ISIMULS(i) - (j1 - 1))
                   If i = 4 Then i4 = CIT(ISIMULS(i) - (j1 - 1))
                   If i = 5 Then i4 = CIPPF(ISIMULS(i) - (j1 - 1))
                   Exit For
                End If
            Next j1
            If ISIMULS(i) > 3 Then
               For j1 = ISIMULS(i) To 1 Step -1
                   If ListBox75.Selected(j1 - 1) Then
                      If i = 1 Then i5 = CIRPF(ISIMULS(i) - (j1 - 1))
                      If i = 2 Then i5 = CIS(ISIMULS(i) - (j1 - 1))
                      If i = 3 Then i5 = CID(ISIMULS(i) - (j1 - 1))
                      If i = 4 Then i5 = CIT(ISIMULS(i) - (j1 - 1))
                      If i = 5 Then i5 = CIPPF(ISIMULS(i) - (j1 - 1))
                      Exit For
                   End If
               Next j1
            End If
         End If
      End If
   End If

   If i1 = 0 And i2 = 0 And i3 = 0 And i4 = 0 And i5 = 0 Then
      RES = 0
      ERR_LEC = True
      Me.Hide
      MsgBox "Ha de seleccionar com a mínim una simulació per obtenir resultats.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      Exit Sub
   End If
   j1 = 0
   If i1 <> 0 Then
      j1 = j1 + 1
      If i2 <> 0 Then
         If i2 <> i1 Then j1 = j1 + 1 Else avis = True
         If i3 <> 0 Then
            If i3 <> i2 And i3 <> i1 Then j1 = j1 + 1 Else avis = True
            If i4 <> 0 Then
               If i4 <> i3 And i4 <> i2 And i4 <> i1 Then j1 = j1 + 1 Else avis = True
               If i5 <> 0 Then
                  If i5 <> i4 And i5 <> i3 And i5 <> i2 And i5 <> i1 Then j1 = j1 + 1 Else avis = True
               End If
            End If
         End If
      End If
   End If
   If avis Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Alguna de les simulacions seleccionades està repetida.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      Exit Sub
   Else
      ReDim IRESULTS(1 To j1)
      For j1 = 1 To UBound(IRESULTS)
          If j1 = 1 Then IRESULTS(j1) = i1
          If j1 = 2 Then IRESULTS(j1) = i2
          If j1 = 3 Then IRESULTS(j1) = i3
          If j1 = 4 Then IRESULTS(j1) = i4
          If j1 = 5 Then IRESULTS(j1) = i5
      Next j1
   End If
   RES = i
   Unload Me

End If

If Gestio1 Or Gestio2 Or Gestio3 Or Gestio4 Or Gestio5 Then

   i1 = 0
   k1 = 0
   ERR_LEC = False
   If Gestio1 Then i = 1
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   If Gestio2 Then i = 2
   If Gestio3 Then i = 3
   If Gestio4 Then i = 4
   If Gestio5 Then i = 5
   For j1 = ISIMULS(i) To 1 Step -1
       If ListBox61.Selected(j1 - 1) Then
          If i = 1 Then i1 = CIRPF(ISIMULS(i) - (j1 - 1))
          If i = 2 Then i1 = CIS(ISIMULS(i) - (j1 - 1))
          If i = 3 Then i1 = CID(ISIMULS(i) - (j1 - 1))
          If i = 4 Then i1 = CIT(ISIMULS(i) - (j1 - 1))
          If i = 5 Then i1 = CIPPF(ISIMULS(i) - (j1 - 1))
          k1 = k1 + 1
       End If
   Next j1

   If k1 = 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Ha de seleccionar alguna simulació per a esborrar.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      Exit Sub
   End If
   If k1 > 1 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Només pot seleccionar una simulació per a esborrar.", vbCritical, _
              IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, IIf(i = 4, TITOL_IT,
TITOL_IPPF))))
      For j1 = 1 To ISIMULS(i)
          ListBox61.Selected(j1 - 1) = False
      Next j1
      Exit Sub
   End If

   If i = 1 Then nom1 = NOM_IRPF_SIMUL & "S" & ANOIRPF & "_"
   If i = 1 Then nom2 = NOM_IRPF_SIMUL & "GP" & ANOIRPF & "_"
   If i = 2 Then nom1 = NOM_IS_SIMUL & "S" & ANOIS & "_"
   If i = 2 Then nom2 = NOM_IS_SIMUL & "GP" & ANOIS & "_"
   If i = 3 Then nom1 = NOM_ID_SIMUL & "S" & ANOID & "_"
   If i = 3 Then nom2 = NOM_ID_SIMUL & "GP" & ANOID & "_"
   If i = 4 Then nom1 = NOM_IT_SIMUL & "S" & ANOIT & "_"
   If i = 4 Then nom2 = NOM_IT_SIMUL & "GP" & ANOIT & "_"
   If i = 5 Then nom1 = NOM_IPPF_SIMUL & "S" & ANOIPPF & "_"
   If i = 5 Then nom2 = NOM_IPPF_SIMUL & "GP" & ANOIPPF & "_"
   For j1 = ISIMULS(i) To 1 Step -1
       ERR_LEC = False
       If ListBox61.Selected(j1 - 1) Then
          ERR_LEC = True
          Me.Hide
          If i = 1 Then i1 = CIRPF(ISIMULS(i) - (j1 - 1))
          If i = 2 Then i1 = CIS(ISIMULS(i) - (j1 - 1))
          If i = 3 Then i1 = CID(ISIMULS(i) - (j1 - 1))
          If i = 4 Then i1 = CIT(ISIMULS(i) - (j1 - 1))
          If i = 5 Then i1 = CIPPF(ISIMULS(i) - (j1 - 1))
          resposta = MsgBox("Vol eliminar la Simulació " & i1 & " ?", vbInformation + vbYesNo, _
                            IIf(i = 1, TITOL_IRPF, IIf(i = 2, TITOL_IS, IIf(i = 3, TITOL_ID, _
                            IIf(i = 4, TITOL_IT, TITOL_IPPF)))))
          If resposta = vbYes Then
             Kill nom1 & Trim(Str(i1)) & ".xlsx"
             If i <> 4 Then Kill nom2 & Trim(Str(i1)) & ".dat"
          End If
          Call COMUNS_0NETEJA(IIf(i = 1, "IRPF(R)", IIf(i = 2, "IS(R)", IIf(i = 3, "ID(R)", _
                              IIf(i = 4, "ITPOOSAJD(R)", "IPPF(R)")))))
          If i = 1 Then Call COMUNS_0NETEJA("IRPF(G-P)")
          If i = 2 Then Call COMUNS_0NETEJA("IS(G-P)")
          If i = 3 Then Call COMUNS_0NETEJA("ID(G-P)")
          If i = 5 Then Call COMUNS_0NETEJA("IPPF(G-P)")
          Call COMPTADOR1(i)
          Exit For
       End If
   Next j1
   For j1 = 1 To ISIMULS(i)
       ListBox61.Selected(j1 - 1) = False
   Next j1
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" Then
          If Left(CTL.Name, 1) <> "R" Then CTL.Enabled = False
          If Left(CTL.Name, 1) = "G" Then CTL.Value = False
          If Left(CTL.Name, 1) = "S" Then CTL.Caption = "Simulació"
       End If
   Next CTL
   With Me
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     .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((Me.Height - height1) / 2)
   End With

End If

End Sub
Private Sub Cancelar_Click()

Dim i1 As Integer

If IMPOST(1) Then MultiPage1.Value = 0
If IMPOST(2) Then MultiPage1.Value = 1
If IMPOST(3) Then MultiPage1.Value = 2
If IMPOST(4) Then MultiPage1.Value = 3
If IMPOST(5) Then MultiPage1.Value = 4

For Each CTL In Me.Controls
    If TypeName(CTL) = "OptionButton" Then
       CTL.Value = False
       If Left(CTL.Name, 1) <> "R" Then CTL.Enabled = False
       If Left(CTL.Name, 1) = "S" Then CTL.Caption = "Simulación"
    End If
Next CTL
Frame6.Visible = False
Frame7.Visible = False

IMPOST(1) = False
IMPOST(2) = False
IMPOST(3) = False
IMPOST(4) = False
IMPOST(5) = False
COMPARA = 0
RES = 0
SIMUL = 0

For i1 = 1 To Application.max(ISIMULS(1), ISIMULS(2), ISIMULS(3), ISIMULS(4), ISIMULS(5))
    If ListBox61.Selected(i1 - 1) Then ListBox61.Selected(i1 - 1) = False
    If ListBox62.Selected(i1 - 1) Then ListBox62.Selected(i1 - 1) = False
    If ListBox71.Selected(i1 - 1) Then ListBox71.Selected(i1 - 1) = False
    If ListBox72.Selected(i1 - 1) Then ListBox72.Selected(i1 - 1) = False
    If ListBox73.Selected(i1 - 1) Then ListBox73.Selected(i1 - 1) = False
    If ListBox74.Selected(i1 - 1) Then ListBox74.Selected(i1 - 1) = False
    If ListBox75.Selected(i1 - 1) Then ListBox75.Selected(i1 - 1) = False
Next i1
For i1 = 1 To Application.max(AIRPF, AIS, AID, AIT, AIPPF)
    If ListBox_IRPF.Selected(i1 - 1) Then ListBox_IRPF.Selected(i1 - 1) = False
    If ListBox_IS.Selected(i1 - 1) Then ListBox_IS.Selected(i1 - 1) = False
    If ListBox_ID.Selected(i1 - 1) Then ListBox_ID.Selected(i1 - 1) = False
    If ListBox_IT.Selected(i1 - 1) Then ListBox_IT.Selected(i1 - 1) = False
    If ListBox_IPPF.Selected(i1 - 1) Then ListBox_IPPF.Selected(i1 - 1) = False
Next i1
ListBox72.Locked = True
ListBox73.Locked = True
ListBox74.Locked = True
ListBox75.Locked = True
With Me
  .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
  .Top = top1 - ((Me.Height - height1) / 2)
End With

End Sub
Private Sub Comparacio1_Click()

Dim s() As String

If Comparacio1.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Comparacio1" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Comparacio", 1, s)
   With Me
     With .Frame6
       .Caption = "Comparar:"
       .Frame61.Left = 2
       .Frame62.Visible = True
       .Label6.Visible = True
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(1)
       .ListBox62.List = s
       .ListBox62.TopIndex = ISIMULS(1)
       .Visible = True
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     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("IRPF(G-P)")
End If

End Sub
Private Sub Comparacio2_Click()

Dim s() As String

If Comparacio2.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Comparacio2" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Comparacio", 2, s)
   With Me
     With .Frame6
       .Caption = "Comparar:"
       .Frame61.Left = 2
       .Frame62.Visible = True
       .Label6.Visible = True
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(2)
       .ListBox62.List = s
       .ListBox62.TopIndex = ISIMULS(2)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("IS(G-P)")
End If

End Sub
Private Sub Comparacio3_Click()

Dim s() As String

If Comparacio3.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Comparacio3" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Comparacio", 3, s)
   With Me
     With .Frame6
       .Caption = "Comparar:"
       .Frame61.Left = 2
       .Frame62.Visible = True
       .Label6.Visible = True
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(3)
       .ListBox62.List = s
       .ListBox62.TopIndex = ISIMULS(3)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("ID(G-P)")
End If

End Sub
Private Sub Comparacio4_Click()

Dim s() As String

If Comparacio4.Value Then
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   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Comparacio4" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Comparacio", 4, s)
   With Me
     With .Frame6
       .Caption = "Comparar:"
       .Frame61.Left = 2
       .Frame62.Visible = True
       .Label6.Visible = True
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(4)
       .ListBox62.List = s
       .ListBox62.TopIndex = ISIMULS(4)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("ITPOOSAJD(G-P)")
End If

End Sub
Private Sub Comparacio5_Click()

Dim s() As String

If Comparacio5.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Comparacio5" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Comparacio", 5, s)
   With Me
     With .Frame6
       .Caption = "Comparar:"
       .Frame61.Left = 2
       .Frame62.Visible = True
       .Label6.Visible = True
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(5)
       .ListBox62.List = s
       .ListBox62.TopIndex = ISIMULS(5)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("IPPF(G-P)")
End If

End Sub
Private Sub Consulta1_Click()

Dim i1 As Integer, s() As String

If Consulta1.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Consulta1" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   For i1 = 1 To Application.max(ISIMULS(1), ISIMULS(2), ISIMULS(3), ISIMULS(4), ISIMULS(5))
       If ListBox61.Selected(i1 - 1) Then ListBox61.Selected(i1 - 1) = False
       If ListBox62.Selected(i1 - 1) Then ListBox62.Selected(i1 - 1) = False
   Next i1
   Call COMPTADOR2("Consulta", 1, s)
   With Me
     .Frame6.Visible = False
     With .Frame7
       .ListBox71.List = s
       .ListBox72.List = s
       .ListBox73.List = s
       .ListBox74.List = s
       .ListBox75.List = s
```

```
       .ListBox71.TopIndex = ISIMULS(1)
       If ISIMULS(1) > 1 Then
          .Frame72.Visible = True
          .ListBox72.TopIndex = ISIMULS(1) - 2
          If ISIMULS(1) > 2 Then
             .Frame73.Visible = True
             .ListBox73.TopIndex = ISIMULS(1) - 3
             If ISIMULS(1) > 3 Then
                .Frame74.Visible = True
                .ListBox74.TopIndex = ISIMULS(1) - 4
                If ISIMULS(1) > 4 Then
                   .Frame75.Visible = True
                   .ListBox75.TopIndex = ISIMULS(1) - 5
                End If
             End If
          End If
       End If
       .Visible = True
     End With
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("IRPF(R)")
End If

End Sub
Private Sub Consulta2_Click()

Dim i1 As Integer, s() As String

If Consulta2.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Consulta2" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   For i1 = 1 To Application.max(ISIMULS(1), ISIMULS(2), ISIMULS(3), ISIMULS(4), ISIMULS(5))
       If ListBox61.Selected(i1 - 1) Then ListBox61.Selected(i1 - 1) = False
       If ListBox62.Selected(i1 - 1) Then ListBox62.Selected(i1 - 1) = False
   Next i1
   Call COMPTADOR2("Consulta", 2, s)
   With Me
     .Frame6.Visible = False
     With .Frame7
       .ListBox71.List = s
       .ListBox72.List = s
       .ListBox73.List = s
       .ListBox74.List = s
       .ListBox75.List = s
       .ListBox71.TopIndex = ISIMULS(2)
       .ListBox71.Visible = True
       If ISIMULS(2) > 1 Then
          .Frame72.Visible = True
          .ListBox72.TopIndex = ISIMULS(2) - 2
          If ISIMULS(2) > 2 Then
             .Frame73.Visible = True
             .ListBox73.TopIndex = ISIMULS(2) - 3
             If ISIMULS(2) > 3 Then
                .Frame74.Visible = True
                .ListBox74.TopIndex = ISIMULS(2) - 4
                If ISIMULS(2) > 4 Then
                   .Frame75.Visible = True
                   .ListBox75.TopIndex = ISIMULS(2) - 5
                End If
             End If
          End If
       End If
       .Visible = True
     End With
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("IS(R)")
End If

End Sub
Private Sub Consulta3_Click()

Dim i1 As Integer, s() As String

If Consulta3.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Consulta3" Then CTL.Value = False
   Next CTL
```

```
   ERR_LEC = False
   For i1 = 1 To Application.max(ISIMULS(1), ISIMULS(2), ISIMULS(3), ISIMULS(4), ISIMULS(5))
       If ListBox61.Selected(i1 - 1) Then ListBox61.Selected(i1 - 1) = False
       If ListBox62.Selected(i1 - 1) Then ListBox62.Selected(i1 - 1) = False
   Next i1
   Call COMPTADOR2("Consulta", 3, s)
   With Me
     .Frame6.Visible = False
     With .Frame7
       .ListBox71.List = s
       .ListBox72.List = s
       .ListBox73.List = s
       .ListBox74.List = s
       .ListBox75.List = s
       .ListBox71.TopIndex = ISIMULS(3)
       If ISIMULS(3) > 1 Then
          .Frame72.Visible = True
          .ListBox72.TopIndex = ISIMULS(3) - 2
          If ISIMULS(3) > 2 Then
             .Frame73.Visible = True
             .ListBox73.TopIndex = ISIMULS(3) - 3
             If ISIMULS(3) > 3 Then
                .Frame74.Visible = True
                .ListBox74.TopIndex = ISIMULS(3) - 4
                If ISIMULS(3) > 4 Then
                   .Frame75.Visible = True
                   .ListBox75.TopIndex = ISIMULS(3) - 5
                End If
             End If
          End If
       End If
       .Visible = True
     End With
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("ID(R)")
End If

End Sub
Private Sub Consulta4_Click()

Dim i1 As Integer, s() As String

If Consulta4.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Consulta4" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   For i1 = 1 To Application.max(ISIMULS(1), ISIMULS(2), ISIMULS(3), ISIMULS(4), ISIMULS(5))
       If ListBox61.Selected(i1 - 1) Then ListBox61.Selected(i1 - 1) = False
       If ListBox62.Selected(i1 - 1) Then ListBox62.Selected(i1 - 1) = False
   Next i1
   Call COMPTADOR2("Consulta", 4, s)
   With Me
     .Frame6.Visible = False
     With .Frame7
       .ListBox71.List = s
       .ListBox72.List = s
       .ListBox73.List = s
       .ListBox74.List = s
       .ListBox75.List = s
       .ListBox71.TopIndex = ISIMULS(4)
       If ISIMULS(4) > 1 Then
          .Frame72.Visible = True
          .ListBox72.TopIndex = ISIMULS(4) - 2
          If ISIMULS(4) > 2 Then
             .Frame73.Visible = True
             .ListBox73.TopIndex = ISIMULS(4) - 3
             If ISIMULS(4) > 3 Then
                .Frame74.Visible = True
                .ListBox74.TopIndex = ISIMULS(4) - 4
                If ISIMULS(4) > 4 Then
                   .Frame75.Visible = True
                   .ListBox75.TopIndex = ISIMULS(4) - 5
                End If
             End If
          End If
       End If
       .Visible = True
     End With
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
```

```
   End With
   Call COMUNS_0NETEJA("ITPOOSAJD(R)")
End If

End Sub
Private Sub Consulta5_Click()

Dim i1 As Integer, s() As String

If Consulta5.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Consulta5" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   For i1 = 1 To Application.max(ISIMULS(1), ISIMULS(2), ISIMULS(3), ISIMULS(4), ISIMULS(5))
       If ListBox61.Selected(i1 - 1) Then ListBox61.Selected(i1 - 1) = False
       If ListBox62.Selected(i1 - 1) Then ListBox62.Selected(i1 - 1) = False
   Next i1
   Call COMPTADOR2("Consulta", 5, s)
   With Me
     .Frame6.Visible = False
     With .Frame7
       .ListBox71.List = s
       .ListBox72.List = s
       .ListBox73.List = s
       .ListBox74.List = s
       .ListBox75.List = s
       .ListBox71.TopIndex = ISIMULS(5)
       If ISIMULS(5) > 1 Then
          .Frame72.Visible = True
          .ListBox72.TopIndex = ISIMULS(5) - 2
          If ISIMULS(5) > 2 Then
             .Frame73.Visible = True
             .ListBox73.TopIndex = ISIMULS(5) - 3
             If ISIMULS(5) > 3 Then
                .Frame74.Visible = True
                .ListBox74.TopIndex = ISIMULS(5) - 4
                If ISIMULS(5) > 4 Then
                   .Frame75.Visible = True
                   .ListBox75.TopIndex = ISIMULS(5) - 5
                End If
             End If
          End If
       End If
       .Visible = True
     End With
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
   Call COMUNS_0NETEJA("IPPF(R)")
End If

End Sub
Private Sub Gestio1_Click()

Dim s() As String

If Gestio1.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Gestio1" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Gestio", 1, s)
   With Me
     With .Frame6
       .Caption = "Eliminar:"
       .Frame61.Left = 60
       .Frame62.Visible = False
       .Label6.Visible = False
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(1)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
End If

End Sub
```

```
Private Sub Gestio2_Click()

Dim s() As String

If Gestio2.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Gestio2" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Gestio", 2, s)
   With Me
     With .Frame6
       .Caption = "Eliminar:"
       .Frame61.Left = 60
       .Frame62.Visible = False
       .Label6.Visible = False
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(2)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
End If

End Sub
Private Sub Gestio3_Click()

Dim s() As String

If Gestio3.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Gestio3" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Gestio", 3, s)
   With Me
     With .Frame6
       .Caption = "Eliminar:"
       .Frame61.Left = 60
       .Frame62.Visible = False
       .Label6.Visible = False
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(3)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
End If

End Sub
Private Sub Gestio4_Click()

Dim s() As String

If Gestio4.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Gestio4" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Gestio", 4, s)
   With Me
     With .Frame6
       .Caption = "Eliminar:"
       .Frame61.Left = 60
       .Frame62.Visible = False
       .Label6.Visible = False
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(4)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
```

```
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
End If

End Sub
Private Sub Gestio5_Click()

Dim s() As String

If Gestio5.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" And CTL.Name <> "Gestio5" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   Call COMPTADOR2("Gestio", 5, s)
   With Me
     With .Frame6
       .Caption = "Eliminar:"
       .Frame61.Left = 60
       .Frame62.Visible = False
       .Label6.Visible = False
       .ListBox61.List = s
       .ListBox61.TopIndex = ISIMULS(5)
       .Visible = True
     End With
     .Frame7.Visible = False
     For Each CTL In .Frame7.Controls
         If TypeName(CTL) = "Frame" And CTL.Name <> "Frame71" Then CTL.Visible = False
     Next CTL
     .Height = 215 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
     .Top = top1 - ((.Height - height1) / 2)
   End With
End If

End Sub
Private Sub Simula1_Click()

Dim i1 As Integer, nom1 As String, nom2 As String, resposta As VbMsgBoxResult

If Simula1.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   If ISIMULS(1) <> 0 Then
      If CIRPF(ISIMULS(1)) = 100 Then
         ERR_LEC = True
         nom1 = NOM_IRPF_SIMUL & "S" & ANOIRPF & "_"
         nom2 = NOM_IRPF_SIMUL & "GP" & ANOIRPF & "_"
         Me.Hide
         resposta = MsgBox("El comptador de  simulacions  ha arribat al seu  límit (100).  Si vol obtenir " &
vbCr & _
                           "més simulacions cal esborrar totes les que hi ha ara emmmegatzemades." & vbCr & vbCr
& _
                           "Vol eliminar totes les simulacions existents definitivament ?", vbInformation +
vbYesNo, TITOL_IRPF)
         If resposta = vbYes Then
            For i1 = 1 To ISIMULS(1)
                If Dir(nom1 & Trim(Str(CIRPF(i1))) & ".xlsx") Then Kill nom1 & Trim(Str(CIRPF(i1))) & ".xlsx"
                If Dir(nom2 & Trim(Str(CIRPF(i1))) & ".dat") Then Kill nom2 & Trim(Str(CIRPF(i1))) & ".dat"
            Next i1
         Else
            SIMUL = 0
            Unload Me
            Exit Sub
         End If
      End If
      Call COMUNS_0NETEJA("IRPF(R)")
   End If
   SIMUL = 1
   Unload Me
End If

End Sub
Private Sub Simula2_Click()

Dim i1 As Integer, nom1 As String, nom2 As String, resposta As VbMsgBoxResult

If Simula2.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" Then CTL.Value = False
```

```
   Next CTL
   ERR_LEC = False
   If ISIMULS(2) <> 0 Then
      If CIS(ISIMULS(2)) = 100 Then
         ERR_LEC = True
         nom1 = NOM_IS_SIMUL & "S" & ANOIS & "_"
         nom2 = NOM_IS_SIMUL & "GP" & ANOIS & "_"
         Me.Hide
         resposta = MsgBox("El comptador de  simulacions  ha arribat al seu  límit (100).  Si vol obtenir " &
vbCr & _
                           "més simulacions cal esborrar totes les que hi ha ara emmmegatzemades." & vbCr & vbCr
& _
                           "Vol eliminar totes les simulacions existents definitivament ?", vbInformation +
vbYesNo, TITOL_IS)
         If resposta = vbYes Then
            For i1 = 1 To ISIMULS(2)
                If Dir(nom1 & Trim(Str(CIS(i1))) & ".xlsx") Then Kill nom1 & Trim(Str(CIS(i1))) & ".xlsx"
                If Dir(nom2 & Trim(Str(CIS(i1))) & ".dat") Then Kill nom2 & Trim(Str(CIS(i1))) & ".dat"
            Next i1
         Else
            SIMUL = 0
            Unload Me
            Exit Sub
         End If
      End If
      Call COMUNS_0NETEJA("IS(R)")
   End If
   SIMUL = 2
   Unload Me
End If

End Sub
Private Sub Simula3_Click()

Dim i1 As Integer, nom1 As String, nom2 As String, resposta As VbMsgBoxResult

If Simula3.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   If ISIMULS(3) <> 0 Then
      If CID(ISIMULS(3)) = 100 Then
         ERR_LEC = True
         nom1 = NOM_ID_SIMUL & "S" & ANOID & "_"
         nom2 = NOM_ID_SIMUL & "GP" & ANOID & "_"
         Me.Hide
         resposta = MsgBox("El comptador de  simulacions  ha arribat al seu  límit (100).  Si vol obtenir " &
vbCr & _
                           "més simulacions cal esborrar totes les que hi ha ara emmmegatzemades." & vbCr & vbCr
& _
                           "Vol eliminar totes les simulacions existents definitivament ?", vbInformation +
vbYesNo, TITOL_ID)
         If resposta = vbYes Then
            For i1 = 1 To ISIMULS(3)
                If Dir(nom1 & Trim(Str(CID(i1))) & ".xlsx") Then Kill nom1 & Trim(Str(CID(i1))) & ".xlsx"
                If Dir(nom2 & Trim(Str(CID(i1))) & ".dat") Then Kill nom2 & Trim(Str(CID(i1))) & ".dat"
            Next i1
         Else
             SIMUL = 0
             Unload Me
             Exit Sub
         End If
      End If
      Call COMUNS_0NETEJA("ID(R)")
   End If
   SIMUL = 3
   Unload Me
End If

End Sub
Private Sub Simula4_Click()

Dim i1 As Integer, nom1 As String, nom2 As String, resposta As VbMsgBoxResult

If Simula4.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   If ISIMULS(4) <> 0 Then
      If CIT(ISIMULS(4)) = 100 Then
         ERR_LEC = True
```

```
         nom1 = NOM_IT_SIMUL & "S" & ANOIT & "_"
         Me.Hide
         resposta = MsgBox("El comptador de  simulacions  ha arribat al seu  límit (100).  Si vol obtenir " &
vbCr & _
                           "més simulacions cal esborrar totes les que hi ha ara emmmegatzemades." & vbCr & vbCr
& _
                           "Vol eliminar totes les simulacions existents definitivament ?", vbInformation +
vbYesNo, TITOL_IT)
         If resposta = vbYes Then
            For i1 = 1 To ISIMULS(4)
                If Dir(nom1 & Trim(Str(CIT(i1))) & ".xlsx") Then Kill nom1 & Trim(Str(CIT(i1))) & ".xlsx"
            Next i1
         Else
             SIMUL = 0
             Unload Me
             Exit Sub
         End If
      End If
      Call COMUNS_0NETEJA("ITPOOSAJD(R)")
   End If
   SIMUL = 4
   Unload Me
End If

End Sub
Private Sub Simula5_Click()

Dim i1 As Integer, nom1 As String, nom2 As String, resposta As VbMsgBoxResult

If Simula5.Value Then
   For Each CTL In Me.Controls
       If TypeName(CTL) = "OptionButton" Then CTL.Value = False
   Next CTL
   ERR_LEC = False
   If ISIMULS(5) <> 0 Then
      If CIPPF(ISIMULS(5)) = 100 Then
         ERR_LEC = True
         nom1 = NOM_IPPF_SIMUL & "S" & ANOIPPF & "_"
         Me.Hide
         resposta = MsgBox("El comptador de  simulacions  ha arribat al seu  límit (100).  Si vol obtenir " &
vbCr & _
                           "més simulacions cal esborrar totes les que hi ha ara emmmegatzemades." & vbCr & vbCr
& _
                           "Vol eliminar totes les simulacions existents definitivament ?", vbInformation +
vbYesNo, TITOL_IPPF)
         If resposta = vbYes Then
            For i1 = 1 To ISIMULS(5)
                If Dir(nom1 & Trim(Str(CIPPF(i1))) & ".xlsx") Then Kill nom1 & Trim(Str(CIPPF(i1))) & ".xlsx"
                If Dir(nom2 & Trim(Str(CIPPF(i1))) & ".dat") Then Kill nom2 & Trim(Str(CIPPF(i1))) & ".dat"
            Next i1
         Else
             SIMUL = 0
             Unload Me
             Exit Sub
         End If
      End If
      Call COMUNS_0NETEJA("IPPF(R)")
   End If
   SIMUL = 5
   Unload Me
End If

End Sub
Private Sub ListBox_IRPF_Click()

Dim i1 As Integer

For Each CTL In Me.Controls
    If TypeName(CTL) = "OptionButton" And Left(CTL.Name, 1) <> "R" Then
       CTL.Enabled = False
       CTL.Value = False
    End If
Next CTL
For i1 = 1 To Application.max(AIRPF, AIS, AID, AIT, AIPPF)
    ListBox_IS.Selected(i1 - 1) = False
    ListBox_ID.Selected(i1 - 1) = False
    ListBox_IT.Selected(i1 - 1) = False
    ListBox_IPPF.Selected(i1 - 1) = False
    If ListBox_IRPF.Selected(i1 - 1) = True Then
       ANOIRPF = ListBox_IRPF.Value
       Exit For
    End If
Next i1
```

```
Call COMPTADOR1(1)
With Me
  With .Simula1
    .Caption = "Simulació (" & ISIMULS(1) & "  emmagatzemad" & IIf(ISIMULS(1) = 1, "a)", "es)")
    .Enabled = True
  End With
  If ISIMULS(1) <> 0 Then
     If ISIMULS(1) > 1 Then .Comparacio1.Enabled = True
     .Consulta1.Enabled = True
     .Gestio1.Enabled = True
  End If
  .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
  .Top = top1 - ((Me.Height - height1) / 2)
End With

End Sub
Private Sub ListBox_IS_Click()

Dim i1 As Integer

For Each CTL In Me.Controls
    If TypeName(CTL) = "OptionButton" And Left(CTL.Name, 1) <> "R" Then
       CTL.Enabled = False
       CTL.Value = False
    End If
Next CTL
For i1 = 1 To Application.max(AIRPF, AIS, AID, AIT, AIPPF)
    ListBox_IRPF.Selected(i1 - 1) = False
    ListBox_ID.Selected(i1 - 1) = False
    ListBox_IT.Selected(i1 - 1) = False
    ListBox_IPPF.Selected(i1 - 1) = False
    If ListBox_IS.Selected(i1 - 1) = True Then
       ANOIS = ListBox_IS.Value
       Exit For
    End If
Next i1

Call COMPTADOR1(2)
With Me
  With .Simula2
    .Caption = "Simulació (" & ISIMULS(2) & "  emmagatzemad" & IIf(ISIMULS(2) = 1, "a)", "es)")
    .Enabled = True
  End With
  If ISIMULS(2) <> 0 Then
     If ISIMULS(2) > 1 Then .Comparacio2.Enabled = True
     .Consulta2.Enabled = True
     .Gestio2.Enabled = True
  End If
  .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
  .Top = top1 - ((Me.Height - height1) / 2)
End With

End Sub
Private Sub ListBox_ID_Click()

Dim i1 As Integer

For Each CTL In Me.Controls
    If TypeName(CTL) = "OptionButton" And Left(CTL.Name, 1) <> "R" Then
       CTL.Enabled = False
       CTL.Value = False
    End If
Next CTL
For i1 = 1 To Application.max(AIRPF, AIS, AID, AIT, AIPPF)
    ListBox_IRPF.Selected(i1 - 1) = False
    ListBox_IS.Selected(i1 - 1) = False
    ListBox_IT.Selected(i1 - 1) = False
    ListBox_IPPF.Selected(i1 - 1) = False
    If ListBox_ID.Selected(i1 - 1) = True Then
       ANOID = ListBox_ID.Value
       Exit For
    End If
Next i1

Call COMPTADOR1(3)
With Me
  With .Simula3
    .Caption = "Simulació (" & ISIMULS(3) & "  emmagatzemad" & IIf(ISIMULS(3) = 1, "a)", "es)")
    .Enabled = True
  End With
  If ISIMULS(3) <> 0 Then
     If ISIMULS(3) > 1 Then .Comparacio3.Enabled = True
```

```
     .Consulta3.Enabled = True
     .Gestio3.Enabled = True
  End If
  .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
  .Top = top1 - ((Me.Height - height1) / 2)
End With

End Sub
Private Sub ListBox_IT_Click()

Dim i1 As Integer

For Each CTL In Me.Controls
    If TypeName(CTL) = "OptionButton" And Left(CTL.Name, 1) <> "R" Then
       CTL.Enabled = False
       CTL.Value = False
    End If
Next CTL
For i1 = 1 To Application.max(AIRPF, AIS, AID, AIT, AIPPF)
    ListBox_IRPF.Selected(i1 - 1) = False
    ListBox_IS.Selected(i1 - 1) = False
    ListBox_ID.Selected(i1 - 1) = False
    ListBox_IPPF.Selected(i1 - 1) = False
    If ListBox_IT.Selected(i1 - 1) = True Then
       ANOIT = ListBox_IT.Value
       Exit For
    End If
Next i1

Call COMPTADOR1(4)
With Me
  With .Simula4
    .Caption = "Simulació (" & ISIMULS(4) & "  emmagatzemad" & IIf(ISIMULS(4) = 1, "a)", "es)")
    .Enabled = True
  End With
  If ISIMULS(4) <> 0 Then
     If ISIMULS(4) > 1 Then .Comparacio4.Enabled = True
     .Consulta4.Enabled = True
     .Gestio4.Enabled = True
  End If
  .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
  .Top = top1 - ((Me.Height - height1) / 2)
End With

End Sub
Private Sub ListBox_IPPF_Click()

Dim i1 As Integer

For Each CTL In Me.Controls
    If TypeName(CTL) = "OptionButton" And Left(CTL.Name, 1) <> "R" Then
       CTL.Enabled = False
       CTL.Value = False
    End If
Next CTL
For i1 = 1 To Application.max(AIRPF, AIS, AID, AIT, AIPPF)
    ListBox_IRPF.Selected(i1 - 1) = False
    ListBox_IS.Selected(i1 - 1) = False
    ListBox_ID.Selected(i1 - 1) = False
    ListBox_IT.Selected(i1 - 1) = False
    If ListBox_IPPF.Selected(i1 - 1) = True Then
       ANOIPPF = ListBox_IPPF.Value
       Exit For
    End If
Next i1

Call COMPTADOR1(5)
With Me
  With .Simula5
    .Caption = "Simulació (" & ISIMULS(5) & "  emmagatzemad" & IIf(ISIMULS(5) = 1, "a)", "es)")
    .Enabled = True
  End With
  If ISIMULS(5) <> 0 Then
     If ISIMULS(5) > 1 Then .Comparacio5.Enabled = True
     .Consulta5.Enabled = True
     .Gestio5.Enabled = True
  End If
  .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
  .Top = top1 - ((Me.Height - height1) / 2)
End With

End Sub
Private Sub ListBox71_Click()
```

```
Dim j1 As Integer

For j1 = 1 To ISIMULS(MultiPage1.Value + 1)
    If ListBox71.Selected(j1 - 1) Then
       ListBox72.Locked = False
       Exit For
    End If
Next j1

End Sub
Private Sub ListBox72_Click()

Dim j1 As Integer

For j1 = 1 To ISIMULS(MultiPage1.Value + 1)
    If ListBox72.Selected(j1 - 1) Then
       ListBox73.Locked = False
       Exit For
    End If
Next j1

End Sub
Private Sub ListBox73_Click()

Dim j1 As Integer

For j1 = 1 To ISIMULS(MultiPage1.Value + 1)
    If ListBox73.Selected(j1 - 1) Then
       ListBox74.Locked = False
       Exit For
    End If
Next j1

End Sub
Private Sub ListBox74_Click()

Dim j1 As Integer

For j1 = 1 To ISIMULS(MultiPage1.Value + 1)
    If ListBox74.Selected(j1 - 1) Then
       ListBox75.Locked = False
       Exit For
    End If
Next j1

End Sub
Private Sub MultiPage1_Change()

Dim i1 As Integer

With Me
  .Height = 145 * (IIf(XZOOM < 200 Or XTEXT, 1, 1.5))
  .Top = top1 - ((Me.Height - height1) / 2)
End With
For i1 = 0 To Application.max(ISIMULS(1), ISIMULS(2), ISIMULS(3), ISIMULS(4), ISIMULS(5))
    ListBox61.Selected(i1) = False
    ListBox62.Selected(i1) = False
Next i1
For Each CTL In Me.Controls
    If TypeName(CTL) = "OptionButton" And Left(CTL.Name, 1) <> "R" Then
       CTL.Enabled = False
       CTL.Value = False
    End If
Next CTL

For i1 = 1 To 5
    IMPOST(i1) = False
    If MultiPage1.Value = i1 - 1 Then
       If i1 = 1 Then
          IMPOST(1) = True
          Caption = "Impost sobre la Renda de les Persones Físiques (IRPF)"
          ListBox_IRPF.List = AIRPF
       ElseIf i1 = 2 Then
          IMPOST(2) = True
          Caption = "Impost sobre Successions (IS)"
          ListBox_IS.List = AIS
       ElseIf i1 = 3 Then
          IMPOST(3) = True
          Caption = "Impost sobre Donacions (ID)"
          ListBox_ID.List = AID
       ElseIf i1 = 4 Then
          IMPOST(4) = True
```

```
          Caption = "Transmissions patrimonials. Operacions societàries. Actes jurídics (ITPOOSAJD)"
          ListBox_IT.List = AIT
       ElseIf i1 = 5 Then
          IMPOST(5) = True
          Caption = "Impost sobre el Patrimoni de les Persones Físiques (IPPF)"
          ListBox_IPPF.List = AIPPF
       End If
    End If
Next i1

End Sub
Private Sub UserForm_Activate()

height1 = Me.Height
left1 = Me.Left
top1 = Me.Top
width1 = Me.Width
Zoom = IIf(XZOOM < 200, 100, IIf(Not XTEXT, 150, 100))

End Sub
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)

If CloseMode = 0 Then SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Zoom(Percent As Integer)

Me.Width = Me.Width * Percent / 100
Me.Height = Me.Height * Percent / 100
Me.Left = left1 - ((Me.Width - width1) / 2)

End Sub
Private Sub COMPTADOR1(opcio As Integer)

Dim i1 As Integer, i2 As Integer, i3 As Integer, j1 As Integer, nom As String

If ISIMULS(opcio) <> 0 Then
   For j1 = 1 To ISIMULS(opcio)
       If ListBox61.Selected(j1 - 1) Then ListBox61.Selected(j1 - 1) = False
       If ListBox62.Selected(j1 - 1) Then ListBox62.Selected(j1 - 1) = False
   Next j1
End If

If opcio = 1 Then nom = NOM_IRPF_SIMUL & "S" & ANOIRPF & "_"
If opcio = 2 Then nom = NOM_IS_SIMUL & "S" & ANOIS & "_"
If opcio = 3 Then nom = NOM_ID_SIMUL & "S" & ANOID & "_"
If opcio = 4 Then nom = NOM_IT_SIMUL & "S" & ANOIT & "_"
If opcio = 5 Then nom = NOM_IPPF_SIMUL & "S" & ANOIPPF & "_"

ISIMULS(opcio) = 0
For i1 = 1 To 100
    If Dir(nom & Trim(Str(i1)) & ".xlsx") <> "" Then ISIMULS(opcio) = ISIMULS(opcio) + 1
Next i1
If ISIMULS(opcio) <> 0 Then
   If opcio = 1 Then ReDim CIRPF(1 To ISIMULS(opcio))
   If opcio = 2 Then ReDim CIS(1 To ISIMULS(opcio))
   If opcio = 3 Then ReDim CID(1 To ISIMULS(opcio))
   If opcio = 4 Then ReDim CIT(1 To ISIMULS(opcio))
   If opcio = 5 Then ReDim CIPPF(1 To ISIMULS(opcio))
   i2 = 1
   i1 = 1
TORNA:
   If Dir(nom & Trim(Str(i1)) & ".xlsx") <> "" Then
      If opcio = 1 Then CIRPF(i2) = i1
      If opcio = 2 Then CIS(i2) = i1
      If opcio = 3 Then CID(i2) = i1
      If opcio = 4 Then CIT(i2) = i1
      If opcio = 5 Then CIPPF(i2) = i1
      i2 = i2 + 1
   End If
   i1 = i1 + 1
   If i1 <= 100 Or i2 < ISIMULS(opcio) Then GoTo TORNA
Else
   If opcio = 1 Then ReDim CIRPF(0)
   If opcio = 2 Then ReDim CIS(0)
   If opcio = 3 Then ReDim CID(0)
   If opcio = 4 Then ReDim CIT(0)
   If opcio = 5 Then ReDim CIPPF(0)
End If

End Sub
Private Sub COMPTADOR2(opcio1 As String, opcio2 As Integer, s)
```

```
Dim i1 As Integer, i2 As Integer, i3 As Integer, nom As String
ReDim s(1 To ISIMULS(opcio2))

If opcio1 <> "Consulta" Then
   If opcio2 = 1 Then nom = NOM_IRPF_SIMUL & "S" & ANOIRPF & "_"
   If opcio2 = 2 Then nom = NOM_IS_SIMUL & "S" & ANOIS & "_"
   If opcio2 = 3 Then nom = NOM_ID_SIMUL & "S" & ANOID & "_"
   If opcio2 = 4 Then nom = NOM_IT_SIMUL & "S" & ANOIT & "_"
   If opcio2 = 5 Then nom = NOM_IPPF_SIMUL & "S" & ANOIPPF & "_"
End If

i2 = 0
i1 = ISIMULS(opcio2)
TORNA:
If opcio2 = 1 Then i3 = CIRPF(i1)
If opcio2 = 2 Then i3 = CIS(i1)
If opcio2 = 3 Then i3 = CID(i1)
If opcio2 = 4 Then i3 = CIT(i1)
If opcio2 = 5 Then i3 = CIPPF(i1)

If opcio1 <> "Consulta" Then
   If Dir(nom & Trim(Str(i3)) & ".xlsx") <> "" Then
      i2 = i2 + 1
      s(i2) = "Simulació " & i3
   End If
Else
   i2 = i2 + 1
   s(i2) = Trim(Str(i3))
End If
i1 = i1 - 1
If i2 < ISIMULS(opcio2) Then GoTo TORNA

End Sub
```

```
Attribute VB_Name = "IPPF"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False

Option Explicit
Dim height1 As Integer, left1 As Integer, top1 As Integer, width1 As Integer
Private Sub Aceptar_Click()

Dim i1 As Integer

ERR_LEC = False

If MultiPage1.Value = 0 Then

   ReDim BENS_E(1 To 22)
   For Each CTL In Frame11.Controls
       For i1 = 1 To 22
           If CTL.Name = "CheckBox11" & i1 Then
              If CTL.Value Then BENS_E(i1) = 1
           End If
       Next i1
   Next CTL
   If WorksheetFunction.Sum(BENS_E) = 22 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Com a mínim algún bé o dret ha de ser no exempt.", vbCritical, TITOL_IPPF
      Exit Sub
   End If

   ReDim MINIMS_E(1 To 22)
   For Each CTL In Frame13.Controls
       For i1 = 1 To 22
           If CTL.Name = "TextBox13" & i1 Then
              If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) > 750000) Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en el mínim exempt de l'epígraf: ''" & LVAR(i1) & "''. No pot ser negatiu ni
superior a 750000€.", vbCritical, TITOL_IPPF
                 Exit Sub
              Else
                 MINIMS_E(i1) = Val(Replace(CTL.Value, ",", "."))
              End If
           End If
       Next i1
   Next CTL

   ''''''''''''''''''''''''''''''''''''''''
   'Guarda els paràmetres del primer quadre
   ''''''''''''''''''''''''''''''''''''''''

   ReDim PARMS(37, 7)
   PARMS(0, 0) = "Paràmetres"
   PARMS(0, 1) = IPPF_ANYREF
   For i1 = 1 To 22
       If BENS_E(i1) = 1 Then PARMS(i1, 1) = "x"
       PARMS(i1, 2) = MINIMS_E(i1)
   Next i1

ElseIf MultiPage1.Value = 1 Then

   If Not IsNumeric(TextBox21.Value) Or (Val(TextBox21.Value) < 0) Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció general per obligació personal.", vbCritical, TITOL_IPPF
      Exit Sub
   Else
      REDUCCIO(1) = Val(Replace(TextBox21.Value, ",", "."))           'Reducció Obligació personal general
   End If
   If Not IsNumeric(TextBox22.Value) Or (Val(TextBox22.Value) < 0) Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per a discapacitats per obligació personal.", vbCritical, TITOL_IPPF
      Exit Sub
   Else
      REDUCCIO(2) = Val(Replace(TextBox22.Value, ",", "."))           'Reducció Obligació personal discapcitats
   End If


   NTRAMS = Val(ListBox22.Value)           'Trams i tipus impositius
   ReDim TIPUS(1 To NTRAMS), T(1 To NTRAMS)
   For i1 = 1 To NTRAMS
```

```
    For Each CTL In Frame222.Controls
        If i1 <> NTRAMS Then
           If CTL.Name = "TextBox222" & i1 & "2" Then
              If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en el TRAM " & i1 & ".", vbCritical, TITOL_IPPF
                 Exit Sub
              Else
                 T(i1) = Val(Replace(CTL.Value, ",", "."))
              End If
           End If
        End If
        If CTL.Name = "TextBox222" & i1 & "3" Then
           If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
              ERR_LEC = True
              Me.Hide
              MsgBox "Error en el tipus impositiu del TRAM " & i1 & ".", vbCritical, TITOL_IPPF
              Exit Sub
           Else
              TIPUS(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
           End If
        End If
    Next CTL
    If i1 <> 1 Then
       If i1 <> NTRAMS Then
          If T(i1) <= T(i1 - 1) Then
             ERR_LEC = True
             Me.Hide
             MsgBox "Error en el TRAM " & i1 & ".", vbCritical, TITOL_IPPF
             Exit Sub
          End If
       End If
       If TIPUS(i1) < TIPUS(i1 - 1) Then
          ERR_LEC = True
          Me.Hide
          MsgBox "Error en el tipus impositiu del TRAM " & i1 & ".", vbCritical, TITOL_IPPF
          Exit Sub
       End If
    End If
Next i1

ReDim LIMITS(1 To 2)                    'Connexió IRPF
If CheckBox23.Value Then
   CONNEXIO_IRPF = True
   LIMITS(1) = Val(ListBox231.Value) / 100
   LIMITS(2) = Val(ListBox232.Value) / 100
Else
   CONNEXIO_IRPF = False
End If

PROJ(1) = 1 + (ListBox241.Value / 100)  'Coeficients de projecció
PROJ(2) = 1 + (ListBox242.Value / 100)
PROJ(3) = 1 + (ListBox243.Value / 100)

''''''''''''''''''''''''''''''''''''''''
'Guarda els paràmetres del segon quadre
''''''''''''''''''''''''''''''''''''''''

PARMS(23, 1) = REDUCCIO(1)
PARMS(23, 2) = REDUCCIO(2)

PARMS(0, 2) = NTRAMS
For i1 = 1 To NTRAMS
    If i1 = 1 Then
       PARMS(23 + i1, 1) = "0"
       PARMS(23 + i1, 2) = IIf(i1 <> NTRAMS, T(i1), "i més")
       PARMS(23 + i1, 3) = TIPUS(i1) + 0.0000000001
    ElseIf i1 < NTRAMS Then
       PARMS(23 + i1, 1) = T(i1 - 1)
       PARMS(23 + i1, 2) = T(i1)
       PARMS(23 + i1, 3) = TIPUS(i1) + 0.0000000001
    Else
       PARMS(23 + i1, 1) = T(i1 - 1)
       PARMS(23 + i1, 2) = "i més"
       PARMS(23 + i1, 3) = TIPUS(i1) + 0.0000000001
    End If
Next i1

PARMS(0, 3) = CONNEXIO_IRPF
PARMS(36, 1) = LIMITS(1) + 0.0000000001
PARMS(36, 2) = LIMITS(2) + 0.0000000001
```

```
   PARMS(37, 1) = PROJ(1)
   PARMS(37, 2) = PROJ(2)
   PARMS(37, 3) = PROJ(3)

End If

Unload Me

End Sub
Private Sub Anterior_Click()

PAGINA = PAGINA - 1

MultiPage1.Value = PAGINA
Me.Caption = "SIMCAT-IPPF: Determinació dels béns i drets exempts i dels mínims exempts (Base de dades: " &
ANOIPPF & ")"

NetejaValors.Value = False
Llei.Value = False
SimulRef.Value = False

For Each CTL In Frame11.Controls
    If PARMS(CTL.TabIndex + 1, 1) = "x" Then CTL.Value = True Else CTL.Value = False
Next CTL
For Each CTL In Frame13.Controls
    CTL.Value = PARMS(CTL.TabIndex + 1, 2)
Next CTL

End Sub
Private Sub Cancelar_Click()

SORTIR = True
IMPOST(5) = True
Unload Me

End Sub
Private Sub CheckBox111_Click()

If CheckBox111.Value Then
   Label121.Enabled = False
   Label141.Enabled = False
   TextBox131.Enabled = False
   TextBox131.Value = "0"
Else
   Label121.Enabled = True
   Label141.Enabled = True
   TextBox131.Enabled = True
   TextBox131.Value = IPPF_ME(1)
End If

End Sub
Private Sub CheckBox112_Click()

If CheckBox112.Value Then
   Label122.Enabled = False
   Label142.Enabled = False
   TextBox132.Enabled = False
   TextBox132.Value = "0"
Else
   Label122.Enabled = True
   Label142.Enabled = True
   TextBox132.Enabled = True
   TextBox132.Value = "0"
End If

End Sub
Private Sub CheckBox113_Click()

If CheckBox113.Value Then
   Label123.Enabled = False
   Label143.Enabled = False
   TextBox133.Enabled = False
   TextBox133.Value = "0"
Else
   Label123.Enabled = True
   Label143.Enabled = True
   TextBox133.Enabled = True
   TextBox133.Value = "0"
End If

End Sub
Private Sub CheckBox114_Click()
```

```
If CheckBox114.Value Then
   Label124.Enabled = False
   Label144.Enabled = False
   TextBox134.Enabled = False
   TextBox134.Value = "0"
Else
   Label124.Enabled = True
   Label144.Enabled = True
   TextBox134.Enabled = True
   TextBox134.Value = "0"
End If

End Sub
Private Sub CheckBox115_Click()

If CheckBox115.Value Then
   Label125.Enabled = False
   Label145.Enabled = False
   TextBox135.Enabled = False
   TextBox135.Value = "0"
Else
   Label125.Enabled = True
   Label145.Enabled = True
   TextBox135.Enabled = True
   TextBox135.Value = "0"
End If

End Sub
Private Sub CheckBox116_Click()

If CheckBox116.Value Then
   Label126.Enabled = False
   Label146.Enabled = False
   TextBox136.Enabled = False
   TextBox136.Value = "0"
Else
   Label126.Enabled = True
   Label146.Enabled = True
   TextBox136.Enabled = True
   TextBox136.Value = "0"
End If

End Sub
Private Sub CheckBox117_Click()

If CheckBox117.Value Then
   Label127.Enabled = False
   Label147.Enabled = False
   TextBox137.Enabled = False
   TextBox137.Value = "0"
Else
   Label127.Enabled = True
   Label147.Enabled = True
   TextBox137.Enabled = True
   TextBox137.Value = "0"
End If

End Sub
Private Sub CheckBox118_Click()

If CheckBox118.Value Then
   Label128.Enabled = False
   Label148.Enabled = False
   TextBox138.Enabled = False
   TextBox138.Value = "0"
Else
   Label128.Enabled = True
   Label148.Enabled = True
   TextBox138.Enabled = True
   TextBox138.Value = "0"
End If

End Sub
Private Sub CheckBox119_Click()

If CheckBox119.Value Then
   Label129.Enabled = False
   Label149.Enabled = False
   TextBox139.Enabled = False
   TextBox139.Value = "0"
Else
   Label129.Enabled = True
   Label149.Enabled = True
```

```
   TextBox139.Enabled = True
   TextBox139.Value = "0"
End If

End Sub
Private Sub CheckBox1110_Click()

If CheckBox1110.Value Then
   Label1210.Enabled = False
   Label1410.Enabled = False
   TextBox1310.Enabled = False
   TextBox1310.Value = "0"
Else
   Label1210.Enabled = True
   Label1410.Enabled = True
   TextBox1310.Enabled = True
   TextBox1310.Value = "0"
End If

End Sub
Private Sub CheckBox1111_Click()

If CheckBox1111.Value Then
   Label1211.Enabled = False
   Label1411.Enabled = False
   TextBox1311.Enabled = False
   TextBox1311.Value = "0"
Else
   Label1211.Enabled = True
   Label1411.Enabled = True
   TextBox1311.Enabled = True
   TextBox1311.Value = "0"
End If

End Sub
Private Sub CheckBox1112_Click()

If CheckBox1112.Value Then
   Label1212.Enabled = False
   Label1412.Enabled = False
   TextBox1312.Enabled = False
   TextBox1312.Value = "0"
Else
   Label1212.Enabled = True
   Label1412.Enabled = True
   TextBox1312.Enabled = True
   TextBox1312.Value = "0"
End If

End Sub
Private Sub CheckBox1113_Click()

If CheckBox1113.Value Then
   Label1213.Enabled = False
   Label1413.Enabled = False
   TextBox1313.Enabled = False
   TextBox1313.Value = "0"
Else
   Label1213.Enabled = True
   Label1413.Enabled = True
   TextBox1313.Enabled = True
   TextBox1313.Value = "0"
End If

End Sub
Private Sub CheckBox1114_Click()

If CheckBox1114.Value Then
   Label1214.Enabled = False
   Label1414.Enabled = False
   TextBox1314.Enabled = False
   TextBox1314.Value = "0"
Else
   Label1214.Enabled = True
   Label1414.Enabled = True
   TextBox1314.Enabled = True
   TextBox1314.Value = "0"
End If

End Sub
Private Sub CheckBox1115_Click()

If CheckBox1115.Value Then
```

```
   Label1215.Enabled = False
   Label1415.Enabled = False
   TextBox1315.Enabled = False
   TextBox1315.Value = "0"
Else
   Label1215.Enabled = True
   Label1415.Enabled = True
   TextBox1315.Enabled = True
   TextBox1315.Value = "0"
End If

End Sub
Private Sub CheckBox1116_Click()

If CheckBox1116.Value Then
   Label1216.Enabled = False
   Label1416.Enabled = False
   TextBox1316.Enabled = False
   TextBox1316.Value = "0"
Else
   Label1216.Enabled = True
   Label1416.Enabled = True
   TextBox1316.Enabled = True
   TextBox1316.Value = "0"
End If

End Sub
Private Sub CheckBox1117_Click()

If CheckBox1117.Value Then
   Label1217.Enabled = False
   Label1417.Enabled = False
   TextBox1317.Enabled = False
   TextBox1317.Value = "0"
Else
   Label1217.Enabled = True
   Label1417.Enabled = True
   TextBox1317.Enabled = True
   TextBox1317.Value = "0"
End If

End Sub
Private Sub CheckBox1118_Click()

If CheckBox1118.Value Then
   Label1218.Enabled = False
   Label1418.Enabled = False
   TextBox1318.Enabled = False
   TextBox1318.Value = "0"
Else
   Label1218.Enabled = True
   Label1418.Enabled = True
   TextBox1318.Enabled = True
   TextBox1318.Value = "0"
End If

End Sub
Private Sub CheckBox1119_Click()

If CheckBox1119.Value Then
   Label1219.Enabled = False
   Label1419.Enabled = False
   TextBox1319.Enabled = False
   TextBox1319.Value = "0"
Else
   Label1219.Enabled = True
   Label1419.Enabled = True
   TextBox1319.Enabled = True
   TextBox1319.Value = "0"
End If

End Sub
Private Sub CheckBox1120_Click()

If CheckBox1120.Value Then
   Label1220.Enabled = False
   Label1420.Enabled = False
   TextBox1320.Enabled = False
   TextBox1320.Value = "0"
Else
   Label1220.Enabled = True
   Label1420.Enabled = True
   TextBox1320.Enabled = True
```

```
   TextBox1320.Value = "0"
End If

End Sub
Private Sub CheckBox1121_Click()

If CheckBox1121.Value Then
   Label1221.Enabled = False
   Label1421.Enabled = False
   TextBox1321.Enabled = False
   TextBox1321.Value = "0"
Else
   Label1221.Enabled = True
   Label1421.Enabled = True
   TextBox1321.Enabled = True
   TextBox1321.Value = "0"
End If

End Sub
Private Sub CheckBox1122_Click()

If CheckBox1122.Value Then
   Label1222.Enabled = False
   Label1422.Enabled = False
   TextBox1322.Enabled = False
   TextBox1322.Value = "0"
Else
   Label1222.Enabled = True
   Label1422.Enabled = True
   TextBox1322.Enabled = True
   TextBox1322.Value = "0"
End If

End Sub
Private Sub CheckBox23_Click()

If CheckBox23.Value Then
   Frame23.Height = 75
Else
   Frame23.Height = 30
   ListBox231.Selected(3) = True
   ListBox231.TopIndex = 3
   ListBox232.Selected(1) = True
   ListBox232.TopIndex = 1
End If

End Sub
Private Sub ListBox22_Click()

Dim i1 As Integer

NTRAMS = Val(ListBox22.Value)
For Each CTL In Frame221.Controls
    If CTL.TabIndex <= NTRAMS - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame222.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMS - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox222" & NTRAMS & "2" Then
       CTL.Enabled = False
       CTL.Value = "En endavant"
    End If
Next CTL
For Each CTL In Frame223.Controls
    If CTL.TabIndex <= NTRAMS - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox22211.Value = "0"

End Sub
Private Sub ListBox_Simulref_Click()

Dim i1 As Integer, nsim As Integer, p(37, 9)

For i1 = 0 To ISIMULS(5) - 1
    If ListBox_SimulRef.Selected(i1) = True Then
       nsim = ListBox_SimulRef.Value
       Exit For
    End If
Next i1
```

```
Call COMUNS_1REFERENCIA_SIMULS("IPPF", nsim, p)

If MultiPage1.Value = 0 Then

For Each CTL In Frame11.Controls
    If p(CTL.TabIndex + 1, 1) = "x" Then CTL.Value = True Else CTL.Value = False
Next CTL
For Each CTL In Frame13.Controls
    CTL.Value = p(CTL.TabIndex + 1, 2)
Next CTL

ElseIf MultiPage1.Value = 1 Then

   TextBox21.Value = p(23, 1)
   TextBox22.Value = p(23, 2)

   ListBox22.Selected(12 - p(0, 2)) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To p(0, 2)
           If i1 <> p(0, 2) And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = Round(p(23 + i1, 2), 2)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(p(23 + i1, 3) * 100, "#0.000")
       Next i1
   Next CTL

   If p(0, 3) Then
      CheckBox23.Value = True
      ListBox231.Selected(9 - Int(p(36, 1) * 10)) = True
      ListBox232.Selected(9 - Int(p(36, 2) * 10)) = True
   Else
      CheckBox23.Value = False
   End If
   ListBox241.Selected(150 - ((p(37, 1) - 1) * 1000)) = True
   ListBox242.Selected(150 - ((p(37, 2) - 1) * 1000)) = True
   ListBox243.Selected(150 - ((p(37, 3) - 1) * 1000)) = True

End If

End Sub
Private Sub Llei_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   For Each CTL In Frame11.Controls
       If CTL.TabIndex = 3 Or CTL.TabIndex = 11 Or CTL.TabIndex = 12 Then
          CTL.Value = True
       Else
          CTL.Value = False
       End If
   Next CTL
   For Each CTL In Frame13.Controls
       CTL.Value = "0"
   Next CTL
   TextBox131.Value = IPPF_ME(1)

ElseIf MultiPage1.Value = 1 Then

   TextBox21.Value = IPPF_OP(1)
   TextBox22.Value = IPPF_OP(2)

   ListBox22.Selected(12 - IPPF_NTRAMS) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To IPPF_NTRAMS
           If i1 <> IPPF_NTRAMS And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = IPPF_TRAMS(i1)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(IPPF_TIPUS(i1) * 100, "#0.000")
       Next i1
   Next CTL

   CheckBox23.Value = True
   ListBox231.Selected(3) = True
   ListBox232.Selected(1) = True

   ListBox241.Selected(150) = True
   ListBox242.Selected(150) = True
   ListBox243.Selected(150) = True

End If

End Sub
Private Sub MultiPage1_Layout(ByVal Index As Long)

If MultiPage1.Value = 0 Then
```

```
   Aceptar.Left = 240
   Anterior.Visible = False
   Cancelar.Left = 288

ElseIf MultiPage1.Value = 1 Then

   Aceptar.Left = 263
   Anterior.Visible = True
   Cancelar.Left = 311

End If

End Sub
Private Sub NetejaValors_Click()

If MultiPage1.Value = 0 Then

   For Each CTL In Frame11.Controls
       CTL.Value = False
   Next CTL
   For Each CTL In Frame13.Controls
       CTL.Value = "0"
   Next CTL

ElseIf MultiPage1.Value = 1 Then

   TextBox21.Value = "0"
   TextBox22.Value = "0"
   ListBox22.Selected(11) = True
   TextBox22211.Value = "0"
   TextBox22212.Value = "En endavant"
   TextBox22213.Value = "1"
   CheckBox23.Value = False
   ListBox231.Selected(3) = True
   ListBox231.TopIndex = 3
   ListBox232.Selected(1) = True
   ListBox232.TopIndex = 1
   ListBox241.Selected(150) = True
   ListBox241.TopIndex = 150
   ListBox242.Selected(150) = True
   ListBox242.TopIndex = 150
   ListBox243.Selected(150) = True
   ListBox243.TopIndex = 150

End If

End Sub
Private Sub SimulRef_Change()

Dim i1 As Integer

If SimulRef Then
   Frame02.Width = 190
   For i1 = 0 To ISIMULS(5) - 1
       ListBox_SimulRef.Selected(i1) = False
   Next i1
Else
   Frame02.Width = 150
   ListBox_SimulRef.TopIndex = 0
End If

End Sub
Private Sub TextBox22212_Change()

If IsNumeric(TextBox22212.Value) Then TextBox22221.Value = TextBox22212.Value

End Sub
Private Sub TextBox22222_Change()

If IsNumeric(TextBox22222.Value) Then TextBox22231.Value = TextBox22222.Value

End Sub
Private Sub TextBox22232_Change()

If IsNumeric(TextBox22232.Value) Then TextBox22241.Value = TextBox22232.Value

End Sub
Private Sub TextBox22242_Change()

If IsNumeric(TextBox22242.Value) Then TextBox22251.Value = TextBox22242.Value

End Sub
Private Sub TextBox22252_Change()
```

```
If IsNumeric(TextBox22252.Value) Then TextBox22261.Value = TextBox22252.Value

End Sub
Private Sub TextBox22262_Change()

If IsNumeric(TextBox22262.Value) Then TextBox22271.Value = TextBox22262.Value

End Sub
Private Sub TextBox22272_Change()

If IsNumeric(TextBox22272.Value) Then TextBox22281.Value = TextBox22272.Value

End Sub
Private Sub TextBox22282_Change()

If IsNumeric(TextBox22282.Value) Then TextBox22291.Value = TextBox22282.Value

End Sub
Private Sub TextBox22292_Change()

If IsNumeric(TextBox22292.Value) Then TextBox222101.Value = TextBox22292.Value

End Sub
Private Sub TextBox222102_Change()

If IsNumeric(TextBox222102.Value) Then TextBox222111.Value = TextBox222102.Value

End Sub
Private Sub TextBox222112_Change()

If IsNumeric(TextBox222112.Value) Then TextBox222121.Value = TextBox222112.Value

End Sub
Private Sub UserForm_Activate()

height1 = Me.Height
left1 = Me.Left
top1 = Me.Top
width1 = Me.Width
Zoom = IIf(XZOOM < 200, 100, IIf(Not XTEXT, 150, 100))
If ISIMULS(5) <> 0 Then Frame02.Width = 150 Else Frame02.Width = 104

End Sub
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)

If CloseMode = 0 Then SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Zoom(Percent As Integer)

Me.Width = Me.Width * Percent / 100
Me.Height = Me.Height * Percent / 100
Me.Left = left1 - ((Me.Width - width1) / 2)
Me.Top = top1 - ((Me.Width - width1) / 2)

End Sub
```

```
Attribute VB_Name = "IRPF"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False

Option Explicit
Dim height1 As Integer, left1 As Integer, top1 As Integer, width1 As Integer
Private Sub Aceptar_Click()

Dim i1 As Integer, i2 As Integer, j1 As Integer, c(1 To 2) As Controls

ERR_LEC = False

If MultiPage1.Value = 0 Then

   ReDim MPF(11, 2)                                  'Mínims personals
   If CheckBox11.Value Then
      MPF(0, 0) = 1

      For Each CTL In Frame112.Controls
          For i1 = 1 To 11
              For j1 = 1 To 2
                  If CTL.Name = "TextBox112" & i1 & j1 Then
                     If Not IsNumeric(CTL.Value) Or Val(CTL.Value) < 0 Then
                        ERR_LEC = True
                        Me.Hide
                        MsgBox "Error en el MPF " & i1 & IIf(j1 = 1, "Estat", "Catalunya") & ".", vbCritical,
TITOL_IRPF
                        Exit Sub
                     Else
                        MPF(i1, j1) = Val(CTL.Value)
                     End If
                  End If
              Next j1
          Next i1
      Next CTL
      For i1 = 1 To 11
          MPF(i1, 2) = MPF(i1, 1) + MPF(i1, 2)
          If MPF(i1, 1) / MPF(i1, 2) > 1.2 Or MPF(i1, 1) / MPF(i1, 2) < 0.8 Then
             ERR_LEC = True
             Me.Hide
             MsgBox "El MPF de Catalunya no pot ser ni superior ni inferior en un 20% del de l'Estat.",
vbCritical, TITOL_IRPF
             Me.NetejaValors = True
             Me.Llei = True
             Exit Sub
          End If
      Next i1
   End If

   ReDim RTC(2)                                      'Tributació conjunta
   If CheckBox12.Value Then
      RTC(0) = 1

      If Not IsNumeric(TextBox121.Value) Or Val(TextBox121.Value) < 0 Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la reducció per tributació conjunta (matrimoni o parella de fet)", vbCritical,
TITOL_IRPF
         Exit Sub
      Else
         RTC(1) = Val(TextBox121.Value)
      End If
      If Not IsNumeric(TextBox122.Value) Or Val(TextBox122.Value) < 0 Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la reducció per tributació conjunta (separació legal)", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         RTC(2) = Val(TextBox122.Value)
      End If

   End If

   ReDim RT(4, 4)                                    'Reduccions Rendiments Treball personal
   If CheckBox13.Value Then
      RT(0, 0) = 1

      If (Not IsNumeric(TextBox13112.Value) Or Val(TextBox13112.Value) < 0) Or _
         (Not IsNumeric(TextBox13113.Value) Or Val(TextBox13113.Value) < 0) Or _
         (Not IsNumeric(TextBox13122.Value) Or Val(TextBox13122.Value) < 0) Or _
         (Not IsNumeric(TextBox13133.Value) Or Val(TextBox13133.Value) < 0) Then
```

```
         ERR_LEC = True
         Me.Hide
         MsgBox "Algun import de la reducció per percepció del treball personal és incorrecte.", vbCritical,
TITOL_IRPF
         Exit Sub
      Else
         If Val(TextBox13122.Value) < Val(TextBox13112.Value) Then
            ERR_LEC = True
            Me.Hide
            MsgBox "En la reducció per percepció del treball personal, el límit màxim del 1er. tram " & _
                   "no pot ser superior al límit màxim del 2on. tram.", vbCritical, TITOL_IRPF
            Exit Sub
         End If
         If Val(TextBox13113.Value) < Val(TextBox13133.Value) Then
            ERR_LEC = True
            Me.Hide
            MsgBox "En la reducció per percepció del treball personal, la reducció de l'últim tram " & _
                   "no pot ser superior a la dels altres trams inferiors.", vbCritical, TITOL_IRPF
            Exit Sub
         End If
         RT(1, 2) = Val(TextBox13112.Value)
         RT(1, 3) = Val(TextBox13113.Value)
         RT(2, 2) = Val(TextBox13122.Value)
         RT(3, 3) = Val(TextBox13133.Value)
      End If

      If (Not IsNumeric(TextBox1321.Value) Or Val(TextBox1321.Value) < 0) Or _
         (Not IsNumeric(TextBox1322.Value) Or Val(TextBox1322.Value) < 0) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la reducció per percepció del treball personal per a discapacitats.", vbCritical,
TITOL_IRPF
         Exit Sub
      Else
         RT(4, 1) = Val(TextBox1321.Value)
         RT(4, 2) = Val(TextBox1322.Value)
      End If
      If RT(4, 1) > RT(4, 2) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la reducció per percepció del treball personal per a discapacitats.", vbCritical,
TITOL_IRPF
         Exit Sub
      End If

   End If

   ReDim RPP(4)                                          'Reduccions Plans Pensions
   If CheckBox14.Value Then
      RPP(0) = 1

      If (Not IsNumeric(TextBox141.Value) Or Val(TextBox141.Value) < 0) Or _
         (Not IsNumeric(TextBox142.Value) Or Val(TextBox142.Value) < 0) Or _
         (Not IsNumeric(TextBox143.Value) Or Val(TextBox143.Value) < 0) Or _
         (Not IsNumeric(TextBox144.Value) Or Val(TextBox144.Value) < 0) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la reducció per plans de pensions.", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         RPP(1) = Val(TextBox141.Value)
         RPP(2) = Val(TextBox142.Value)
         RPP(3) = Val(TextBox143.Value)
         RPP(4) = Val(TextBox144.Value)
      End If

      If RPP(1) > IRPF_RED_PP(1) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "En les aportacions a plans de pensions, el límit general " & _
                "no pot ser superior a " & IRPF_RED_PP(1) & ".", vbCritical, TITOL_IRPF
         Exit Sub
      End If
      If RPP(2) > IRPF_RED_PP(2) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "En les aportacions a plans de pensions, el límit per a declarants més grans de 50 anys " & _
                "no pot ser superior a " & IRPF_RED_PP(2) & ".", vbCritical, TITOL_IRPF
         Exit Sub
      End If
      If RPP(3) > IRPF_RED_PP(3) Then
         ERR_LEC = True
         Me.Hide
```

```
         MsgBox "En les aportacions a plans de pensions, el límit per a cònjuges no pot ser superior a " & _
                IRPF_RED_PP(3) & ".", vbCritical, TITOL_IRPF
         Exit Sub
      End If
      If RPP(4) > IRPF_RED_PP(4) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "En les aportacions a plans de pensions, el límit per a discapacitats i esportites professionals
" & _
                "no pot ser superior a " & IRPF_RED_PP(4) & ".", vbCritical, TITOL_IRPF
         Exit Sub
      End If

   End If

   '''''''''''''''''''''''''''''''''''''''''''''''''
   'Guarda els paràmetres del primer quadre a PARMS'
   '''''''''''''''''''''''''''''''''''''''''''''''''

   ReDim PARMS(53, 18)
   PARMS(0, 0) = "Paràmetres"
   PARMS(0, 1) = IRPF_ANYREF

   PARMS(0, 2) = MPF(0, 0)
   If MPF(0, 0) = 1 Then
      For i1 = 1 To 11
          PARMS(1, i1) = MPF(i1, 1)
          PARMS(2, i1) = MPF(i1, 2)
      Next i1
   End If

   PARMS(0, 3) = RTC(0)
   If RTC(0) = 1 Then
      PARMS(3, 1) = RTC(1)
      PARMS(3, 2) = RTC(2)
   End If

   PARMS(0, 4) = RT(0, 0)
   If RT(0, 0) = 1 Then
      PARMS(4, 1) = "0"
      PARMS(4, 2) = RT(1, 2)
      PARMS(4, 3) = RT(1, 3)
      PARMS(5, 1) = PARMS(4, 2)
      PARMS(5, 2) = RT(2, 2)
      PARMS(5, 3) = PARMS(4, 3)
      PARMS(6, 1) = PARMS(5, 2)
      PARMS(6, 2) = "i més"
      PARMS(6, 3) = RT(3, 3)
      PARMS(7, 1) = RT(4, 1)
      PARMS(7, 2) = RT(4, 2)
   End If

   PARMS(0, 5) = RPP(0)
   If RPP(0) = 1 Then
      PARMS(8, 1) = RPP(1)
      PARMS(8, 2) = RPP(2)
      PARMS(8, 3) = RPP(3)
      PARMS(8, 4) = RPP(4)
   End If

   '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
   'ULL QUE AIXÒ S'ESCRIU ABANS D'ESCRIURE ELS ALTRES PARÀMETRES PERÒ VA AL FINAL
   '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

   If TotsSi.Value Then DECL_NOMBRE = "TOTS" Else DECL_NOMBRE = "OBLIGATS"
   PARMS(0, 17) = DECL_NOMBRE
   PARMS(0, 18) = ANY_PROJ
   For i1 = 1 To 5
       PARMS(48 + i1, 1) = PROJ(i1)
   Next i1

ElseIf MultiPage1.Value = 1 Then                              'Tarifa

   Dim auxntrams As Integer
   Set c(1) = Frame212.Controls
   Set c(2) = Frame222.Controls

   NTRAMSG(1) = ListBox21.Value
   NTRAMSG(2) = ListBox22.Value
   auxntrams = Application.max(NTRAMSG(1), NTRAMSG(2))
   ReDim TIPUSG(1 To auxntrams, 1 To 2), T(1 To auxntrams, 1 To 2)  'Trams i tipus base general
   For i1 = 1 To 2
       For i2 = 1 To NTRAMSG(i1)
```

```
            For Each CTL In c(i1)
                If i2 <> NTRAMSG(i1) Then
                   If CTL.Name = "TextBox2" & i1 & "2" & i2 & "2" Then
                      If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                         ERR_LEC = True
                         Me.Hide
                         MsgBox "Error en el TRAM " & i2 & " de la base general " & _
                                IIf(i1 = 1, "estatal", "autonòmica") & ".", vbCritical, TITOL_IRPF
                         Exit Sub
                      Else
                         T(i2, i1) = Val(Replace(CTL.Value, ",", "."))
                      End If
                   End If
                End If
                If CTL.Name = "TextBox2" & i1 & "2" & i2 & "3" Then
                   CTL.Value = Replace(CTL.Value, ",", ".")
                   If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
                      ERR_LEC = True
                      Me.Hide
                      MsgBox "Error en el tipus impositiu del TRAM " & i2 & _
                             " de la base general " & IIf(i1 = 1, "estatal", "autonòmica") & ".", vbCritical,
TITOL_IRPF
                      Exit Sub
                   Else
                      TIPUSG(i2, i1) = Val(CTL.Value) / 100
                   End If
                End If
            Next CTL
            If i2 <> 1 Then
               If i2 <> NTRAMSG(i1) Then
                  If T(i2, i1) <= T(i2 - 1, i1) Then
                     ERR_LEC = True
                     Me.Hide
                     MsgBox "Error en el TRAM " & i2 & " de la base general " & _
                            IIf(i1 = 1, "estatal", "autonòmica") & ".", vbCritical, TITOL_IRPF
                     Exit Sub
                  End If
               End If
               If TIPUSG(i2, i1) < TIPUSG(i2 - 1, i1) Then
                  ERR_LEC = True
                  Me.Hide
                  MsgBox "Error en el tipus impositiu del TRAM " & i2 & " de la base general " & _
                         IIf(i1 = 1, "estatal", "autonòmica") & ".", vbCritical, TITOL_IRPF
                  Exit Sub
               End If
            End If
        Next i2
    Next i1

    NTRAMSE = ListBox23.Value
    ReDim TIPUSE(1 To NTRAMSE, 1 To 2), TE(1 To NTRAMSE, 1 To 2)  'Trams i tipus base general
    For i1 = 1 To NTRAMSE
        For Each CTL In Frame232.Controls
            If i1 <> NTRAMSE Then
               If CTL.Name = "TextBox232" & i1 & "2" Then
                  If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                     ERR_LEC = True
                     Me.Hide
                     MsgBox "Error en el TRAM " & i1 & " de la base de l'estalvi.", vbCritical, TITOL_IRPF
                     Exit Sub
                  Else
                     TE(i1, 1) = Val(Replace(CTL.Value, ",", "."))
                  End If
               End If
            End If
            For i2 = 1 To 2
                If CTL.Name = "TextBox232" & i1 & IIf(i2 = 1, 3, 4) Then
                   CTL.Value = Replace(CTL.Value, ",", ".")
                   If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
                      ERR_LEC = True
                      Me.Hide
                      MsgBox "Error en el tipus " & IIf(i2 = 1, "estatal", "autonòmic") & _
                             " del TRAM " & i1 & " de la base de l'estalvi.", vbCritical, TITOL_IRPF
                      Exit Sub
                   Else
                      TIPUSE(i1, i2) = Val(CTL.Value) / 100
                   End If
                End If
            Next i2
        Next CTL
        If i1 <> 1 Then
           If i1 <> NTRAMSE Then
              If TE(i1, 1) <= TE(i1 - 1, 1) Then
```

```
                ERR_LEC = True
                Me.Hide
                MsgBox "Error en el TRAM " & i1 & " de la base de l'estalvi.", vbCritical, TITOL_IRPF
                Exit Sub
             End If
          End If
          For i2 = 1 To 2
              If TIPUSE(i1, i2) < TIPUSE(i1 - 1, i2) Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en el tipus " & IIf(i2 = 1, "estatal", "autonòmic") & _
                        " del TRAM " & i1 & " de la base de l'estalvi.", vbCritical, TITOL_IRPF
                 Exit Sub
              End If
          Next i2
       End If
       TE(i1, 2) = TE(i1, 1)
   Next i1

   If Not IsNumeric(TextBox231.Value) Or (Val(TextBox231.Value) < 0 Or Val(TextBox231.Value) > 6000) Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per dividends de la base de l'estalvi: ha de ser positiva i inferior a 6.000
€.", vbCritical, TITOL_IRPF
      Exit Sub
   Else
      RDIVE = Val(TextBox231.Value)
   End If
   If Not IsNumeric(TextBox232.Value) Or (Val(TextBox232.Value) < 0 Or Val(TextBox232.Value) > 9000) Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en el mínim exempt de la base de l'estalvi: ha de ser positiu i inferior a 9.000 €.",
vbCritical, TITOL_IRPF
      Exit Sub
   Else
      MINIM_EXEMPTE = Val(TextBox232.Value)
   End If

   '''''''''''''''''''''''''''''''''''''''''''''''''
   'Guarda els paràmetres del segon quadre a PARMS'
   '''''''''''''''''''''''''''''''''''''''''''''''''

   PARMS(0, 6) = NTRAMSG(1)
   For i1 = 1 To NTRAMSG(1)
       If i1 = 1 Then
          PARMS(8 + i1, 1) = "0"
          PARMS(8 + i1, 2) = IIf(i1 <> NTRAMSG(1), T(i1, 1), "i més")
          PARMS(8 + i1, 3) = TIPUSG(i1, 1) + 0.0000000001
       ElseIf i1 < NTRAMSG(1) Then
          PARMS(8 + i1, 1) = T(i1 - 1, 1)
          PARMS(8 + i1, 2) = T(i1, 1)
          PARMS(8 + i1, 3) = TIPUSG(i1, 1) + 0.0000000001
       Else
          PARMS(8 + i1, 1) = T(i1 - 1, 1)
          PARMS(8 + i1, 2) = "i més"
          PARMS(8 + i1, 3) = TIPUSG(i1, 1) + 0.0000000001
       End If
   Next i1

   PARMS(0, 7) = NTRAMSG(2)
   For i1 = 1 To NTRAMSG(2)
       If i1 = 1 Then
          PARMS(8 + i1, 4) = "0"
          PARMS(8 + i1, 5) = IIf(i1 <> NTRAMSG(2), T(i1, 2), "i més")
          PARMS(8 + i1, 6) = TIPUSG(i1, 2) + 0.0000000001
       ElseIf i1 < NTRAMSG(2) Then
          PARMS(8 + i1, 4) = T(i1 - 1, 2)
          PARMS(8 + i1, 5) = T(i1, 2)
          PARMS(8 + i1, 6) = TIPUSG(i1, 2) + 0.0000000001
       Else
          PARMS(8 + i1, 4) = T(i1 - 1, 2)
          PARMS(8 + i1, 5) = "i més"
          PARMS(8 + i1, 6) = TIPUSG(i1, 2) + 0.0000000001
       End If
   Next i1

   PARMS(0, 8) = NTRAMSE
   For i1 = 1 To NTRAMSE
       If i1 = 1 Then
          PARMS(18 + i1, 1) = "0"
          PARMS(18 + i1, 2) = IIf(i1 <> NTRAMSE, TE(i1, 1), "i més")
          PARMS(18 + i1, 3) = TIPUSE(i1, 1) + 0.0000000001
          PARMS(18 + i1, 4) = TIPUSE(i1, 2) + 0.0000000001
```

```
       ElseIf i1 < NTRAMSE Then
          PARMS(18 + i1, 1) = TE(i1 - 1, 1)
          PARMS(18 + i1, 2) = TE(i1, 1)
          PARMS(18 + i1, 3) = TIPUSE(i1, 1) + 0.0000000001
          PARMS(18 + i1, 4) = TIPUSE(i1, 2) + 0.0000000001
       Else
          PARMS(18 + i1, 1) = TE(i1 - 1, 1)
          PARMS(18 + i1, 2) = "i més"
          PARMS(18 + i1, 3) = TIPUSE(i1, 1) + 0.0000000001
          PARMS(18 + i1, 4) = TIPUSE(i1, 2) + 0.0000000001
       End If
   Next i1

   PARMS(25, 1) = RDIVE
   PARMS(25, 2) = MINIM_EXEMPTE

ElseIf MultiPage1.Value = 2 Then                          'Deduccions generals

   ReDim DED(UBound(IRPF_DED)), DEDV(1 To 4, 1 To 4)
   If CheckBox31.Value Then
      DED(0) = 1

      If CheckBox311.Value Then                           'Habitatge habitual

         DED(1) = 1
         If Not IsNumeric(TextBox31211.Value) Or Val(TextBox31211.Value) < 0 Or Val(TextBox31211.Value) >
IRPF_DEDV(1, 1) Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en la base màxima de la deducció estatal per habitatge habitual.", vbCritical,
TITOL_IRPF
            Exit Sub
         Else
            DEDV(1, 1) = Val(TextBox31211.Value)
         End If
         If Not IsNumeric(TextBox31212.Value) Or Val(TextBox31212.Value) < 0 Or Val(TextBox31212.Value) > 100
Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el % general de la deducció estatal per habitatge habitual.", vbCritical,
TITOL_IRPF
            Exit Sub
         Else
            DEDV(1, 2) = Val(Replace(TextBox31212.Value, ",", ".")) / 100
         End If
         If Not IsNumeric(TextBox31213.Value) Or Val(TextBox31213.Value) < 0 Or Val(TextBox31213.Value) > 100
Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el % general de la deducció autonòmica per habitatge habitual.", vbCritical,
TITOL_IRPF
            Exit Sub
         Else
            DEDV(1, 3) = Val(Replace(TextBox31213.Value, ",", ".")) / 100
         End If
         If Not IsNumeric(TextBox31214.Value) Or Val(TextBox31214.Value) < 0 Or Val(TextBox31214.Value) > 100
Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el % especial de la deducció autonòmica per habitatge habitual.", vbCritical,
TITOL_IRPF
            Exit Sub
         Else
            DEDV(1, 4) = Val(Replace(TextBox31214.Value, ",", ".")) / 100
         End If

         If Not IsNumeric(TextBox31221.Value) Or Val(TextBox31221.Value) < 0 Or Val(TextBox31221.Value) >
IRPF_DEDV(2, 1) Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en la base màxima de la deducció estatal per habitatge habitual (discapacitats).",
vbCritical, TITOL_IRPF
            Exit Sub
         Else
            DEDV(2, 1) = Replace(TextBox31221.Value, ",", ".")
         End If
         If Not IsNumeric(TextBox31222.Value) Or Val(TextBox31222.Value) < 0 Or Val(TextBox31222.Value) > 100
Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el % de la deducció estatal per habitatge habitual (discapacitats).", vbCritical,
TITOL_IRPF
            Exit Sub
```

```
         Else
            DEDV(2, 2) = Val(Replace(TextBox31222.Value, ",", ".")) / 100
         End If
         If Not IsNumeric(TextBox31223.Value) Or Val(TextBox31223.Value) < 0 Or Val(TextBox31213.Value) > 100
Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el % de la deducció autonòmica per habitatge habitual (discapacitats).",
vbCritical, TITOL_IRPF
            Exit Sub
         Else
            DEDV(2, 3) = Val(Replace(TextBox31223.Value, ",", ".")) / 100
         End If

         If Not IsNumeric(TextBox3123.Value) Or Val(TextBox3123.Value) < 0 Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en la base imposable màxima per optar a la deducció per lloguer de l'habitatge
habitual.", vbCritical, TITOL_IRPF
            Exit Sub
         Else
            DEDV(3, 1) = Val(TextBox3123.Value)
         End If
         If Not IsNumeric(TextBox312312.Value) Or Val(TextBox312312.Value) < 0 Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el 1er. tram de la deducció per lloguer de l'habitatge habitual.", vbCritical,
TITOL_IRPF
            Exit Sub
         Else
            DEDV(3, 2) = Val(TextBox312312.Value)
         End If
         If Not IsNumeric(TextBox312313.Value) Or Val(TextBox312313.Value) < 0 Or Val(TextBox312313.Value) > 100
Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el % de la deducció per lloguer de l'habitatge habitual.", vbCritical, TITOL_IRPF
            Exit Sub
         Else
            DEDV(3, 3) = Val(Replace(TextBox312313.Value, ",", ".")) / 100
         End If
         If Not IsNumeric(TextBox312314.Value) Or Val(TextBox312314.Value) < 0 Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el límit màxim de la deducció per lloguer de l'habitatge habitual.", vbCritical,
TITOL_IRPF
            Exit Sub
         Else
            DEDV(3, 4) = TextBox312314.Value
         End If

         If Not IsNumeric(TextBox3124.Value) Or Val(TextBox3124.Value) < 0 Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en la base imposable màxima per optar a la deducció per obres a la vivenda habitual.",
vbCritical, TITOL_IRPF
            Exit Sub
         Else
            DEDV(4, 1) = Val(TextBox3124.Value)
         End If
         If Not IsNumeric(TextBox312412.Value) Or Val(TextBox312412.Value) < 0 Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el 1er. tram de la deducció per obres a la vivenda habitual.", vbCritical,
TITOL_IRPF
            Exit Sub
         Else
            DEDV(4, 2) = Val(TextBox312412.Value)
         End If
         If Not IsNumeric(TextBox312413.Value) Or Val(TextBox312413.Value) < 0 Or Val(TextBox312413.Value) > 100
Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el % de la deducció per obres a la vivenda habitual.", vbCritical, TITOL_IRPF
            Exit Sub
         Else
            DEDV(4, 3) = Val(Replace(TextBox312413.Value, ",", ".")) / 100
         End If
         If Not IsNumeric(TextBox312414.Value) Or Val(TextBox312414.Value) < 0 Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el límit màxim de la deducció per obres a la vivenda habitual.", vbCritical,
TITOL_IRPF
```

```
            Exit Sub
         Else
            DEDV(4, 4) = TextBox312414.Value
         End If

      End If

      If CheckBox312.Value Then DED(2) = 1                'Béns culturals
      If CheckBox313.Value Then DED(3) = 1                'Donatius
      If CheckBox314.Value Then DED(4) = 1                'Activitats econòmiques
      If CheckBox315.Value Then DED(5) = 1                'Ceuta i Melilla
      If CheckBox316.Value Then DED(6) = 1                'Comptes estalvi-empresa
   End If

   ''''''''''''''''''''''''''''''''''''''''''''''''''''''
   'Guarda els paràmetres del tercer quadre a PARMS'
   ''''''''''''''''''''''''''''''''''''''''''''''''''''''

   PARMS(0, 9) = DED(0)
   For i1 = 1 To 6
       PARMS(26, i1) = DED(i1)
   Next i1
   For i1 = 1 To 4
       PARMS(27, i1) = DEDV(1, i1) + IIf(i1 <> 1, 0.0000000001, 0)
   Next i1
   For i1 = 1 To 3
       PARMS(28, i1) = DEDV(2, i1) + IIf(i1 <> 1, 0.0000000001, 0)
   Next i1
   For i1 = 1 To 4
       PARMS(29, i1) = DEDV(3, i1) + IIf(i1 = 3, 0.0000000001, 0)
   Next i1
   For i1 = 1 To 4
       PARMS(30, i1) = DEDV(4, i1) + IIf(i1 = 3, 0.0000000001, 0)
   Next i1

ElseIf MultiPage1.Value = 3 Then                          'Deduccions autonòmiques

   NDEDA1 = UBound(IRPF_DEDA1, 1)
   ReDim DEDA1(NDEDA1, 2)                                 'Deduccions autonòmiques ja contemplades
   If CheckBox41.Value Then
      DEDA1(0, 0) = 1
      DEDA1(2, 1) = ListBox4121.Value / 100               'Foment llengua catalana
      DEDA1(2, 2) = ListBox4122.Value / 100
      DEDA1(3, 1) = ListBox4131.Value / 100               'Foment innovació científica
      DEDA1(3, 2) = ListBox4132.Value / 100
      DEDA1(4, 1) = ListBox4141.Value / 100               'Lloguer habitatge habitual
      DEDA1(5, 1) = ListBox4151.Value / 100               'Interessos estudis 3er cicle
      DEDA1(7, 1) = ListBox4171.Value / 100               'rehabilitació habitatge habitual
      DEDA1(8, 1) = ListBox4181.Value / 100               'Donacions millora medi ambient
      DEDA1(8, 2) = ListBox4182.Value / 100
      DEDA1(9, 1) = ListBox4191.Value / 100               'Inversió en empreses noves
      DEDA1(10, 1) = ListBox41101.Value / 100             'Inversió en accions mercat alternatiu borsari

      If Not IsNumeric(TextBox4111.Value) Or Val(TextBox4111.Value) < 0 Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la deducció autonòmica per naixement o adopció.", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         DEDA1(1, 1) = Val(TextBox4111.Value) 'Naixement o adopció
      End If
      If Not IsNumeric(TextBox4142.Value) Or Val(TextBox4142.Value) < 0 Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la deducció autonòmica per lloguer de l'habitatge habitual.", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         DEDA1(4, 2) = Val(TextBox4142.Value) 'Lloguer habitatge habitual
      End If
      If Not IsNumeric(TextBox4161.Value) Or Val(TextBox4161.Value) < 0 Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la deducció autonòmica dels contribuents vidus/es.", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         DEDA1(6, 1) = Val(TextBox4161.Value) 'Contribuents vidus
      End If
      If Not IsNumeric(TextBox4172.Value) Or Val(TextBox4172.Value) < 0 Or Val(TextBox4172.Value) >
IRPF_DEDA1(7, 2) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la deducció autonòmica per rehabilitació de l'habitatge habitual.", vbCritical,
TITOL_IRPF
```

```
         Exit Sub
      Else
         DEDA1(7, 2) = Val(TextBox4172.Value) 'Rehabilitació habitatge habitual
      End If
      If Not IsNumeric(TextBox4192.Value) Or Val(TextBox4192.Value) < 0 Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la deducció autonòmica per inversió en empreses noves.", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         DEDA1(9, 2) = Val(TextBox4192.Value) 'Inversió en empreses noves
      End If
      If Not IsNumeric(TextBox41102.Value) Or Val(TextBox41102.Value) < 0 Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en la deducció autonòmica per inversió en empreses noves.", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         DEDA1(10, 2) = Val(TextBox41102.Value) 'Inversió en empreses noves
      End If
   End If

   NDEDA2 = 0
   For Each CTL In Frame42.Controls
       If TypeName(CTL) = "TextBox" Then NDEDA2 = NDEDA2 + 1
   Next CTL
   ReDim DEDA2(NDEDA2)                                    'Altres deduccions autonòmiques
   If CheckBox42.Value Then
      DEDA2(0) = 1
      For i1 = 1 To NDEDA2 - 1
          For Each CTL In Frame42.Controls
              If CTL.Name = "TextBox42" & i1 Then
                 If Not IsNumeric(CTL.Value) Or Val(CTL.Value) < 0 Then
                    ERR_LEC = True
                    Me.Hide
                    MsgBox "Error en la deducció autonòmica " & i1 & ".", vbCritical, TITOL_IRPF
                    Exit Sub
                 Else
                    DEDA2(i1) = Val(CTL.Value)
                 End If
              End If
          Next CTL
      Next i1
      If Not IsNumeric(TextBox428.Value) Or (Val(TextBox428.Value) < 0 Or Val(TextBox428.Value) > 12000) Then
         ERR_LEC = True
         Me.Hide
         MsgBox "Error en l'import per a determinar la deducció en la quota autonòmica: ha de ser positiva i
inferior a 12.000 €.", vbCritical, TITOL_IRPF
         Exit Sub
      Else
         DEDA2(8) = Val(TextBox428.Value)
      End If
      If DEDA2(8) = 0 Then DEDA2(8) = -1                  'Instrucció per "evitar problemes"
   End If

   '''''''''''''''''''''''''''''''''''''''''''''''''''''
   'Guarda els paràmetres del quart quadre a PARMS'
   '''''''''''''''''''''''''''''''''''''''''''''''''''''

   PARMS(0, 10) = DEDA1(0, 0)
   For i1 = 1 To NDEDA1
       PARMS(30 + i1, 1) = DEDA1(i1, 1) + IIf(i1 <> 1 And i1 <> 6, 0.0000000001, 0)
       If i1 = 1 Or i1 = 5 Or i1 = 6 Then
          PARMS(30 + i1, 2) = ""
       Else
          PARMS(30 + i1, 2) = DEDA1(i1, 2) + IIf(i1 = 2 Or i1 = 3 Or i1 = 8, 0.0000000001, 0)
       End If
   Next i1

   PARMS(0, 11) = DEDA2(0)
   For i1 = 1 To NDEDA2
       PARMS(40 + i1, 1) = DEDA2(i1)
   Next i1

End If

Unload Me

End Sub
Private Sub Anterior_Click()

Dim i1 As Integer
```

```
PAGINA = PAGINA - 1

MultiPage1.Value = PAGINA

NetejaValors.Value = False
Llei.Value = False
SimulRef.Value = False

If MultiPage1.Value = 0 Then

   Me.Caption = "SIMCAT-IRPF: Mínims Personals i Familiars i Reduccions" & " (Base de dades: " & ANOIRPF & ")"
   If PARMS(0, 2) = 1 Then CheckBox11.Value = True Else CheckBox11.Value = False
   For i1 = 1 To 11
       For Each CTL In Frame112.Controls
           If CTL.TabIndex = 2 * (i1 - 1) Then CTL.Value = PARMS(1, i1)
           If CTL.TabIndex = 2 * (i1 - 1) + 1 Then CTL.Value = PARMS(2, i1) - PARMS(1, i1)
       Next CTL
   Next i1

   If PARMS(0, 3) = 1 Then CheckBox12.Value = True Else CheckBox12.Value = False
   TextBox121.Value = PARMS(3, 1)
   TextBox122.Value = PARMS(3, 2)

   If PARMS(0, 4) = 1 Then CheckBox13.Value = True Else CheckBox13.Value = False
   TextBox13112.Value = PARMS(4, 2)
   TextBox13113.Value = PARMS(4, 3)
   TextBox13122.Value = PARMS(5, 2)
   TextBox13133.Value = PARMS(6, 3)
   TextBox1321.Value = PARMS(7, 1)
   TextBox1322.Value = PARMS(7, 2)

   If PARMS(0, 5) = 1 Then CheckBox14.Value = True Else CheckBox14.Value = False
   TextBox141.Value = PARMS(8, 1)
   TextBox142.Value = PARMS(8, 2)
   TextBox143.Value = PARMS(8, 3)
   TextBox144.Value = PARMS(8, 4)

   If PARMS(0, 17) = "TOTS" Then TotsSi.Value = True Else TotsNo.Value = True
   ListBox_Proj.Selected(LBound(A_PROJ)) = True
   For i1 = 0 To UBound(A_PROJ)
       If PARMS(0, 18) = A_PROJ(i1) Then
          ListBox_Proj.Selected(i1) = True
          Exit For
       End If
   Next i1

ElseIf MultiPage1.Value = 1 Then

   Me.Caption = "SIMCAT-IRPF: Tarifa" & " (Base de dades: " & ANOIRPF & ")"
   ListBox21.Selected(10 - PARMS(0, 6)) = True
   For Each CTL In Frame212.Controls
       For i1 = 1 To PARMS(0, 6)
           If i1 <> PARMS(0, 6) And CTL.Name = "TextBox212" & i1 & "2" Then CTL.Text = PARMS(8 + i1, 2)
           If CTL.Name = "TextBox212" & i1 & "3" Then CTL.Text = Format(PARMS(8 + i1, 3) * 100, "#0.00")
       Next i1
   Next CTL

   ListBox22.Selected(10 - PARMS(0, 7)) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To PARMS(0, 7)
           If i1 <> PARMS(0, 7) And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = PARMS(8 + i1, 5)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(PARMS(8 + i1, 6) * 100, "#0.00")
       Next i1
   Next CTL

   ListBox23.Selected(6 - PARMS(0, 8)) = True
   For i1 = 1 To PARMS(0, 8)
       For Each CTL In Frame232.Controls
           If i1 <> PARMS(0, 8) And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = PARMS(18 + i1, 2)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(PARMS(18 + i1, 3) * 100, "#0.00")
           If CTL.Name = "TextBox232" & i1 & "4" Then CTL.Text = Format(PARMS(18 + i1, 4) * 100, "#0.00")
       Next CTL
   Next i1

   TextBox231.Value = PARMS(25, 1)
   TextBox232.Value = PARMS(25, 2)

ElseIf MultiPage1.Value = 2 Then

   Me.Caption = "SIMCAT-IRPF: Deduccions Generals" & " (Base de dades: " & ANOIRPF & ")"
   If PARMS(0, 9) = 1 Then CheckBox31.Value = True Else CheckBox31.Value = False
   If PARMS(26, 1) = 1 Then CheckBox311.Value = True Else CheckBox311.Value = False
   If PARMS(26, 2) = 1 Then CheckBox312.Value = True Else CheckBox312.Value = False
```

```
   If PARMS(26, 3) = 1 Then CheckBox313.Value = True Else CheckBox313.Value = False
   If PARMS(26, 4) = 1 Then CheckBox314.Value = True Else CheckBox314.Value = False
   If PARMS(26, 5) = 1 Then CheckBox315.Value = True Else CheckBox315.Value = False
   If PARMS(26, 6) = 1 Then CheckBox316.Value = True Else CheckBox316.Value = False
   TextBox31211.Value = PARMS(27, 1)
   TextBox31212.Value = Format(PARMS(27, 2) * 100, "#0.00")
   TextBox31213.Value = Format(PARMS(27, 3) * 100, "#0.00")
   TextBox31214.Value = Format(PARMS(27, 4) * 100, "#0.00")
   TextBox31221.Value = PARMS(27, 1)
   TextBox31222.Value = Format(PARMS(27, 2) * 100, "#0.00")
   TextBox31223.Value = Format(PARMS(27, 3) * 100, "#0.00")
   TextBox3123.Value = PARMS(29, 1)
   TextBox312312.Value = PARMS(29, 2)
   TextBox312313.Value = Format(PARMS(29, 3) * 100, "#0.00")
   TextBox312314.Value = PARMS(29, 4)
   TextBox3124.Value = PARMS(30, 1)
   TextBox312412.Value = PARMS(30, 2)
   TextBox312413.Value = Format(PARMS(30, 3) * 100, "#0.00")
   TextBox312414.Value = PARMS(30, 4)

End If

End Sub
Private Sub Cancelar_Click()

SORTIR = True
IMPOST(1) = True
Unload Me

End Sub
Private Sub CheckBox11_Click()

If CheckBox11.Value Then
   Frame11.Enabled = True
   For Each CTL In Frame11.Controls
       CTL.Enabled = True
   Next CTL
Else
   Frame11.Enabled = False
   For Each CTL In Frame11.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If

End Sub
Private Sub CheckBox12_Click()

If CheckBox12.Value Then
   Frame12.Enabled = True
   For Each CTL In Frame12.Controls
       CTL.Enabled = True
   Next CTL
Else
   Frame12.Enabled = False
   For Each CTL In Frame12.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If

End Sub
Private Sub CheckBox13_Click()

If CheckBox13.Value Then
   Frame13.Enabled = True
   For Each CTL In Frame13.Controls
       CTL.Enabled = True
   Next CTL
   TextBox13111.Enabled = False
   TextBox13121.Enabled = False
   TextBox13123.Enabled = False
   TextBox13124.Enabled = False
   TextBox13131.Enabled = False
   TextBox13132.Enabled = False
Else
   Frame13.Enabled = False
   For Each CTL In Frame13.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If
```

```
End Sub
Private Sub CheckBox14_Click()

If CheckBox14.Value Then
   Frame14.Enabled = True
   For Each CTL In Frame14.Controls
       CTL.Enabled = True
   Next CTL
Else
   Frame14.Enabled = False
   For Each CTL In Frame14.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If

End Sub
Private Sub CheckBox31_Click()

If CheckBox31.Value Then
   Frame31.Enabled = True
   For Each CTL In Frame31.Controls
       If TypeName(CTL) = "CheckBox" Then
          CTL.Enabled = True
          CTL.Value = True
       End If
   Next CTL
Else
   Frame31.Enabled = False
   For Each CTL In Frame31.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "CheckBox" Then CTL.Value = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If

End Sub
Private Sub CheckBox311_Click()

If CheckBox311.Value Then
   Frame312.Enabled = True
   For Each CTL In Frame312.Controls
       CTL.Enabled = True
   Next CTL
'   TextBox31211.Enabled = False
'   TextBox31221.Enabled = False
'   TextBox3123.Enabled = False
   TextBox312311.Enabled = False
   TextBox312311.Value = "0"
'   TextBox312314.Enabled = False
   TextBox312321.Enabled = False
   TextBox312322.Enabled = False
   TextBox312323.Enabled = False
   TextBox312324.Enabled = False
   TextBox312325.Enabled = False
   TextBox312411.Enabled = False
   TextBox312411.Value = "0"
'   TextBox312414.Enabled = False
   TextBox312421.Enabled = False
   TextBox312422.Enabled = False
   TextBox312423.Enabled = False
   TextBox312424.Enabled = False
   TextBox312425.Enabled = False

Else
   Frame312.Enabled = False
   For Each CTL In Frame312.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If

End Sub
Private Sub CheckBox41_Click()

If CheckBox41 Then
   Frame41.Enabled = True
   For Each CTL In Frame41.Controls
       CTL.Enabled = True
   Next CTL
Else
   Frame41.Enabled = False
   For Each CTL In Frame41.Controls
```

```
       CTL.Enabled = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If

End Sub
Private Sub CheckBox42_Click()

Dim i1 As Integer, i2 As Integer

i1 = 0
If CheckBox42.Value Then
   Frame42.Enabled = True
   For Each CTL In Frame42.Controls
       If TypeName(CTL) = "TextBox" Then i1 = i1 + 1
       CTL.Enabled = True
   Next CTL
   For Each CTL In Frame42.Controls
       For i2 = 1 To i1
           If CTL.Name = "TextBox42" & i2 Then CTL.Value = IRPF_DEDA2(i2)
       Next i2
   Next CTL
Else
   Frame42.Enabled = False
   For Each CTL In Frame42.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "TextBox" Then CTL.Value = "0"
   Next CTL
End If

End Sub
Private Sub ListBox_Simulref_Click()

Dim i1 As Integer, nsim As Integer, p(53, 18)

For i1 = 0 To ISIMULS(1) - 1
    If ListBox_SimulRef.Selected(i1) = True Then
       nsim = ListBox_SimulRef.Value
       Exit For
    End If
Next i1

Call COMUNS_1REFERENCIA_SIMULS("IRPF", nsim, p)

If MultiPage1.Value = 0 Then

   If p(0, 2) = 1 Then CheckBox11.Value = True Else CheckBox11.Value = False
   For i1 = 1 To 11
       For Each CTL In Frame112.Controls
           If CTL.TabIndex = 2 * (i1 - 1) Then CTL.Value = Round(p(1, i1) * DEFLACTOR, 2)
           If CTL.TabIndex = 2 * (i1 - 1) + 1 Then CTL.Value = Round((p(2, i1) - p(1, i1)) * DEFLACTOR, 2)
       Next CTL
   Next i1

   If p(0, 3) = 1 Then CheckBox12.Value = True Else CheckBox12.Value = False
   TextBox121.Value = p(3, 1)
   TextBox122.Value = p(3, 2)

   If p(0, 4) = 1 Then CheckBox13.Value = True Else CheckBox13.Value = False
   TextBox13112.Value = p(4, 2)
   TextBox13113.Value = p(4, 3)
   TextBox13122.Value = p(5, 2)
   TextBox13133.Value = p(6, 3)
   TextBox1321.Value = p(7, 1)
   TextBox1322.Value = p(7, 2)

   If p(0, 5) = 1 Then CheckBox14.Value = True Else CheckBox14.Value = False
   TextBox141.Value = p(8, 1)
   TextBox142.Value = p(8, 2)
   TextBox143.Value = p(8, 3)
   TextBox144.Value = p(8, 4)

   If p(0, 17) = "TOTS" Then TotsSi.Value = True Else TotsNo.Value = True

   ListBox_Proj.Selected(LBound(A_PROJ)) = True
   For i1 = 0 To UBound(A_PROJ)
       If p(0, 18) = A_PROJ(i1) Then
          ListBox_Proj.Selected(i1) = True
          Exit For
       End If
   Next i1

   ListBox051.Selected(150 - ((p(49, 1) - 1) * 1000)) = True
```

```
   ListBox052.Selected(150 - ((p(50, 1) - 1) * 1000)) = True
   ListBox053.Selected(150 - ((p(51, 1) - 1) * 1000)) = True
   ListBox054.Selected(150 - ((p(52, 1) - 1) * 1000)) = True
   ListBox055.Selected(150 - ((p(53, 1) - 1) * 1000)) = True

ElseIf MultiPage1.Value = 1 Then

   ListBox21.Selected(10 - p(0, 6)) = True
   For Each CTL In Frame212.Controls
       For i1 = 1 To p(0, 6)
           If i1 <> p(0, 6) And CTL.Name = "TextBox212" & i1 & "2" Then CTL.Text = Round(p(8 + i1, 2) *
DEFLACTOR, 2)
           If CTL.Name = "TextBox212" & i1 & "3" Then CTL.Text = Format(p(8 + i1, 3) * 100, "#0.00")
       Next i1
   Next CTL

   ListBox22.Selected(10 - p(0, 7)) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To p(0, 7)
           If i1 <> p(0, 7) And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = Round(p(8 + i1, 5) *
DEFLACTOR, 2)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(p(8 + i1, 6) * 100, "#0.00")
       Next i1
   Next CTL

   ListBox23.Selected(6 - p(0, 8)) = True
   For i1 = 1 To p(0, 8)
       For Each CTL In Frame232.Controls
           If i1 <> p(0, 8) And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = Round(p(18 + i1, 2) *
DEFLACTOR, 2)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(p(18 + i1, 3) * 100, "#0.00")
           If CTL.Name = "TextBox232" & i1 & "4" Then CTL.Text = Format(p(18 + i1, 4) * 100, "#0.00")
       Next CTL
   Next i1

   TextBox231.Value = p(25, 1)
   TextBox232.Value = p(25, 2)

ElseIf MultiPage1.Value = 2 Then

   If p(0, 9) = 1 Then CheckBox31.Value = True Else CheckBox31.Value = False
   If p(26, 1) = 1 Then CheckBox311.Value = True Else CheckBox311.Value = False
   If p(26, 2) = 1 Then CheckBox312.Value = True Else CheckBox312.Value = False
   If p(26, 3) = 1 Then CheckBox313.Value = True Else CheckBox313.Value = False
   If p(26, 4) = 1 Then CheckBox314.Value = True Else CheckBox314.Value = False
   If p(26, 5) = 1 Then CheckBox315.Value = True Else CheckBox315.Value = False
   If p(26, 6) = 1 Then CheckBox316.Value = True Else CheckBox316.Value = False
   TextBox31211.Value = p(27, 1)
   TextBox31212.Value = Format(p(27, 2) * 100, "#0.00")
   TextBox31213.Value = Format(p(27, 3) * 100, "#0.00")
   TextBox31214.Value = Format(p(27, 4) * 100, "#0.00")
   TextBox31221.Value = p(28, 1)
   TextBox31222.Value = Format(p(28, 2) * 100, "#0.00")
   TextBox31223.Value = Format(p(28, 3) * 100, "#0.00")
   TextBox3123.Value = p(29, 1)
   TextBox312312.Value = p(29, 2)
   TextBox312313.Value = Format(p(29, 3) * 100, "#0.00")
   TextBox312314.Value = p(29, 4)
   TextBox3124.Value = p(30, 1)
   TextBox312412.Value = p(30, 2)
   TextBox312413.Value = Format(p(30, 3) * 100, "#0.00")
   TextBox312414.Value = p(30, 4)

ElseIf MultiPage1.Value = 3 Then

   If p(0, 10) = 1 Then CheckBox41.Value = True Else CheckBox41.Value = False
   TextBox4111.Value = p(31, 1)
   ListBox4121.Selected(40 - p(32, 1) * 100) = True:   ListBox4122.Selected(15 - p(32, 2) * 100) = True
   ListBox4131.Selected(40 - p(33, 1) * 100) = True:   ListBox4132.Selected(15 - p(33, 2) * 100) = True
   ListBox4141.Selected(40 - p(34, 1) * 100) = True:   TextBox4142.Value = p(34, 2)
   For i1 = 0 To 10
       If p(35, 1) * 10 = i1 Then
          ListBox4151.Selected(10 - i1) = True
          Exit For
       End If
   Next i1
   TextBox4161.Value = p(36, 1)
   For i1 = 0 To 10
       If p(37, 1) * 10 = 5 - (0.5 * i1) Then
          ListBox4171.Selected(i1) = True
          Exit For
       End If
   Next i1
```

```
   TextBox4172.Value = p(37, 2)
   ListBox4181.Selected(40 - p(38, 1) * 100) = True:   ListBox4182.Selected(15 - p(38, 2) * 100) = True
   ListBox4191.Selected(40 - p(39, 1) * 100) = True:   TextBox4192.Value = p(39, 2)
   ListBox41101.Selected(40 - p(40, 1) * 100) = True:   TextBox41102.Value = p(40, 2)

   If p(0, 11) = 1 Then CheckBox42.Value = True Else CheckBox42.Value = False
   For i1 = 1 To UBound(IRPF_DEDA2)
       For Each CTL In Frame42.Controls
           If CTL.TabIndex = i1 - 1 Then CTL.Value = p(40 + i1, 1)
       Next CTL
   Next i1

End If

End Sub
Private Sub ListBox_Proj_Click()

ANY_PROJ = ListBox_Proj.Value                                        'Any a projectar
If ANY_PROJ = ANOIRPF Then
   Frame05.Enabled = True
   For Each CTL In Frame05.Controls
       CTL.Enabled = True
   Next CTL
Else
   Frame05.Enabled = False
   For Each CTL In Frame05.Controls
       CTL.Enabled = False
       If TypeName(CTL) = "ListBox" Then CTL.Selected(150) = True
   Next CTL
End If

End Sub
Private Sub ListBox_Deflactor_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   DEFLACTOR = 1 + Abs(ListBox_Deflactor.Value) / 100
   DEFLACTOR = IIf(ListBox_Deflactor.Value >= 0, DEFLACTOR, 1 / DEFLACTOR)
   If CheckBox11 Then
      For i1 = 1 To 11
          For Each CTL In Frame112.Controls
              If CTL.TabIndex = 2 * (i1 - 1) Then CTL.Value = Round(CTL.Value * DEFLACTOR, 2)
              If CTL.TabIndex = 2 * (i1 - 1) + 1 Then CTL.Value = Round(CTL.Value * DEFLACTOR, 2)
          Next CTL
      Next i1
   End If
   If CheckBox13 Then
      TextBox13112.Value = Round(TextBox13112.Value * DEFLACTOR, 2)
      TextBox13113.Value = Round(TextBox13113.Value * DEFLACTOR, 2)
      TextBox13122.Value = Round(TextBox13122.Value * DEFLACTOR, 2)
      TextBox13133.Value = Round(TextBox13133.Value * DEFLACTOR, 2)
      TextBox1321.Value = Round(TextBox1321.Value * DEFLACTOR, 2)
      TextBox1322.Value = Round(TextBox1322.Value * DEFLACTOR, 2)
   End If

End If

End Sub
Private Sub ListBox051_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   PROJ(1) = 1 + (ListBox051.Value / 100)

End If

End Sub
Private Sub ListBox052_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   PROJ(2) = 1 + (ListBox052.Value / 100)

End If

End Sub
Private Sub ListBox053_Click()
```

```
Dim i1 As Integer

If MultiPage1.Value = 0 Then

   PROJ(3) = 1 + (ListBox053.Value / 100)

End If

End Sub
Private Sub ListBox054_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   PROJ(4) = 1 + (ListBox054.Value / 100)

End If

End Sub
Private Sub ListBox055_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   PROJ(5) = 1 + (ListBox055.Value / 100)

End If

End Sub
Private Sub ListBox21_Click()

Dim i1 As Integer

NTRAMSG(1) = ListBox21.Value
For Each CTL In Frame211.Controls
    If CTL.TabIndex <= NTRAMSG(1) - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame212.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMSG(1) - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox212" & NTRAMSG(1) & "2" Then
       CTL.Enabled = False
       CTL.Value = "i més"
    End If
Next CTL
For Each CTL In Frame213.Controls
    If CTL.TabIndex <= NTRAMSG(1) - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox21211.Value = "0"

End Sub
Private Sub ListBox22_Click()

Dim i1 As Integer

NTRAMSG(2) = ListBox22.Value
For Each CTL In Frame221.Controls
    If CTL.TabIndex <= NTRAMSG(2) - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame222.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMSG(2) - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox222" & NTRAMSG(2) & "2" Then
       CTL.Enabled = False
       CTL.Value = "i més"
    End If
Next CTL
For Each CTL In Frame223.Controls
    If CTL.TabIndex <= NTRAMSG(2) - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox22211.Value = "0"

End Sub
Private Sub ListBox23_Click()
```

```
Dim i1 As Integer

NTRAMSE = ListBox23.Value
For Each CTL In Frame231.Controls
    If CTL.TabIndex <= NTRAMSE - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame232.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMSE - 1
        If CTL.TabIndex = (4 * i1) + 1 Or CTL.TabIndex = (4 * i1) + 2 Or _
           CTL.TabIndex = (4 * i1) + 3 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox232" & NTRAMSE & "2" Then
       CTL.Enabled = False
       CTL.Value = "i més"
    End If
Next CTL
For Each CTL In Frame233.Controls
    If CTL.TabIndex <= NTRAMSE - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox23211.Value = "0"

End Sub
Private Sub ListBox311_Click()

Dim per As Double

If CheckBox312 Then
   TextBox31212.Value = Format(15 * (1 - per), "#0.00")
   TextBox31213.Value = Format(15 * (per - 0.1), "#0.00")
   TextBox31214.Value = Format(15 * (per + 0.1), "#0.00")
   TextBox31222.Value = Format(20 * (1 - per), "#0.00")
   TextBox31223.Value = Format(20 * (per + 0.1), "#0.00")
End If

End Sub
Private Sub Llei_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   CheckBox11.Value = True
   For i1 = 1 To 11
       For Each CTL In Frame112.Controls
           If CTL.TabIndex = 2 * (i1 - 1) Then CTL.Value = IRPF_MPF(i1, 1)
           If CTL.TabIndex = 2 * (i1 - 1) + 1 Then CTL.Value = IRPF_MPF(i1, 2)
       Next CTL
   Next i1

   CheckBox12.Value = True
   TextBox121.Value = IRPF_RED_RTC(1)
   TextBox122.Value = IRPF_RED_RTC(2)

   CheckBox13.Value = True
   TextBox13112.Value = IRPF_RED_RT(1, 1)
   TextBox13113.Value = IRPF_RED_RT(1, 2)
   TextBox13122.Value = IRPF_RED_RT(2, 1)
   TextBox13133.Value = IRPF_RED_RT(3, 2)
   TextBox1321.Value = IRPF_RED_RT(4, 1)
   TextBox1322.Value = IRPF_RED_RT(4, 2)

   CheckBox14.Value = True
   TextBox141.Value = IRPF_RED_PP(1)
   TextBox142.Value = IRPF_RED_PP(2)
   TextBox143.Value = IRPF_RED_PP(3)
   TextBox144.Value = IRPF_RED_PP(4)

   TotsSi.Value = True

   ListBox_Proj.Selected(UBound(A_PROJ)) = True

   ListBox_Deflactor.Selected(150) = True

   ListBox051.Selected(150) = True
   ListBox052.Selected(150) = True
   ListBox053.Selected(150) = True
   ListBox054.Selected(150) = True
   ListBox055.Selected(150) = True

ElseIf MultiPage1.Value = 1 Then
```

```
   ListBox21.Selected(10 - IRPF_NTRAMSG(1)) = True
   For Each CTL In Frame212.Controls
       For i1 = 1 To IRPF_NTRAMSG(1)
           If i1 <> IRPF_NTRAMSG(1) And CTL.Name = "TextBox212" & i1 & "2" Then CTL.Text = Round(IRPF_TRAMSG(i1,
1) * DEFLACTOR, 2)
           If CTL.Name = "TextBox212" & i1 & "3" Then CTL.Text = Format(IRPF_TIPUSG(i1, 1) * 100, "#0.00")
       Next i1
   Next CTL

   ListBox22.Selected(10 - IRPF_NTRAMSG(2)) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To IRPF_NTRAMSG(2)
           If i1 <> IRPF_NTRAMSG(2) And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = Round(IRPF_TRAMSG(i1,
2) * DEFLACTOR, 2)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(IRPF_TIPUSG(i1, 2) * 100, "#0.00")
       Next i1
   Next CTL

   ListBox23.Selected(6 - IRPF_NTRAMSE) = True
   For i1 = 1 To IRPF_NTRAMSE
       For Each CTL In Frame232.Controls
           If i1 <> IRPF_NTRAMSE And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = Round(IRPF_TRAMSE(i1) *
DEFLACTOR, 2)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(IRPF_TIPUSE(i1, 1) * 100, "#0.00")
           If CTL.Name = "TextBox232" & i1 & "4" Then CTL.Text = Format(IRPF_TIPUSE(i1, 2) * 100, "#0.00")
       Next CTL
   Next i1

   TextBox231.Value = IRPF_RDIVE
   TextBox232.Value = IRPF_EXEMPTE

ElseIf MultiPage1.Value = 2 Then

   CheckBox31.Value = True
   TextBox31211.Value = IRPF_DEDV(1, 1)
   TextBox31212.Value = Format(IRPF_DEDV(1, 2) * 100, "#0.00")
   TextBox31213.Value = Format(IRPF_DEDV(1, 3) * 100, "#0.00")
   TextBox31214.Value = Format(IRPF_DEDV(1, 4) * 100, "#0.00")
   TextBox31221.Value = IRPF_DEDV(2, 1)
   TextBox31222.Value = Format(IRPF_DEDV(2, 2) * 100, "#0.00")
   TextBox31223.Value = Format(IRPF_DEDV(2, 3) * 100, "#0.00")
   TextBox3123.Value = IRPF_DEDV(3, 1)
   TextBox312312.Value = IRPF_DEDV(3, 2)
   TextBox312313.Value = Format(IRPF_DEDV(3, 3) * 100, "#0.00")
   TextBox312314.Value = IRPF_DEDV(3, 4)
   TextBox3124.Value = IRPF_DEDV(4, 1)
   TextBox312412.Value = IRPF_DEDV(4, 2)
   TextBox312413.Value = Format(IRPF_DEDV(4, 3) * 100, "#0.00")
   TextBox312414.Value = IRPF_DEDV(4, 4)

ElseIf MultiPage1.Value = 3 Then

   CheckBox41.Value = True
   TextBox4111.Value = IRPF_DEDA1(1, 1)
   ListBox4121.Selected(40 - IRPF_DEDA1(2, 1) * 100) = True
   ListBox4122.Selected(15 - IRPF_DEDA1(2, 2) * 100) = True
   ListBox4131.Selected(40 - IRPF_DEDA1(3, 1) * 100) = True
   ListBox4132.Selected(15 - IRPF_DEDA1(3, 2) * 100) = True
   ListBox4141.Selected(40 - IRPF_DEDA1(4, 1) * 100) = True
   TextBox4142.Value = IRPF_DEDA1(4, 2)
   ListBox4151.Selected(0) = True
   TextBox4161.Value = IRPF_DEDA1(6, 1)
   ListBox4171.Selected(7) = True
   TextBox4172.Value = IRPF_DEDA1(7, 2)
   ListBox4181.Selected(40 - IRPF_DEDA1(8, 1) * 100) = True
   ListBox4182.Selected(15 - IRPF_DEDA1(8, 2) * 100) = True
   ListBox4191.Selected(40 - IRPF_DEDA1(9, 1) * 100) = True
   TextBox4192.Value = IRPF_DEDA1(9, 2)
   ListBox41101.Selected(40 - IRPF_DEDA1(10, 1) * 100) = True
   TextBox41102.Value = IRPF_DEDA1(10, 2)

End If

End Sub
Private Sub MultiPage1_Layout(ByVal Index As Long)

Dim i1 As Integer

If MultiPage1.Value = 0 Then
   Aceptar.Left = 222.5
   Anterior.Visible = False
   Cancelar.Left = 272.5
```

```
   Frame01.Enabled = True
   For Each CTL In Frame01.Controls
       CTL.Enabled = True
   Next CTL
   Frame03.Enabled = True
   For Each CTL In Frame03.Controls
       CTL.Enabled = True
   Next CTL
   Frame04.Enabled = True
   For Each CTL In Frame04.Controls
       CTL.Enabled = True
   Next CTL
Else
   For i1 = 0 To UBound(A_PROJ)
       If ANY_PROJ = A_PROJ(i1) Then
          ListBox_Proj.Selected(i1) = True
          Exit For
       End If
   Next i1
   Aceptar.Left = 247.5
   Anterior.Visible = True
   Cancelar.Left = 297.5
   Frame01.Enabled = False
   If DECL_NOMBRE = "TOTS" Then TotsSi.Value = True Else TotsNo.Value = True
   For Each CTL In Frame01.Controls
       CTL.Enabled = False
   Next CTL
   Frame03.Enabled = False
   For Each CTL In Frame03.Controls
       CTL.Enabled = False
   Next CTL
   Frame04.Enabled = False
   ListBox_Deflactor.Selected(150 - ((DEFLACTOR - 1) * 1000)) = True
   For Each CTL In Frame04.Controls
       CTL.Enabled = False
   Next CTL
   Frame05.Enabled = False
   For Each CTL In Frame05.Controls
       For i1 = 1 To 5
           If CTL.Name = "ListBox05" & i1 Then CTL.Selected(150 - ((PROJ(i1) - 1) * 1000)) = True
       Next i1
       CTL.Enabled = False
   Next CTL
End If

End Sub
Private Sub NetejaValors_Click()

Dim i1 As Integer

If MultiPage1.Value = 0 Then

   CheckBox11.Value = False
   For i1 = 1 To 11
       For Each CTL In Frame112.Controls
           CTL.Value = "0"
       Next CTL
   Next i1

   CheckBox12.Value = False
   TextBox121.Value = "0"
   TextBox122.Value = "0"

   CheckBox13.Value = False
   TextBox13112.Value = "0"
   TextBox13113.Value = "0"
   TextBox13122.Value = "0"
   TextBox13133.Value = "0"
   TextBox1321.Value = "0"
   TextBox1322.Value = "0"

   CheckBox14.Value = False
   TextBox141.Value = "0"
   TextBox142.Value = "0"
   TextBox143.Value = "0"
   TextBox144.Value = "0"

ElseIf MultiPage1.Value = 1 Then

   ListBox22.Selected(9) = True
   TextBox22213.Value = "12,00"

   TextBox231.Value = "0"
```

```
   TextBox232.Value = "0"

ElseIf MultiPage1.Value = 2 Then

   TextBox31211.Value = "0"
   TextBox31212.Value = "0"
   TextBox31213.Value = "0"
   TextBox31214.Value = "0"
   TextBox31221.Value = "0"
   TextBox31222.Value = "0"
   TextBox31223.Value = "0"
   TextBox3123.Value = "0"
   TextBox312312.Value = "0"
   TextBox312313.Value = "0"
   TextBox312314.Value = "0"
   TextBox3124.Value = "0"
   TextBox312412.Value = "0"
   TextBox312413.Value = "0"
   TextBox312414.Value = "0"

ElseIf MultiPage1.Value = 3 Then

   CheckBox41.Value = False
   ListBox4121.Selected(40) = True
   ListBox4122.Selected(15) = True
   ListBox4131.Selected(40) = True
   ListBox4132.Selected(15) = True
   ListBox4141.Selected(40) = True
   ListBox4151.Selected(10) = True
   ListBox4171.Selected(10) = True
   ListBox4181.Selected(40) = True
   ListBox4182.Selected(15) = True
   ListBox4191.Selected(40) = True
   ListBox41101.Selected(40) = True

End If

End Sub
Private Sub SimulRef_Change()

Dim i1 As Integer

If SimulRef Then
   Frame02.Width = 190
   For i1 = 0 To ISIMULS(1) - 1
       ListBox_SimulRef.Selected(i1) = False
   Next i1
Else
   Frame02.Width = 150
   ListBox_SimulRef.TopIndex = 0
End If

End Sub
Private Sub TextBox13112_Change()

If IsNumeric(TextBox13112.Value) Then
   TextBox13121.Value = TextBox13112.Value
   TextBox13124.Value = TextBox13112.Value
End If

End Sub
Private Sub TextBox13113_Change()

If IsNumeric(TextBox13113.Value) Then TextBox13123.Value = TextBox13113.Value

End Sub
Private Sub TextBox13122_Change()

If IsNumeric(TextBox13122.Value) Then TextBox13131.Value = TextBox13122.Value

End Sub
Private Sub TextBox21212_Change()

If IsNumeric(TextBox21212.Value) Then TextBox21221.Value = TextBox21212.Value

End Sub

Private Sub TextBox21222_Change()

If IsNumeric(TextBox21222.Value) Then TextBox21231.Value = TextBox21222.Value

End Sub
Private Sub TextBox21232_Change()
```

```
If IsNumeric(TextBox21232.Value) Then TextBox21241.Value = TextBox21232.Value

End Sub
Private Sub TextBox21242_Change()

If IsNumeric(TextBox21242.Value) Then TextBox21251.Value = TextBox21242.Value

End Sub
Private Sub TextBox21252_Change()

If IsNumeric(TextBox21252.Value) Then TextBox21261.Value = TextBox21252.Value

End Sub
Private Sub TextBox21262_Change()

If IsNumeric(TextBox21262.Value) Then TextBox21271.Value = TextBox21262.Value

End Sub
Private Sub TextBox21272_Change()

If IsNumeric(TextBox21272.Value) Then TextBox21281.Value = TextBox21272.Value

End Sub
Private Sub TextBox21282_Change()

If IsNumeric(TextBox21282.Value) Then TextBox21291.Value = TextBox21282.Value

End Sub
Private Sub TextBox21292_Change()

If IsNumeric(TextBox21292.Value) Then TextBox212101.Value = TextBox21292.Value

End Sub
Private Sub TextBox22212_Change()

If IsNumeric(TextBox22212.Value) Then TextBox22221.Value = TextBox22212.Value

End Sub
Private Sub TextBox22222_Change()

If IsNumeric(TextBox22222.Value) Then TextBox22231.Value = TextBox22222.Value

End Sub
Private Sub TextBox22232_Change()

If IsNumeric(TextBox22232.Value) Then TextBox22241.Value = TextBox22232.Value

End Sub
Private Sub TextBox22242_Change()

If IsNumeric(TextBox22242.Value) Then TextBox22251.Value = TextBox22242.Value

End Sub
Private Sub TextBox22252_Change()

If IsNumeric(TextBox22252.Value) Then TextBox22261.Value = TextBox22252.Value

End Sub
Private Sub TextBox22262_Change()

If IsNumeric(TextBox22262.Value) Then TextBox22271.Value = TextBox22262.Value

End Sub
Private Sub TextBox22272_Change()

If IsNumeric(TextBox22272.Value) Then TextBox22281.Value = TextBox22272.Value

End Sub
Private Sub TextBox22282_Change()

If IsNumeric(TextBox22282.Value) Then TextBox22291.Value = TextBox22282.Value

End Sub
Private Sub TextBox22292_Change()

If IsNumeric(TextBox22292.Value) Then TextBox222101.Value = TextBox22292.Value

End Sub
Private Sub TextBox23212_Change()

If IsNumeric(TextBox23212.Value) Then TextBox23221.Value = TextBox23212.Value
```

```
End Sub
Private Sub TextBox23222_Change()

If IsNumeric(TextBox23222.Value) Then TextBox23231.Value = TextBox23222.Value

End Sub
Private Sub TextBox23232_Change()

If IsNumeric(TextBox23232.Value) Then TextBox23241.Value = TextBox23232.Value

End Sub
Private Sub TextBox23242_Change()

If IsNumeric(TextBox23242.Value) Then TextBox23251.Value = TextBox23242.Value

End Sub
Private Sub TextBox23252_Change()

If IsNumeric(TextBox23252.Value) Then TextBox23261.Value = TextBox23252.Value

End Sub
Private Sub TextBox3123_Change()

If IsNumeric(TextBox3123.Value) Then
   TextBox312322.Value = TextBox3123.Value
End If

End Sub
Private Sub TextBox312312_Change()

If IsNumeric(TextBox312312.Value) Then
   TextBox312321.Value = TextBox312312.Value
   TextBox312325.Value = TextBox312312.Value
End If

End Sub
Private Sub TextBox312313_Change()

If IsNumeric(TextBox312313.Value) Then
   TextBox312323.Value = TextBox312313.Value
End If

End Sub
Private Sub TextBox312314_Change()

If IsNumeric(TextBox312314.Value) Then
   TextBox312324.Value = TextBox312314.Value
End If

End Sub
Private Sub TextBox3124_Change()

If IsNumeric(TextBox3124.Value) Then
   TextBox312422.Value = TextBox3124.Value
End If

End Sub
Private Sub TextBox312412_Change()

If IsNumeric(TextBox312412.Value) Then
   TextBox312421.Value = TextBox312412.Value
   TextBox312425.Value = TextBox312412.Value
End If

End Sub
Private Sub TextBox312413_Change()

If IsNumeric(TextBox312413.Value) Then
   TextBox312423.Value = TextBox312413.Value
End If

End Sub
Private Sub TextBox312414_Change()

If IsNumeric(TextBox312414.Value) Then
   TextBox312424.Value = TextBox312414.Value
End If

End Sub
Private Sub UserForm_Activate()

height1 = Me.Height
left1 = Me.Left
```

```
top1 = Me.Top
width1 = Me.Width
Zoom = IIf(XZOOM < 200, 100, IIf(Not XTEXT, 150, 100))
If ISIMULS(1) <> 0 Then Frame02.Width = 150 Else Frame02.Width = 104

End Sub
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)

If CloseMode = 0 Then SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Zoom(Percent As Integer)

Me.Width = Me.Width * Percent / 100
Me.Height = Me.Height * Percent / 100
Me.Left = left1 - ((Me.Width - width1) / 2)
Me.Top = top1 - ((Me.Width - width1) / 2)

End Sub
```

```
Attribute VB_Name = "IS1"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False

Option Explicit
Dim height1 As Integer, left1 As Integer, top1 As Integer, width1 As Integer
Private Sub Aceptar_Click()

Dim i1 As Integer, j1 As Integer
ERR_LEC = False

If MultiPage1.Value = 0 Then

   ReDim R_PARENT(1 To 7, 1 To 4)  'Reducció parentiu
   For Each CTL In Frame11.Controls
       For i1 = 1 To 7
           If CTL.Name = "TextBox11" & i1 & "1" Then
              If Not IsNumeric(CTL.Value) Or Val(CTL.Value) < 0 Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en la reducció per parentiu.", vbCritical, TITOL_IS
                 Exit Sub
              Else
                 R_PARENT(i1, 1) = Val(Replace(CTL.Value, ",", "."))
              End If
           End If
       Next i1
   Next CTL
   If Not IsNumeric(TextBox1112.Value) Or Val(TextBox1112.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per parentiu.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_PARENT(1, 2) = Val(Replace(TextBox1112.Value, ",", "."))
   End If
   R_PARENT(1, 3) = ListBox111.Value
   R_PARENT(1, 4) = ListBox112.Value

   ReDim R_PARENT_AD(1 To 5)       'Reducció parentiu addicional
   For i1 = 1 To 5
       For Each CTL In Frame12.Controls
           If CTL.Name = "TextBox12" & i1 Then
              If Not IsNumeric(CTL.Value) Or Val(CTL.Value) < 0 Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en la reducció de parentiu addicional " & i1 & ".", vbCritical, TITOL_IS
                 Exit Sub
              Else
                 R_PARENT_AD(i1) = Val(Replace(CTL.Value, ",", "."))
              End If
           End If
       Next CTL
   Next i1

   ReDim R_DISCAP(1 To 2)          'Reducció discapacitat
   For i1 = 1 To 2
       For Each CTL In Frame13.Controls
           If CTL.Name = "TextBox13" & i1 Then
              If Not IsNumeric(CTL.Value) Or Val(CTL.Value) < 0 Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en la reducció per discapacitat.", vbCritical, TITOL_IS
                 Exit Sub
              Else
                 R_DISCAP(i1) = Val(Replace(CTL.Value, ",", "."))
              End If
           End If
       Next CTL
   Next i1
   If R_DISCAP(1) > R_DISCAP(2) Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per discapacitat.", vbCritical, TITOL_IS
      Exit Sub
   End If

   ReDim R_EDATGR(1 To 2)            'Reducció edat
   R_EDATGR(1) = ListBox131.Value
   If Not IsNumeric(TextBox1311.Value) Or Val(TextBox1311.Value) < 0 Then
      ERR_LEC = True
```

```
      Me.Hide
      MsgBox "Error en la reducció per edat.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_EDATGR(2) = Val(Replace(TextBox1311.Value, ",", "."))
   End If

   ReDim R_ASSEGU(1 To 2)          'Reducció assegurança
   R_ASSEGU(1) = Val(ListBox141.Value) / 100
   If Not IsNumeric(TextBox141.Value) Or Val(TextBox141.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per assegurança de vida.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_ASSEGU(2) = Val(Replace(TextBox141.Value, ",", "."))
   End If

   ReDim R_HABITA(1 To 2)          'Reducció habitatge
   R_HABITA(1) = Val(ListBox142.Value) / 100
   If Not IsNumeric(TextBox142.Value) Or Val(TextBox142.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per vivenda habitual.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_HABITA(2) = Val(Replace(TextBox142.Value, ",", "."))
   End If

   ReDim R_EMPRES(1 To 2)          'Reducció empresa familiar
   R_EMPRES(1) = Val(ListBox143.Value) / 100
   If Not IsNumeric(TextBox143.Value) Or Val(TextBox143.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per empresa familiar.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_EMPRES(2) = Val(Replace(TextBox143.Value, ",", "."))
   End If

   ReDim R_PARTIC(1 To 2)          'Reducció participacions empresarials
   R_PARTIC(1) = Val(ListBox144.Value) / 100
   If Not IsNumeric(TextBox144.Value) Or Val(TextBox144.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per participacions empresarials.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_PARTIC(2) = Val(Replace(TextBox144.Value, ",", "."))
   End If

   ReDim R_BENSCU(1 To 2)          'Reducció inversió béns culturals
   R_BENSCU(1) = Val(ListBox145.Value) / 100
   If Not IsNumeric(TextBox145.Value) Or Val(TextBox145.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per inversió béns culturals.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_BENSCU(2) = Val(Replace(TextBox145.Value, ",", "."))
   End If

   ReDim R_FINQUE(1 To 2)          'Reducció adquisició finques rústiques
   R_FINQUE(1) = Val(ListBox146.Value) / 100
   If Not IsNumeric(TextBox146.Value) Or Val(TextBox146.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en la reducció per adquisició finques rústiques.", vbCritical, TITOL_IS
      Exit Sub
   Else
      R_FINQUE(2) = Val(Replace(TextBox146.Value, ",", "."))
   End If

   ReDim PARMS(47, 10)              'Guarda els paràmetres del primer quadre a PARMS'
   PARMS(0, 0) = "Paràmetres"
   PARMS(0, 1) = IS_ANYREF

   For i1 = 1 To 7
       PARMS(1, i1) = R_PARENT(i1, 1)
   Next i1
   PARMS(1, 8) = R_PARENT(1, 2)
   PARMS(1, 9) = R_PARENT(1, 3)
   PARMS(1, 10) = R_PARENT(1, 4)
```

```
   For i1 = 1 To 5
       PARMS(2, i1) = R_PARENT_AD(i1)
   Next i1

   PARMS(3, 1) = R_DISCAP(1)
   PARMS(3, 2) = R_DISCAP(2)

   PARMS(4, 1) = R_EDATGR(1)
   PARMS(4, 2) = R_EDATGR(2)

   PARMS(5, 1) = R_ASSEGU(1) + IIf(R_ASSEGU(1) <> 0, 0.0000000001, 0)
   PARMS(5, 2) = R_ASSEGU(2)
   PARMS(6, 1) = R_HABITA(1) + IIf(R_HABITA(1) <> 0, 0.0000000001, 0)
   PARMS(6, 2) = R_HABITA(2)
   PARMS(7, 1) = R_EMPRES(1) + IIf(R_EMPRES(1) <> 0, 0.0000000001, 0)
   PARMS(7, 2) = R_EMPRES(2)
   PARMS(8, 1) = R_PARTIC(1) + IIf(R_PARTIC(1) <> 0, 0.0000000001, 0)
   PARMS(8, 2) = R_PARTIC(2)
   PARMS(9, 1) = R_BENSCU(1) + IIf(R_BENSCU(1) <> 0, 0.0000000001, 0)
   PARMS(9, 2) = R_BENSCU(2)
   PARMS(10, 1) = R_FINQUE(1) + IIf(R_FINQUE(1) <> 0, 0.0000000001, 0)
   PARMS(10, 2) = R_FINQUE(2)

ElseIf MultiPage1.Value = 1 Then

   ReDim COEF(1 To 4, 1 To 4)
   For i1 = 1 To 4
       If i1 <> 2 Then
          For j1 = 1 To 4
              For Each CTL In Frame21.Controls
                  If CTL.Name = "TextBox21" & i1 & j1 Then
                     If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                        ERR_LEC = True
                        Me.Hide
                        MsgBox "Error en el coeficient multiplicador" & i1 & "," & j1 & ".", vbCritical,
TITOL_IS
                        Exit Sub
                     Else
                        COEF(i1, j1) = Val(Replace(CTL.Value, ",", "."))
                     End If
                  End If
              Next CTL
          Next j1
       End If
       For j1 = 1 To 4
           COEF(2, j1) = COEF(1, j1)
       Next j1
   Next i1

   NTRAMS12 = ListBox22.Value      'Trams i tipus grups 1 i 2
   ReDim TIPUS12(1 To NTRAMS12), T12(1 To NTRAMS12)
   For i1 = 1 To NTRAMS12
       For Each CTL In Frame222.Controls
           If i1 <> NTRAMS12 Then
              If CTL.Name = "TextBox222" & i1 & "2" Then
                 If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                    ERR_LEC = True
                    Me.Hide
                    MsgBox "Error en el TRAM " & i1 & " del grup parentiu 1 i 2.", vbCritical, TITOL_IS
                    Exit Sub
                 Else
                    T12(i1) = Val(Replace(CTL.Value, ",", "."))
                 End If
              End If
           End If
           If CTL.Name = "TextBox222" & i1 & "3" Then
              If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en el tipus impositiu del TRAM " & i1 & " del grup parentiu 1 i 2.", vbCritical,
TITOL_IS
                 Exit Sub
              Else
                 TIPUS12(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
              End If
           End If
       Next CTL
       If i1 <> 1 Then
          If i1 <> NTRAMS12 Then
             If T12(i1) <= T12(i1 - 1) Then
                ERR_LEC = True
                Me.Hide
```

```
                MsgBox "Error en el TRAM " & i1 & " del grup parentiu 1 i 2.", vbCritical, TITOL_IS
                Exit Sub
             End If
          End If
          If TIPUS12(i1) < TIPUS12(i1 - 1) Then
             ERR_LEC = True
             Me.Hide
             MsgBox "Error en el tipus impositiu del TRAM " & i1 & " del grup parentiu 1 i 2.", vbCritical,
TITOL_IS
             Exit Sub
          End If
       End If
   Next i1

   NTRAMS34 = ListBox23.Value      'Trams i tipus grups 3 i 4
   ReDim TIPUS34(1 To NTRAMS34), T34(1 To NTRAMS34)
   For i1 = 1 To NTRAMS34
       For Each CTL In Frame232.Controls
           If i1 <> NTRAMS34 Then
              If CTL.Name = "TextBox232" & i1 & "2" Then
                 If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                    ERR_LEC = True
                    Me.Hide
                    MsgBox "Error en el TRAM " & i1 & " del grup parentiu 3 i 4.", vbCritical, TITOL_IS
                    Exit Sub
                 Else
                    T34(i1) = Val(Replace(CTL.Value, ",", "."))
                 End If
              End If
           End If
           If CTL.Name = "TextBox232" & i1 & "3" Then
              If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en el tipus impositiu del TRAM " & i1 & " del grup parentiu 3 i 4.", vbCritical,
TITOL_IS
                 Exit Sub
              Else
                 TIPUS34(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
              End If
           End If
       Next CTL
       If i1 <> 1 Then
          If i1 <> NTRAMS34 Then
             If T34(i1) <= T34(i1 - 1) Then
                ERR_LEC = True
                Me.Hide
                    MsgBox "Error en el TRAM " & i1 & " del grup parentiu 3 i 4.", vbCritical, TITOL_IS
                Exit Sub
             End If
          End If
          If TIPUS34(i1) < TIPUS34(i1 - 1) Then
             ERR_LEC = True
             Me.Hide
             MsgBox "Error en el tipus impositiu del TRAM " & i1 & " del grup parentiu 3 i 4.", vbCritical,
TITOL_IS
             Exit Sub
          End If
       End If
   Next i1

   PARMS(0, 2) = NTRAMS12              'Guarda els paràmetres del segon quadre a PARMS'
   PARMS(0, 3) = NTRAMS34

   For i1 = 1 To 4
       For j1 = 1 To 4
           PARMS(10 + i1, j1) = COEF(i1, j1)
       Next j1
   Next i1

   For i1 = 1 To NTRAMS12
       If i1 = 1 Then
          PARMS(14 + i1, 1) = "0"
          PARMS(14 + i1, 2) = IIf(i1 <> NTRAMS12, T12(i1), "i més")
          PARMS(14 + i1, 3) = TIPUS12(i1) + 0.0000000001
       ElseIf i1 < NTRAMS12 Then
          PARMS(14 + i1, 1) = T12(i1 - 1)
          PARMS(14 + i1, 2) = T12(i1)
          PARMS(14 + i1, 3) = TIPUS12(i1) + 0.0000000001
       Else
          PARMS(14 + i1, 1) = T12(i1 - 1)
          PARMS(14 + i1, 2) = "i més"
          PARMS(14 + i1, 3) = TIPUS12(i1) + 0.0000000001
```

```
        End If
    Next i1

    For i1 = 1 To NTRAMS34
        If i1 = 1 Then
            PARMS(14 + i1, 5) = "0"
            PARMS(14 + i1, 6) = IIf(i1 <> NTRAMS34, T34(i1), "i més")
            PARMS(14 + i1, 7) = TIPUS34(i1) + 0.0000000001
        ElseIf i1 < NTRAMS34 Then
            PARMS(14 + i1, 5) = T34(i1 - 1)
            PARMS(14 + i1, 6) = T34(i1)
            PARMS(14 + i1, 7) = TIPUS34(i1) + 0.0000000001
        Else
            PARMS(14 + i1, 5) = T34(i1 - 1)
            PARMS(14 + i1, 6) = "i més"
            PARMS(14 + i1, 7) = TIPUS34(i1) + 0.0000000001
        End If
    Next i1

ElseIf MultiPage1.Value = 2 Then

    ReDim BONIF(1 To 17, 1 To 2)
    BONIF(1, 1) = Val(ListBox3011.Value) / 100: BONIF(1, 2) = Val(ListBox3012.Value) / 100
    BONIF(2, 1) = Val(ListBox3021.Value) / 100: BONIF(2, 2) = Val(ListBox3022.Value) / 100
    BONIF(3, 1) = Val(ListBox3031.Value) / 100: BONIF(3, 2) = Val(ListBox3032.Value) / 100
    BONIF(4, 1) = Val(ListBox3041.Value) / 100: BONIF(4, 2) = Val(ListBox3042.Value) / 100
    BONIF(5, 1) = Val(ListBox305.Value) / 100
    BONIF(6, 1) = Val(ListBox306.Value) / 100
    BONIF(7, 1) = Val(ListBox307.Value) / 100
    BONIF(8, 1) = Val(ListBox308.Value) / 100
    BONIF(9, 1) = Val(ListBox309.Value) / 100
    BONIF(10, 1) = Val(ListBox310.Value) / 100
    BONIF(11, 1) = Val(ListBox311.Value) / 100
    BONIF(12, 1) = Val(ListBox312.Value) / 100
    BONIF(13, 1) = Val(ListBox313.Value) / 100
    BONIF(14, 1) = Val(ListBox314.Value) / 100
    BONIF(15, 1) = Val(ListBox315.Value) / 100
    BONIF(16, 1) = Val(ListBox316.Value) / 100
    BONIF(17, 1) = Val(ListBox317.Value) / 100

    For i1 = 1 To 17                    'Guarda els paràmetres del tercer quadre a PARMS'
        PARMS(30 + i1, 1) = BONIF(i1, 1)
        If i1 < 5 Then PARMS(30 + i1, 2) = BONIF(i1, 2)
    Next i1

End If

Unload Me

End Sub
Private Sub Anterior_Click()

Dim i1 As Integer, j1 As Integer

PAGINA = PAGINA - 1

MultiPage1.Value = PAGINA

NetejaValors.Value = False
Llei.Value = False
SimulRef.Value = False

If MultiPage1.Value = 0 Then

    Me.Caption = "SIMCAT-IS: Reduccions" & " (Base de dades: " & ANOIS & " )"

    For Each CTL In Frame11.Controls
        For i1 = 1 To 7
            If CTL.Name = "TextBox11" & i1 & "1" Then CTL.Text = Format(PARMS(1, i1), "#0")
        Next i1
    Next CTL
    TextBox1112.Text = Format(PARMS(1, 8), "#0")
    ListBox111.Selected(20 - PARMS(1, 9)) = True
    ListBox112.Selected(20 - PARMS(1, 10)) = True

    For Each CTL In Frame12.Controls
        For i1 = 1 To 5
            If CTL.Name = "TextBox12" & i1 Then CTL.Text = Format(PARMS(2, i1), "#0")
        Next i1
    Next CTL

    TextBox131.Text = Format(PARMS(3, 1), "#0")
    TextBox132.Text = Format(PARMS(3, 2), "#0")
```

```
   If PARMS(4, 1) <> 0 Then ListBox131.Selected(100 - PARMS(4, 1)) = True Else ListBox131.Selected(51) = True
   TextBox1311.Text = Format(PARMS(4, 2), "#0")

   For Each CTL In Frame14.Controls
       For i1 = 1 To 6
           If CTL.Name = "ListBox14" & i1 Then CTL.Selected(100 - (PARMS(4 + i1, 1) * 100)) = True
           If CTL.Name = "TextBox14" & i1 Then CTL.Text = Format(PARMS(4 + i1, 2), "#0")
       Next i1
   Next CTL

ElseIf MultiPage1.Value = 1 Then

   Me.Caption = "SIMCAT-IS: Coeficients multiplicadors i tarifa (Base de dades: " & ANOIS & ")"

   For Each CTL In Frame21.Controls
       For i1 = 1 To 4
           If i1 <> 2 Then
              For j1 = 1 To 4
                  If CTL.Name = "TextBox21" & i1 & j1 Then CTL.Text = Format(PARMS(10 + i1, j1), "0.0000")
              Next j1
           End If
       Next i1
   Next CTL

   ListBox22.Selected(16 - PARMS(0, 2)) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To PARMS(0, 2)
           If i1 <> PARMS(0, 2) And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = PARMS(14 + i1, 2)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(PARMS(14 + i1, 3) * 100, "#0.00")
       Next i1
   Next CTL
   ListBox23.Selected(16 - PARMS(0, 3)) = True
   For Each CTL In Frame232.Controls
       For i1 = 1 To PARMS(0, 3)
           If i1 <> PARMS(0, 3) And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = PARMS(14 + i1, 6)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(PARMS(14 + i1, 7) * 100, "#0.00")
       Next i1
   Next CTL

End If

End Sub
Private Sub Cancelar_Click()

SORTIR = True
IMPOST(2) = True
Unload Me

End Sub
Private Sub ListBox22_Click()

Dim i1 As Integer

NTRAMS12 = ListBox22.Value
For Each CTL In Frame221.Controls
    If CTL.TabIndex <= NTRAMS12 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame222.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMS12 - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox222" & NTRAMS12 & "2" Then
       CTL.Enabled = False
       CTL.Value = "i més"
    End If
Next CTL
For Each CTL In Frame223.Controls
    If CTL.TabIndex <= NTRAMS12 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox22211.Value = "0"

End Sub
Private Sub ListBox23_Click()

Dim i1 As Integer

NTRAMS34 = ListBox23.Value
For Each CTL In Frame231.Controls
    If CTL.TabIndex <= NTRAMS34 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame232.Controls
```

```
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMS34 - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox232" & NTRAMS34 & "2" Then
       CTL.Enabled = False
       CTL.Value = "i més"
    End If
Next CTL
For Each CTL In Frame233.Controls
    If CTL.TabIndex <= NTRAMS34 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox23211.Value = "0"

End Sub
Private Sub Llei_Click()

Dim i1 As Integer, j1 As Integer

If MultiPage1.Value = 0 Then

   TextBox1111.Value = IS_R_PARENT(1, 1)
   TextBox1112.Value = IS_R_PARENT(1, 2)
   ListBox111.Selected(20 - IS_R_PARENT(1, 3)) = True
   ListBox112.Selected(20 - IS_R_PARENT(1, 4)) = True
   TextBox1121.Value = IS_R_PARENT(2, 1)
   TextBox1131.Value = IS_R_PARENT(3, 1)
   TextBox1141.Value = IS_R_PARENT(4, 1)
   TextBox1151.Value = IS_R_PARENT(5, 1)
   TextBox1161.Value = IS_R_PARENT(6, 1)
   TextBox1171.Value = IS_R_PARENT(7, 1)

   TextBox121.Value = IS_R_PARENT_AD(1)
   TextBox122.Value = IS_R_PARENT_AD(2)
   TextBox123.Value = IS_R_PARENT_AD(3)
   TextBox124.Value = IS_R_PARENT_AD(4)
   TextBox125.Value = IS_R_PARENT_AD(5)

   TextBox131.Value = IS_R_DISCAP(1)
   TextBox132.Value = IS_R_DISCAP(2)
   ListBox131.Selected(100 - IS_R_EDATGR(1)) = True
   TextBox1311.Value = IS_R_EDATGR(2)

   ListBox141.Selected(100 - (IS_R_ASSEGU(1) * 100)) = True
   TextBox141.Value = IS_R_ASSEGU(2)
   ListBox142.Selected(100 - (IS_R_HABITA(1) * 100)) = True
   TextBox142.Value = IS_R_HABITA(2)
   ListBox143.Selected(100 - (IS_R_EMPRES(1) * 100)) = True
   TextBox143.Value = IS_R_EMPRES(2)
   ListBox144.Selected(100 - (IS_R_PARTIC(1) * 100)) = True
   TextBox144.Value = IS_R_PARTIC(2)
   ListBox145.Selected(100 - (IS_R_BENSCU(1) * 100)) = True
   TextBox145.Value = IS_R_BENSCU(2)
   ListBox146.Selected(100 - (IS_R_FINQUE(1) * 100)) = True
   TextBox146.Value = IS_R_FINQUE(2)

ElseIf MultiPage1.Value = 1 Then

   For Each CTL In Frame21.Controls
       For i1 = 1 To 4
           If i1 <> 2 Then
              For j1 = 1 To 4
                  If CTL.Name = "TextBox21" & i1 & j1 Then CTL.Text = Format(IS_COEF(i1, j1), "0.0000")
              Next j1
           End If
       Next i1
   Next CTL

   ListBox22.Selected(16 - IS_NTRAMS) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To IS_NTRAMS
           If i1 <> IS_NTRAMS And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = IS_TRAMS(i1)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(IS_TIPUS(i1) * 100, "#0.00")
       Next i1
   Next CTL
   ListBox23.Selected(16 - IS_NTRAMS) = True
   For Each CTL In Frame232.Controls
       For i1 = 1 To IS_NTRAMS
           If i1 <> IS_NTRAMS And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = IS_TRAMS(i1)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(IS_TIPUS(i1) * 100, "#0.00")
       Next i1
   Next CTL
```

```
ElseIf MultiPage1.Value = 2 Then

    For Each CTL In Frame3.Controls
        If TypeName(CTL) = "ListBox" Then
           If Left(CTL.Name, 9) = "ListBox30" Then
              CTL.Selected(100 - IS_BONIF(1)) = True
           Else
              CTL.Selected(100 - IS_BONIF(2)) = True
           End If
        End If
    Next CTL

End If

End Sub
Private Sub ListBox_Simulref_Click()

Dim i1 As Integer, j1 As Integer, nsim As Integer, p(47, 10)

For i1 = 0 To ISIMULS(2) - 1
    If ListBox_SimulRef.Selected(i1) = True Then
       nsim = ListBox_SimulRef.Value
       Exit For
    End If
Next i1

Call COMUNS_1REFERENCIA_SIMULS("IS", nsim, p)

If MultiPage1.Value = 0 Then

   For j1 = 1 To 7                                                  'parentiu
       For Each CTL In Frame11.Controls
           If CTL.Name = "TextBox11" & j1 & "1" Then CTL.Value = Format(p(1, j1), "#0")
       Next CTL
   Next j1
   TextBox1112.Value = Format(p(1, 8), "#0")
   ListBox111.Selected(20 - p(1, 9)) = True
   ListBox112.Selected(20 - p(1, 10)) = True

   For j1 = 1 To 5                                                  'parentiu addicional
       For Each CTL In Frame12.Controls
           If CTL.Name = "TextBox12" & j1 Then CTL.Value = p(2, j1)
       Next CTL
   Next j1
   TextBox131.Value = p(3, 1)                                       'discapacitat
   TextBox132.Value = p(3, 2)
   ListBox131.Selected(IIf(p(4, 1) <> 0, 100 - p(4, 1), 51)) = True 'edat
   TextBox1311.Value = p(4, 2)

   ListBox141.Selected(100 - Format(p(5, 1) * 100, "#0")) = True    'assegurances
   TextBox141.Value = p(5, 2)
   ListBox142.Selected(100 - Format(p(6, 1) * 100, "#0")) = True    'habitatge
   TextBox142.Value = p(6, 2)
   ListBox143.Selected(100 - Format(p(7, 1) * 100, "#0")) = True    'empresa familiar
   TextBox143.Value = p(7, 2)
   ListBox144.Selected(100 - Format(p(8, 1) * 100, "#0")) = True    'participacions empresarials
   TextBox144.Value = p(8, 2)
   ListBox145.Selected(100 - Format(p(9, 1) * 100, "#0")) = True    'inversió béns culturals
   TextBox145.Value = p(9, 2)
   ListBox146.Selected(100 - Format(p(10, 1) * 100, "#0")) = True   'adquisició finques rústiques
   TextBox146.Value = p(10, 2)

ElseIf MultiPage1.Value = 1 Then

   For Each CTL In Frame21.Controls
       For i1 = 1 To 4
           If i1 <> 2 Then
              For j1 = 1 To 4
                  If CTL.Name = "TextBox21" & i1 & j1 Then CTL.Value = Format(p(10 + i1, j1), "0.0000")
              Next j1
           End If
       Next i1
   Next CTL

   ListBox22.Selected(16 - p(0, 2)) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To p(0, 2)
           If i1 <> p(0, 2) And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = p(14 + i1, 2)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(p(14 + i1, 3) * 100, "#0.00")
       Next i1
   Next CTL
   ListBox23.Selected(16 - p(0, 3)) = True
```

```
   For Each CTL In Frame232.Controls
       For i1 = 1 To p(0, 3)
           If i1 <> p(0, 3) And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = p(14 + i1, 6)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(p(14 + i1, 7) * 100, "#0.00")
       Next i1
   Next CTL

ElseIf MultiPage1.Value = 2 Then

   ListBox3011.Selected(100 - p(31, 1) * 100) = True: ListBox3012.Selected(100 - p(31, 2) * 100) = True
   ListBox3021.Selected(100 - p(32, 1) * 100) = True: ListBox3022.Selected(100 - p(32, 2) * 100) = True
   ListBox3031.Selected(100 - p(33, 1) * 100) = True: ListBox3032.Selected(100 - p(33, 2) * 100) = True
   ListBox3041.Selected(100 - p(34, 1) * 100) = True: ListBox3042.Selected(100 - p(34, 2) * 100) = True
   ListBox305.Selected(100 - p(35, 1) * 100) = True
   ListBox306.Selected(100 - p(36, 1) * 100) = True
   ListBox307.Selected(100 - p(37, 1) * 100) = True
   ListBox308.Selected(100 - p(38, 1) * 100) = True
   ListBox309.Selected(100 - p(39, 1) * 100) = True
   ListBox310.Selected(100 - p(40, 1) * 100) = True
   ListBox311.Selected(100 - p(41, 1) * 100) = True
   ListBox312.Selected(100 - p(42, 1) * 100) = True
   ListBox313.Selected(100 - p(43, 1) * 100) = True
   ListBox314.Selected(100 - p(44, 1) * 100) = True
   ListBox315.Selected(100 - p(45, 1) * 100) = True
   ListBox316.Selected(100 - p(46, 1) * 100) = True
   ListBox317.Selected(100 - p(47, 1) * 100) = True

End If

End Sub
Private Sub MultiPage1_Layout(ByVal Index As Long)

If MultiPage1.Value = 0 Then
   Aceptar.Left = 223
   Anterior.Visible = False
   Cancelar.Left = 273
Else
   Aceptar.Left = 248
   Anterior.Visible = True
   Cancelar.Left = 298
End If

End Sub
Private Sub NetejaValors_Click()

Dim i1 As Integer, j1 As Integer

If MultiPage1.Value = 0 Then

   For Each CTL In MultiPage1(0).Controls
       If TypeName(CTL) = "TextBox" Then CTL.Value = 0
   Next CTL

   ListBox111.Selected(20) = True
   ListBox112.Selected(20) = True

   ListBox131.Selected(51) = True

   ListBox141.Selected(100) = True
   ListBox142.Selected(100) = True
   ListBox143.Selected(100) = True
   ListBox144.Selected(100) = True
   ListBox145.Selected(100) = True
   ListBox146.Selected(100) = True

ElseIf MultiPage1.Value = 1 Then

   For Each CTL In Frame21.Controls
       For i1 = 1 To 4
           If i1 <> 2 Then
              For j1 = 1 To 4
                  If CTL.Name = "TextBox21" & i1 & j1 Then CTL.Text = "0.0000"
              Next j1
           End If
       Next i1
   Next CTL
   ListBox22.Selected(15) = True
   ListBox23.Selected(15) = True
   TextBox22213.Text = 14
   TextBox23213.Text = 14

ElseIf MultiPage1.Value = 2 Then
```

```
   For Each CTL In Frame3.Controls
       If TypeName(CTL) = "ListBox" Then CTL.Selected(100) = True
   Next CTL

End If

End Sub
Private Sub SimulRef_Change()

Dim i1 As Integer

If SimulRef Then
   Frame02.Width = 190
   For i1 = 0 To ISIMULS(2) - 1
       ListBox_SimulRef.Selected(i1) = False
   Next i1
Else
   Frame02.Width = 150
   ListBox_SimulRef.TopIndex = 0
End If

End Sub
Private Sub TextBox22212_Change()

If IsNumeric(TextBox22212.Value) Then TextBox22221.Value = TextBox22212.Value

End Sub
Private Sub TextBox22222_Change()

If IsNumeric(TextBox22222.Value) Then TextBox22231.Value = TextBox22222.Value

End Sub
Private Sub TextBox22232_Change()

If IsNumeric(TextBox22232.Value) Then TextBox22241.Value = TextBox22232.Value

End Sub
Private Sub TextBox22242_Change()

If IsNumeric(TextBox22242.Value) Then TextBox22251.Value = TextBox22242.Value

End Sub
Private Sub TextBox22252_Change()

If IsNumeric(TextBox22252.Value) Then TextBox22261.Value = TextBox22252.Value

End Sub
Private Sub TextBox22262_Change()

If IsNumeric(TextBox22262.Value) Then TextBox22271.Value = TextBox22262.Value

End Sub
Private Sub TextBox22272_Change()

If IsNumeric(TextBox22272.Value) Then TextBox22281.Value = TextBox22272.Value

End Sub
Private Sub TextBox22282_Change()

If IsNumeric(TextBox22282.Value) Then TextBox22291.Value = TextBox22282.Value

End Sub
Private Sub TextBox22292_Change()

If IsNumeric(TextBox22292.Value) Then TextBox222101.Value = TextBox22292.Value

End Sub
Private Sub TextBox222102_Change()

If IsNumeric(TextBox222102.Value) Then TextBox222111.Value = TextBox222102.Value

End Sub
Private Sub TextBox222112_Change()

If IsNumeric(TextBox222112.Value) Then TextBox222121.Value = TextBox222112.Value

End Sub
Private Sub TextBox222122_Change()

If IsNumeric(TextBox222122.Value) Then TextBox222131.Value = TextBox222122.Value

End Sub
Private Sub TextBox222132_Change()
```

```
If IsNumeric(TextBox222132.Value) Then TextBox222141.Value = TextBox222132.Value

End Sub
Private Sub TextBox222142_Change()

If IsNumeric(TextBox222142.Value) Then TextBox222151.Value = TextBox222142.Value

End Sub
Private Sub TextBox222152_Change()

If IsNumeric(TextBox222152.Value) Then TextBox222161.Value = TextBox222152.Value

End Sub
Private Sub TextBox23212_Change()

If IsNumeric(TextBox23212.Value) Then TextBox23221.Value = TextBox23212.Value

End Sub
Private Sub TextBox23222_Change()

If IsNumeric(TextBox23222.Value) Then TextBox23231.Value = TextBox23222.Value

End Sub
Private Sub TextBox23232_Change()

If IsNumeric(TextBox23232.Value) Then TextBox23241.Value = TextBox23232.Value

End Sub
Private Sub TextBox23242_Change()

If IsNumeric(TextBox23242.Value) Then TextBox23251.Value = TextBox23242.Value

End Sub
Private Sub TextBox23252_Change()

If IsNumeric(TextBox23252.Value) Then TextBox23261.Value = TextBox23252.Value

End Sub
Private Sub TextBox23262_Change()

If IsNumeric(TextBox23262.Value) Then TextBox23271.Value = TextBox23262.Value

End Sub
Private Sub TextBox23272_Change()

If IsNumeric(TextBox23272.Value) Then TextBox23281.Value = TextBox23272.Value

End Sub
Private Sub TextBox23282_Change()

If IsNumeric(TextBox23282.Value) Then TextBox23291.Value = TextBox23282.Value

End Sub
Private Sub TextBox23292_Change()

If IsNumeric(TextBox23292.Value) Then TextBox232101.Value = TextBox23292.Value

End Sub
Private Sub TextBox232102_Change()

If IsNumeric(TextBox232102.Value) Then TextBox232111.Value = TextBox232102.Value

End Sub
Private Sub TextBox232112_Change()

If IsNumeric(TextBox232112.Value) Then TextBox232121.Value = TextBox232112.Value

End Sub
Private Sub TextBox232122_Change()

If IsNumeric(TextBox232122.Value) Then TextBox232131.Value = TextBox232122.Value

End Sub
Private Sub TextBox232132_Change()

If IsNumeric(TextBox232132.Value) Then TextBox232141.Value = TextBox232132.Value

End Sub
Private Sub TextBox232142_Change()

If IsNumeric(TextBox232142.Value) Then TextBox232151.Value = TextBox232142.Value
```

```
End Sub
Private Sub TextBox232152_Change()

If IsNumeric(TextBox232152.Value) Then TextBox232161.Value = TextBox232152.Value

End Sub
Private Sub UserForm_Activate()

height1 = Me.Height
left1 = Me.Left
top1 = Me.Top
width1 = Me.Width
Zoom = IIf(XZOOM < 200, 100, IIf(Not XTEXT, 150, 100))
If ISIMULS(2) <> 0 Then Frame02.Width = 150 Else Frame02.Width = 104

End Sub
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)

If CloseMode = 0 Then SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Zoom(Percent As Integer)

Me.Width = Me.Width * Percent / 100
Me.Height = Me.Height * Percent / 100
Me.Left = left1 - ((Me.Width - width1) / 2)
Me.Top = top1 - ((Me.Width - width1) / 2)

End Sub
```

```
Attribute VB_Name = "IS2"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False

Option Explicit
Dim height1 As Integer, left1 As Integer, top1 As Integer, width1 As Integer
Private Sub Aceptar_Click()

Dim i1 As Integer, j1 As Integer
ERR_LEC = False

If MultiPage1.Value = 0 Then

   ReDim R_BASE(1 To 6, 1 To 4)            'Reduccions a la base
   R_BASE(1, 1) = ListBox11.Value / 100  'Activitat empresarial
   R_BASE(2, 1) = ListBox12.Value / 100  'Participacions entitats
   R_BASE(3, 1) = ListBox13.Value / 100  'Patrimoni cultural

   R_BASE(5, 1) = ListBox15.Value / 100  'Altres(3)
   If Not IsNumeric(TextBox151.Value) Or Val(TextBox151.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en el límit general de la reducció Altres(3).", vbCritical, TITOL_ID
      Exit Sub
   Else
      R_BASE(5, 2) = Val(Replace(TextBox151.Value, ",", "."))
   End If
   If Not IsNumeric(TextBox152.Value) Or Val(TextBox152.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en el límit (discapacitats) de la reducció Altres(3).", vbCritical, TITOL_ID
      Exit Sub
   Else
      R_BASE(5, 3) = Val(Replace(TextBox152.Value, ",", "."))
   End If

   R_BASE(6, 1) = ListBox16.Value / 100  'Altres(4)
   If Not IsNumeric(TextBox161.Value) Or Val(TextBox161.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en el límit general de la reducció Altres(4).", vbCritical, TITOL_ID
      Exit Sub
   Else
      R_BASE(6, 2) = Val(Replace(TextBox161.Value, ",", "."))
   End If
   If Not IsNumeric(TextBox162.Value) Or Val(TextBox162.Value) < 0 Then
      ERR_LEC = True
      Me.Hide
      MsgBox "Error en el límit (discapacitats) de la reducció Altres(4).", vbCritical, TITOL_ID
      Exit Sub
   Else
      R_BASE(6, 3) = Val(Replace(TextBox162.Value, ",", "."))
   End If
   R_BASE(6, 4) = ListBox161.Value

   ReDim PARMS(18, 6)              'Guarda els paràmetres del primer quadre a PARMS'
   PARMS(0, 0) = "Paràmetres"
   PARMS(0, 1) = ID_ANYREF
   For i1 = 1 To 6
       If i1 <> 4 Then
          PARMS(i1, 1) = R_BASE(i1, 1)
       End If
   Next i1
   For i1 = 5 To 6
       For j1 = 2 To IIf(i1 = 5, 3, 4)
           PARMS(i1, j1) = R_BASE(i1, j1)
       Next j1
   Next i1

ElseIf MultiPage1.Value = 1 Then

   ReDim COEF(1 To 4)
   For i1 = 1 To 4
       If i1 <> 2 Then
          For Each CTL In Frame21.Controls
              If CTL.Name = "TextBox21" & i1 Then
                 If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                    ERR_LEC = True
                    Me.Hide
                    MsgBox "Error en el coeficient multiplicador" & i1 & ".", vbCritical, TITOL_ID
```

```
                    Exit Sub
                Else
                    COEF(i1) = Val(Replace(CTL.Value, ",", "."))
                End If
            End If
        Next CTL
    End If
Next i1
COEF(2) = COEF(1)

NTRAMS12 = ListBox22.Value      'Trams i tipus grups 1 i 2
ReDim TIPUS12(1 To NTRAMS12), T12(1 To NTRAMS12)
For i1 = 1 To NTRAMS12
    For Each CTL In Frame222.Controls
        If i1 <> NTRAMS12 Then
            If CTL.Name = "TextBox222" & i1 & "2" Then
                If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                    ERR_LEC = True
                    Me.Hide
                    MsgBox "Error en el TRAM " & i1 & " de la tarifa dels Grups 1 i 2.", vbCritical, TITOL_ID
                    Exit Sub
                Else
                    T12(i1) = Val(Replace(CTL.Value, ",", "."))
                End If
            End If
        End If
        If CTL.Name = "TextBox222" & i1 & "3" Then
            If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
                ERR_LEC = True
                Me.Hide
                MsgBox "Error en el tipus impositiu del TRAM " & i1 & " dels Grups 1 i 2.", vbCritical,
TITOL_ID
                Exit Sub
            Else
                TIPUS12(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
            End If
        End If
    Next CTL
    If i1 <> 1 Then
        If i1 <> NTRAMS12 Then
            If T12(i1) <= T12(i1 - 1) Then
                ERR_LEC = True
                Me.Hide
                    MsgBox "Error en el TRAM " & i1 & " de la tarifa dels Grups 1 i 2.", vbCritical, TITOL_ID
                Exit Sub
            End If
        End If
        If TIPUS12(i1) < TIPUS12(i1 - 1) Then
            ERR_LEC = True
            Me.Hide
            MsgBox "Error en el tipus impositiu del TRAM " & i1 & " dels Grups 1 i 2.", vbCritical, TITOL_ID
            Exit Sub
        End If
    End If
Next i1

NTRAMS34 = ListBox23.Value      'Trams i tipus grups 3 i 4
ReDim TIPUS34(1 To NTRAMS34), T34(1 To NTRAMS34)
For i1 = 1 To NTRAMS34
    For Each CTL In Frame232.Controls
        If i1 <> NTRAMS34 Then
            If CTL.Name = "TextBox232" & i1 & "2" Then
                If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
                    ERR_LEC = True
                    Me.Hide
                    MsgBox "Error en el TRAM " & i1 & " de la tarifa dels Grups 3 i 4.", vbCritical, TITOL_ID
                    Exit Sub
                Else
                    T34(i1) = Val(Replace(CTL.Value, ",", "."))
                End If
            End If
        End If
        If CTL.Name = "TextBox232" & i1 & "3" Then
            If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
                ERR_LEC = True
                Me.Hide
                MsgBox "Error en el tipus impositiu del TRAM " & i1 & " del Grups 3 i 4.", vbCritical, TITOL_ID
                Exit Sub
            Else
                TIPUS34(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
            End If
        End If
    Next CTL
```

```
       If i1 <> 1 Then
          If i1 <> NTRAMS34 Then
             If T34(i1) <= T34(i1 - 1) Then
                ERR_LEC = True
                Me.Hide
                    MsgBox "Error en el TRAM " & i1 & " de la tarifa dels Grups 3 i 4.", vbCritical, TITOL_ID
                Exit Sub
             End If
          End If
          If TIPUS34(i1) < TIPUS34(i1 - 1) Then
             ERR_LEC = True
             Me.Hide
             MsgBox "Error en el tipus impositiu del TRAM " & i1 & " dels Grups 3 i 4.", vbCritical, TITOL_ID
             Exit Sub
          End If
       End If
   Next i1

   ReDim BONIF(1 To 4)
   BONIF(1) = Val(ListBox241.Value) / 100
   BONIF(2) = Val(ListBox241.Value) / 100
   BONIF(3) = Val(ListBox243.Value) / 100
   BONIF(4) = Val(ListBox244.Value) / 100

   PARMS(0, 2) = NTRAMS12                'Guarda els paràmetres del segon quadre a PARMS'
   PARMS(0, 3) = NTRAMS34

   For j1 = 1 To 4
       PARMS(7, j1) = COEF(j1)
   Next j1

   For i1 = 1 To NTRAMS12
       If i1 = 1 Then
          PARMS(7 + i1, 1) = "0"
          PARMS(7 + i1, 2) = IIf(i1 <> NTRAMS12, T12(i1), "i més")
          PARMS(7 + i1, 3) = TIPUS12(i1) + 0.0000000001
       ElseIf i1 < NTRAMS12 Then
          PARMS(7 + i1, 1) = T12(i1 - 1)
          PARMS(7 + i1, 2) = T12(i1)
          PARMS(7 + i1, 3) = TIPUS12(i1) + 0.0000000001
       Else
          PARMS(7 + i1, 1) = T12(i1 - 1)
          PARMS(7 + i1, 2) = "i més"
          PARMS(7 + i1, 3) = TIPUS12(i1) + 0.0000000001
       End If
   Next i1

   For i1 = 1 To NTRAMS34
       If i1 = 1 Then
          PARMS(7 + i1, 4) = "0"
          PARMS(7 + i1, 5) = IIf(i1 <> NTRAMS34, T34(i1), "i més")
          PARMS(7 + i1, 6) = TIPUS34(i1) + 0.0000000001
       ElseIf i1 < NTRAMS34 Then
          PARMS(7 + i1, 4) = T34(i1 - 1)
          PARMS(7 + i1, 5) = T34(i1)
          PARMS(7 + i1, 6) = TIPUS34(i1) + 0.0000000001
       Else
          PARMS(7 + i1, 4) = T34(i1 - 1)
          PARMS(7 + i1, 5) = "i més"
          PARMS(7 + i1, 6) = TIPUS34(i1) + 0.0000000001
       End If
   Next i1

   For j1 = 1 To 4
       PARMS(18, j1) = BONIF(j1)
   Next j1

End If

Unload Me

End Sub
Private Sub Anterior_Click()

Dim i1 As Integer, j1 As Integer

PAGINA = PAGINA - 1

MultiPage1.Value = PAGINA
Me.Caption = "SIMCAT-ID: Reduccions a la Base Imposable" & " (Base de dades: " & ANOID & " )"
NetejaValors.Value = False
SimulRef.Value = False
```

```
ListBox11.Selected(100 - PARMS(1, 1) * 100) = True
ListBox12.Selected(100 - PARMS(2, 1) * 100) = True
ListBox13.Selected(100 - PARMS(3, 1) * 100) = True
ListBox15.Selected(100 - PARMS(5, 1) * 100) = True
TextBox151.Value = PARMS(5, 2)
TextBox152.Value = PARMS(5, 3)
ListBox16.Selected(100 - PARMS(6, 1) * 100) = True
TextBox161.Value = PARMS(6, 2)
TextBox162.Value = PARMS(6, 3)
ListBox161.Selected(40 - PARMS(6, 4)) = True

End Sub
Private Sub Cancelar_Click()

SORTIR = True
IMPOST(3) = True
Unload Me

End Sub
Private Sub ListBox22_Click()

Dim i1 As Integer

NTRAMS12 = ListBox22.Value
For Each CTL In Frame231.Controls
    If CTL.TabIndex <= NTRAMS12 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame222.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMS12 - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox222" & NTRAMS12 & "2" Then
       CTL.Enabled = False
       CTL.Value = "i més"
    End If
Next CTL
For Each CTL In Frame223.Controls
    If CTL.TabIndex <= NTRAMS12 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox22211.Value = "0"

End Sub
Private Sub ListBox23_Click()

Dim i1 As Integer

NTRAMS34 = ListBox23.Value
For Each CTL In Frame231.Controls
    If CTL.TabIndex <= NTRAMS34 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame232.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMS34 - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
    If CTL.Name = "TextBox232" & NTRAMS34 & "2" Then
       CTL.Enabled = False
       CTL.Value = "i més"
    End If
Next CTL
For Each CTL In Frame233.Controls
    If CTL.TabIndex <= NTRAMS34 - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox23211.Value = "0"

End Sub
Private Sub Llei_Click()

Dim i1 As Integer, j1 As Integer

If MultiPage1.Value = 0 Then

   ListBox11.Selected(100 - (ID_R_BASE(1, 1) * 100)) = True
   ListBox12.Selected(100 - (ID_R_BASE(2, 1) * 100)) = True
   ListBox13.Selected(100 - (ID_R_BASE(3, 1) * 100)) = True
   ListBox15.Selected(100 - (ID_R_BASE(5, 1) * 100)) = True
   TextBox151.Value = ID_R_BASE(5, 2)
   TextBox152.Value = ID_R_BASE(5, 3)
   ListBox16.Selected(100 - (ID_R_BASE(6, 1) * 100)) = True
   TextBox161.Value = ID_R_BASE(6, 2)
```

```
   TextBox162.Value = ID_R_BASE(6, 3)
   ListBox161.Selected(40 - ID_R_BASE(6, 4)) = True

ElseIf MultiPage1.Value = 1 Then

   TextBox211.Text = Format(ID_COEF(1), "0.0000")
   TextBox213.Text = Format(ID_COEF(3), "0.0000")
   TextBox214.Text = Format(ID_COEF(4), "0.0000")

   ListBox22.Selected(10 - ID_NTRAMS12) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To ID_NTRAMS12
           If i1 <> ID_NTRAMS12 And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = ID_TRAMS12(i1)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(ID_TIPUS12(i1) * 100, "#0.00")
       Next i1
   Next CTL
   ListBox23.Selected(10 - ID_NTRAMS34) = True
   For Each CTL In Frame232.Controls
       For i1 = 1 To ID_NTRAMS34
           If i1 <> ID_NTRAMS34 And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = ID_TRAMS34(i1)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(ID_TIPUS34(i1) * 100, "#0.00")
       Next i1
   Next CTL

   ListBox241.Selected(100) = True
   ListBox243.Selected(100) = True
   ListBox244.Selected(100) = True

End If

End Sub
Private Sub ListBox_Simulref_Click()

Dim i1 As Integer, j1 As Integer, nsim As Integer, p(22, 6)

For i1 = 0 To ISIMULS(3) - 1
    If ListBox_SimulRef.Selected(i1) = True Then
       nsim = ListBox_SimulRef.Value
       Exit For
    End If
Next i1

Call COMUNS_1REFERENCIA_SIMULS("ID", nsim, p)

If MultiPage1.Value = 0 Then

   ListBox11.Selected(100 - p(1, 1) * 100) = True
   ListBox12.Selected(100 - p(2, 1) * 100) = True
   ListBox13.Selected(100 - p(3, 1) * 100) = True
   ListBox15.Selected(100 - p(5, 1) * 100) = True
   TextBox151.Value = p(5, 2)
   TextBox152.Value = p(5, 3)
   ListBox16.Selected(100 - p(6, 1) * 100) = True
   TextBox161.Value = p(6, 2)
   TextBox162.Value = p(6, 3)
   ListBox161.Selected(40 - p(6, 4)) = True

ElseIf MultiPage1.Value = 1 Then

   TextBox211.Text = Format(p(7, 1), "0.0000")
   TextBox213.Text = Format(p(7, 3), "0.0000")
   TextBox214.Text = Format(p(7, 4), "0.0000")

   ListBox22.Selected(10 - p(0, 2)) = True
   For Each CTL In Frame222.Controls
       For i1 = 1 To p(0, 2)
           If i1 <> p(0, 2) And CTL.Name = "TextBox222" & i1 & "2" Then CTL.Text = p(7 + i1, 2)
           If CTL.Name = "TextBox222" & i1 & "3" Then CTL.Text = Format(p(7 + i1, 3) * 100, "#0.00")
       Next i1
   Next CTL
   ListBox23.Selected(10 - p(0, 3)) = True
   For Each CTL In Frame232.Controls
       For i1 = 1 To p(0, 3)
           If i1 <> p(0, 3) And CTL.Name = "TextBox232" & i1 & "2" Then CTL.Text = p(7 + i1, 5)
           If CTL.Name = "TextBox232" & i1 & "3" Then CTL.Text = Format(p(7 + i1, 6) * 100, "#0.00")
       Next i1
   Next CTL

End If

End Sub
Private Sub MultiPage1_Layout(ByVal Index As Long)
```

```
If MultiPage1.Value = 0 Then
   Aceptar.Left = 223
   Anterior.Visible = False
   Cancelar.Left = 273
Else
   Aceptar.Left = 248
   Anterior.Visible = True
   Cancelar.Left = 298
End If

End Sub
Private Sub NetejaValors_Click()

Dim i1 As Integer, j1 As Integer

If MultiPage1.Value = 0 Then

   ListBox11.Selected(100) = True
   ListBox12.Selected(100) = True
   ListBox13.Selected(100) = True
   ListBox15.Selected(100) = True
   TextBox151.Value = "0"
   TextBox152.Value = "0"
   ListBox16.Selected(100) = True
   TextBox161.Value = "0"
   TextBox162.Value = "0"
   ListBox161.Selected(4) = True

ElseIf MultiPage1.Value = 1 Then

   TextBox211.Text = Format(1, "0.0000")
   TextBox213.Text = Format(1, "0.0000")
   TextBox214.Text = Format(1, "0.0000")
   ListBox22.Selected(9) = True
   ListBox23.Selected(9) = True
   TextBox22213.Text = 14
   TextBox23213.Text = 14
   ListBox241.Selected(100) = True
   ListBox243.Selected(100) = True
   ListBox244.Selected(100) = True

End If

End Sub
Private Sub SimulRef_Change()

Dim i1 As Integer

If SimulRef Then
   Frame02.Width = 190
   For i1 = 0 To ISIMULS(3) - 1
       ListBox_SimulRef.Selected(i1) = False
   Next i1
Else
   Frame02.Width = 150
   ListBox_SimulRef.TopIndex = 0
End If

End Sub
Private Sub TextBox22212_Change()

If IsNumeric(TextBox22212.Value) Then TextBox22221.Value = TextBox22212.Value

End Sub
Private Sub TextBox22222_Change()

If IsNumeric(TextBox22222.Value) Then TextBox22231.Value = TextBox22222.Value

End Sub
Private Sub TextBox22232_Change()

If IsNumeric(TextBox22232.Value) Then TextBox22241.Value = TextBox22232.Value

End Sub
Private Sub TextBox22242_Change()

If IsNumeric(TextBox22242.Value) Then TextBox22251.Value = TextBox22242.Value

End Sub
Private Sub TextBox22252_Change()

If IsNumeric(TextBox22252.Value) Then TextBox22261.Value = TextBox22252.Value
```

```
End Sub
Private Sub TextBox22262_Change()

If IsNumeric(TextBox22262.Value) Then TextBox22271.Value = TextBox22262.Value

End Sub
Private Sub TextBox22272_Change()

If IsNumeric(TextBox22272.Value) Then TextBox22281.Value = TextBox22272.Value

End Sub
Private Sub TextBox22282_Change()

If IsNumeric(TextBox22282.Value) Then TextBox22291.Value = TextBox22282.Value

End Sub
Private Sub TextBox22292_Change()

If IsNumeric(TextBox22292.Value) Then TextBox222101.Value = TextBox22292.Value

End Sub
Private Sub TextBox23212_Change()

If IsNumeric(TextBox23212.Value) Then TextBox23221.Value = TextBox23212.Value

End Sub
Private Sub TextBox23222_Change()

If IsNumeric(TextBox23222.Value) Then TextBox23231.Value = TextBox23222.Value

End Sub
Private Sub TextBox23232_Change()

If IsNumeric(TextBox23232.Value) Then TextBox23241.Value = TextBox23232.Value

End Sub
Private Sub TextBox23242_Change()

If IsNumeric(TextBox23242.Value) Then TextBox23251.Value = TextBox23242.Value

End Sub
Private Sub TextBox23252_Change()

If IsNumeric(TextBox23252.Value) Then TextBox23261.Value = TextBox23252.Value

End Sub
Private Sub TextBox23262_Change()

If IsNumeric(TextBox23262.Value) Then TextBox23271.Value = TextBox23262.Value

End Sub
Private Sub TextBox23272_Change()

If IsNumeric(TextBox23272.Value) Then TextBox23281.Value = TextBox23272.Value

End Sub
Private Sub TextBox23282_Change()

If IsNumeric(TextBox23282.Value) Then TextBox23291.Value = TextBox23282.Value

End Sub
Private Sub TextBox23292_Change()

If IsNumeric(TextBox23292.Value) Then TextBox232101.Value = TextBox23292.Value

End Sub
Private Sub UserForm_Activate()

height1 = Me.Height
left1 = Me.Left
top1 = Me.Top
width1 = Me.Width
Zoom = IIf(XZOOM < 200, 100, IIf(Not XTEXT, 150, 100))
If ISIMULS(3) <> 0 Then Frame02.Width = 150 Else Frame02.Width = 104

End Sub
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)

If CloseMode = 0 Then SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Zoom(Percent As Integer)
```

```
Me.Width = Me.Width * Percent / 100
Me.Height = Me.Height * Percent / 100
Me.Left = left1 - ((Me.Width - width1) / 2)
Me.Top = top1 - ((Me.Width - width1) / 2)

End Sub
```

```
Attribute VB_Name = "ITPOAJDOS"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False

Option Explicit
Dim height1 As Integer, left1 As Integer, top1 As Integer, width1 As Integer
Private Sub Aceptar_Click()

Dim i1 As Integer, j1 As Integer
ERR_LEC = False

ReDim TIPUS_TPO(1 To 17)
For Each CTL In Frame1112.Controls
    For i1 = 1 To 17
        If i1 <> 13 Then
           If CTL.Name = "TextBox1112" & i1 Then
              If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
                 ERR_LEC = True
                 Me.Hide
                 MsgBox "Error en el tipus impositiu de la Tarifa " & IT_TARIFA_TPO(i1) & ".", vbCritical,
TITOL_IT
                 Exit Sub
              Else
                 TIPUS_TPO(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
              End If
           End If
        End If
    Next i1
Next CTL

NTRAMS_AUR = ListBox112.Value
ReDim TRAMS_AUR(1 To NTRAMS_AUR + 1), IMPORT_AUR(1 To NTRAMS_AUR + 1)
For i1 = 1 To NTRAMS_AUR
    For Each CTL In Frame1122.Controls
        If CTL.Name = "TextBox1122" & i1 & "2" Then
           If Not IsNumeric(CTL.Value) Or Val(CTL.Value) <= 0 Then
              ERR_LEC = True
              Me.Hide
              MsgBox "Error en el tram-" & i1 & " de la Tarifa AUR.", vbCritical, TITOL_IT
              Exit Sub
           Else
              TRAMS_AUR(i1) = Val(Replace(CTL.Value, ",", "."))
           End If
        End If
        If CTL.Name = "TextBox1122" & i1 & "3" Then
           If Not IsNumeric(CTL.Value) Or Val(CTL.Value) < 0 Or Val(CTL.Value) >= TRAMS_AUR(i1) Then
              ERR_LEC = True
              Me.Hide
              MsgBox "Error en l'import del tram-" & i1 & " de la tarifa AUR.", vbCritical, TITOL_IT
              Exit Sub
           Else
              IMPORT_AUR(i1) = Val(Replace(CTL.Value, ",", "."))
           End If
        End If
    Next CTL
    If i1 <> 1 Then
       If TRAMS_AUR(i1) <= TRAMS_AUR(i1 - 1) Then
          ERR_LEC = True
          Me.Hide
          MsgBox "Error en el tram-1" & i1 & " de la tarifa AUR.", vbCritical, TITOL_IT
          Exit Sub
       End If
       If IMPORT_AUR(i1) < IMPORT_AUR(i1 - 1) Then
          ERR_LEC = True
          Me.Hide
          MsgBox "Error en l'import del tram-" & i1 & " de la tarifa AUR.", vbCritical, TITOL_IS
          Exit Sub
       End If
    End If
Next i1
If Not IsNumeric(TextBox11242.Value) Or Val(TextBox11242.Value) < 0 Then
   ERR_LEC = True
   Me.Hide
   MsgBox "Error en el darrer import de la tarifa AUR.", vbCritical, TITOL_IT
   Exit Sub
Else
   IMPORT_AUR(NTRAMS_AUR + 1) = Val(Replace(TextBox11242.Value, ",", "."))
End If
If Not IsNumeric(TextBox11243.Value) Or Val(TextBox11243.Value) <= 0 Then
   ERR_LEC = True
   Me.Hide
```

```
   MsgBox "Error en el darrer tram de la tarifa AUR.", vbCritical, TITOL_IT
   Exit Sub
Else
   TRAMS_AUR(NTRAMS_AUR + 1) = Val(Replace(TextBox11243.Value, ",", "."))
End If

BON_TUB = Val(ListBox_TUB.Value) / 100

PROJ(1) = 1 + (ListBox_TPO.Value / 100)

ReDim TIPUS_OS(1 To 17)
For Each CTL In Frame122.Controls
    For i1 = 1 To 7
        If CTL.Name = "TextBox122" & i1 Then
           If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
              ERR_LEC = True
              Me.Hide
              MsgBox "Error en el tipus impositiu de la Tarifa " & IT_TARIFA_OS(i1) & ".", vbCritical, TITOL_IT
              Exit Sub
           Else
              TIPUS_OS(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
           End If
        End If
    Next i1
Next CTL

PROJ(2) = 1 + (ListBox_OS.Value / 100)

ReDim TIPUS_AJD(1 To 17)
For Each CTL In Frame132.Controls
    For i1 = 1 To 17
        If CTL.Name = "TextBox132" & i1 Then
           If Not IsNumeric(CTL.Value) Or (Val(CTL.Value) < 0 Or Val(CTL.Value) >= 100) Then
              ERR_LEC = True
              Me.Hide
              MsgBox "Error en el tipus impositiu de la Tarifa " & IT_TARIFA_AJD(i1) & ".", vbCritical, TITOL_IT
              Exit Sub
           Else
              TIPUS_AJD(i1) = Val(Replace(CTL.Value, ",", ".")) / 100
           End If
        End If
    Next i1
Next CTL

PROJ(3) = 1 + (ListBox_AJD.Value / 100)

ReDim PARMS(19, 9)              'Guarda els paràmetres a PARMS'

PARMS(0, 1) = IT_ANYREF
PARMS(0, 2) = NTRAMS_AUR

For i1 = 1 To 17
    If i1 <> 13 Then
       PARMS(i1, 1) = IT_TARIFA_TPO(i1)
       PARMS(i1, 2) = TIPUS_TPO(i1)
    End If
Next i1
For i1 = 1 To NTRAMS_AUR
    If i1 = 1 Then
       PARMS(i1, 3) = "0"
       PARMS(i1, 4) = TRAMS_AUR(i1)
       PARMS(i1, 5) = IMPORT_AUR(i1)
    ElseIf i1 < NTRAMS_AUR + 1 Then
       PARMS(i1, 3) = TRAMS_AUR(i1 - 1)
       PARMS(i1, 4) = TRAMS_AUR(i1)
       PARMS(i1, 5) = IMPORT_AUR(i1)
    Else
       PARMS(i1, 3) = TRAMS_AUR(i1 - 1)
       PARMS(i1, 4) = "i més"
       PARMS(i1, 5) = IMPORT_AUR(i1)
    End If
Next i1
PARMS(NTRAMS_AUR + 1, 3) = TRAMS_AUR(NTRAMS_AUR)
PARMS(NTRAMS_AUR + 1, 4) = IMPORT_AUR(NTRAMS_AUR + 1)
PARMS(NTRAMS_AUR + 1, 5) = TRAMS_AUR(NTRAMS_AUR + 1)
PARMS(18, 1) = "BON_TUB"
PARMS(18, 2) = BON_TUB
PARMS(19, 1) = PROJ(1)

For i1 = 1 To 7
    PARMS(i1, 6) = IT_TARIFA_OS(i1)
    PARMS(i1, 7) = TIPUS_OS(i1)
Next i1
```

```
PARMS(19, 2) = PROJ(2)

For i1 = 1 To 17
    PARMS(i1, 8) = IT_TARIFA_AJD(i1)
    PARMS(i1, 9) = TIPUS_AJD(i1)
Next i1
PARMS(19, 3) = PROJ(3)

Unload Me

End Sub
Private Sub Cancelar_Click()

SORTIR = True
IMPOST(4) = True
Unload Me

End Sub
Private Sub ListBox112_Click()

Dim i1 As Integer

NTRAMS_AUR = ListBox112.Value
For Each CTL In Frame1121.Controls
    If CTL.TabIndex <= NTRAMS_AUR - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
For Each CTL In Frame1122.Controls
    CTL.Enabled = False
    CTL.Value = ""
    For i1 = 0 To NTRAMS_AUR - 1
        If CTL.TabIndex = 3 * i1 + 1 Or CTL.TabIndex = 3 * i1 + 2 Then CTL.Enabled = True
    Next i1
Next CTL
For Each CTL In Frame1123.Controls
    If CTL.TabIndex <= NTRAMS_AUR - 1 Then CTL.Enabled = True Else CTL.Enabled = False
Next CTL
TextBox112211.Value = "0"

End Sub
Private Sub ListBox_Simulref_Click()

Dim i1 As Integer, j1 As Integer, nsim As Integer, p(19, 9)

For i1 = 0 To ISIMULS(4) - 1
    If ListBox_SimulRef.Selected(i1) = True Then
       nsim = ListBox_SimulRef.Value
       Exit For
    End If
Next i1

Call COMUNS_1REFERENCIA_SIMULS("IT", nsim, p)

For Each CTL In Frame1112.Controls
    For i1 = 1 To 17
        If i1 >= 13 Then j1 = 1 Else j1 = 0
        If CTL.Name = "TextBox1112" & i1 + j1 Then CTL.Text = Format(p(i1, 2) * 100, "#0.00")
    Next i1
Next CTL
ListBox_TUB.Selected(100 - (p(18, 2) * 100)) = True
ListBox112.Selected(9 - p(0, 2)) = True
For Each CTL In Frame1122.Controls
    For i1 = 1 To p(0, 2)
        If CTL.Name = "TextBox1122" & i1 & "2" Then CTL.Text = p(i1, 4)
        If CTL.Name = "TextBox1122" & i1 & "3" Then CTL.Text = Format(p(i1, 5), "#0.00")
    Next i1
Next CTL
TextBox11243.Text = p(p(0, 2) + 1, 5)
TextBox11242.Text = p(p(0, 2) + 1, 4)
ListBox_TPO.Selected(500 - ((p(19, 1) - 1) * 1000)) = True

For Each CTL In Frame122.Controls
    For i1 = 1 To 7
        If CTL.Name = "TextBox122" & i1 Then CTL.Text = Format(p(i1, 7) * 100, "#0.00")
    Next i1
Next CTL
ListBox_OS.Selected(500 - ((p(19, 2) - 1) * 1000)) = True

For Each CTL In Frame132.Controls
    For i1 = 1 To 17
        If CTL.Name = "TextBox132" & i1 Then CTL.Text = Format(p(i1, 9) * 100, "#0.00")
    Next i1
Next CTL
ListBox_AJD.Selected(500 - ((p(19, 3) - 1) * 1000)) = True
```

```
End Sub
Private Sub Llei_Click()

Dim i1 As Integer

For Each CTL In Frame1112.Controls
    For i1 = 1 To 17
        If i1 <> 13 Then
           If CTL.Name = "TextBox1112" & i1 Then CTL.Text = Format(IT_TIPUS_TPO(i1) * 100, "#0.00")
        End If
    Next i1
Next CTL
ListBox112.Selected(0) = True
For Each CTL In Frame1122.Controls
    For i1 = 1 To 9
        If CTL.Name = "TextBox1122" & i1 & "2" Then CTL.Text = IT_TRAMS_AUR(i1)
        If CTL.Name = "TextBox1122" & i1 & "3" Then CTL.Text = Format(IT_IMPORT_AUR(i1), "#0.00")
    Next i1
Next CTL
TextBox11242.Text = IT_IMPORT_AUR(IT_NTRAMS_AUR)
TextBox11243.Text = IT_TRAMS_AUR(IT_NTRAMS_AUR)
ListBox_TUB.Selected(100 - (IT_BON_TUB * 100)) = True
ListBox_TPO.Selected(500) = True

For Each CTL In Frame122.Controls
    For i1 = 1 To 7
        If CTL.Name = "TextBox122" & i1 Then CTL.Text = Format(IT_TIPUS_OS(i1) * 100, "#0.00")
    Next i1
Next CTL
ListBox_OS.Selected(500) = True

For Each CTL In Frame132.Controls
    For i1 = 1 To 17
        If CTL.Name = "TextBox132" & i1 Then CTL.Text = Format(IT_TIPUS_AJD(i1) * 100, "#0.00")
    Next i1
Next CTL
ListBox_AJD.Selected(500) = True

End Sub
Private Sub NetejaValors_Click()

Dim i1 As Integer

For Each CTL In Frame1112.Controls
    For i1 = 1 To 17
        If i1 <> 13 Then
           If CTL.Name = "TextBox1112" & i1 Then CTL.Text = Format(1, "#0.00")
        End If
    Next i1
Next CTL
ListBox112.Selected(8) = True
TextBox112212.Text = "1000"
TextBox112213.Text = "1,00"
TextBox11242.Text = "1"
TextBox11243.Text = "100"
ListBox_TPO.Selected(500) = True

For Each CTL In Frame122.Controls
    For i1 = 1 To 7
        If CTL.Name = "TextBox122" & i1 Then CTL.Text = Format(1, "#0.00")
    Next i1
Next CTL
ListBox_OS.Selected(500) = True

For Each CTL In Frame132.Controls
    For i1 = 1 To 17
        If CTL.Name = "TextBox132" & i1 Then CTL.Text = Format(1, "#0.00")
    Next i1
Next CTL
ListBox_AJD.Selected(500) = True

End Sub
Private Sub SimulRef_Change()

Dim i1 As Integer

If SimulRef Then
   Frame02.Width = 190
   For i1 = 0 To ISIMULS(4) - 1
       ListBox_SimulRef.Selected(i1) = False
   Next i1
Else
```

```
   Frame02.Width = 150
   ListBox_SimulRef.TopIndex = 0
End If

End Sub
Private Sub TextBox112212_Change()

If NTRAMS_AUR >= 2 Then TextBox112221.Value = TextBox112212.Value
If NTRAMS_AUR = 1 Then TextBox11241.Value = TextBox112212.Value

End Sub
Private Sub TextBox112222_Change()

If NTRAMS_AUR >= 3 Then TextBox112231.Value = TextBox112222.Value
If NTRAMS_AUR = 2 Then TextBox11241.Value = TextBox112222.Value

End Sub
Private Sub TextBox112232_Change()

If NTRAMS_AUR >= 4 Then TextBox112241.Value = TextBox112232.Value
If NTRAMS_AUR = 3 Then TextBox11241.Value = TextBox112232.Value

End Sub
Private Sub TextBox112242_Change()

If NTRAMS_AUR >= 5 Then TextBox112251.Value = TextBox112242.Value
If NTRAMS_AUR = 4 Then TextBox11241.Value = TextBox112242.Value

End Sub
Private Sub TextBox112252_Change()

If NTRAMS_AUR >= 6 Then TextBox112261.Value = TextBox112252.Value
If NTRAMS_AUR = 5 Then TextBox11241.Value = TextBox112252.Value

End Sub
Private Sub TextBox112262_Change()

If NTRAMS_AUR >= 7 Then TextBox112271.Value = TextBox112262.Value
If NTRAMS_AUR = 6 Then TextBox11241.Value = TextBox112262.Value

End Sub
Private Sub TextBox112272_Change()

If NTRAMS_AUR >= 8 Then TextBox112281.Value = TextBox112272.Value
If NTRAMS_AUR = 7 Then TextBox11241.Value = TextBox112272.Value

End Sub
Private Sub TextBox112282_Change()

If NTRAMS_AUR >= 9 Then TextBox112291.Value = TextBox112282.Value
If NTRAMS_AUR = 8 Then TextBox11241.Value = TextBox112282.Value

End Sub
Private Sub TextBox112292_Change()

If NTRAMS_AUR = 9 Then TextBox11241.Value = TextBox112292.Value

End Sub
Private Sub UserForm_Activate()

height1 = Me.Height
left1 = Me.Left
top1 = Me.Top
width1 = Me.Width
Zoom = IIf(XZOOM < 200, 100, IIf(Not XTEXT, 150, 100))
If ISIMULS(4) <> 0 Then Frame02.Width = 150 Else Frame02.Width = 104

End Sub
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)

If CloseMode = 0 Then SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Zoom(Percent As Integer)

Me.Width = Me.Width * Percent / 100
Me.Height = Me.Height * Percent / 100
Me.Left = left1 - ((Me.Width - width1) / 2)
Me.Top = top1 - ((Me.Width - width1) / 2)

End Sub
```

```
Attribute VB_Name = "SIMCAT_Caratula"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False

Option Explicit
Dim height1 As Integer, left1 As Integer, top1 As Integer, width1 As Integer
Private Sub Acceptar_Click()

Unload Me

End Sub
Private Sub Credits_Click()

Me.MultiPage1.Value = 1
If Application.Wait(Now + TimeValue("0:00:04")) Then Me.MultiPage1.Value = 0

End Sub
Private Sub Cancelar_Click()

SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Activate()

height1 = Me.Height
left1 = Me.Left
top1 = Me.Top
width1 = Me.Width
Zoom = IIf(XZOOM < 200, 100, IIf(Not XTEXT, 150, 100))

End Sub
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)

If CloseMode = 0 Then SORTIR = True
Unload Me

End Sub
Private Sub UserForm_Zoom(Percent As Integer)

Me.Width = Me.Width * Percent / 100
Me.Height = Me.Height * Percent / 100
Me.Left = left1 - ((Me.Width - width1) / 2)

End Sub
```

```
Declare Function GetSystemMetrics Lib "user32" (ByVal nIndex As Long) As Long
Declare Function GetTextMetrics Lib "gdi32" Alias "GetTextMetricsA" (ByVal hdc As Long, lpMetrics As TEXTMETRIC)
As Long
Declare Function GetDesktopWindow Lib "user32" () As Long
Declare Function GetWindowDC Lib "user32" (ByVal hwnd As Long) As Long

Public ALT_PANTALLA As Integer, AMP_PANTALLA As Integer, AVISSORTIR As Boolean, COMPARA As Integer, CTL As
Control, _
       ERR_LEC As Boolean, LLIBRE_FORMATS As Workbook, LLIBRE_PROJECCIONS As Workbook, LLIBRE_REFERENCIA As
Workbook, _
       LLIBRE_RESULTATS As Workbook, N As Long, N1 As Long, N2 As Long, N3 As Long, NT As Double, NT1 As Double,
_
       NT2 As Double, NT3 As Double, OBRIR As Integer, PAGINA As Integer, RES As Integer, SIMUL As Integer,
SORTIR As Boolean, _
       XZOOM As Integer, XTEXT As Boolean
Public BONIF() As Double, COEF() As Double, COMP(1 To 2) As Integer, IMPOST(1 To 5) As Boolean, IND() As Long, _
       IRESULTS() As Integer, ISIMULS(1 To 5) As Integer, MITJANA() As Double, NTRAMS As Integer, PAG() As
Double, _
       PARMS(), PROJ(1 To 5) As Double, SUMA() As Double, T() As Double, TIPUS() As Double, VT(), X() As Double,
y() As Double

Public IRPF_ANYREF, IRPF_DED(), IRPF_DEDA1(), IRPF_DEDA2(), IRPF_DEDV(), IRPF_EXEMPTE, IRPF_MPF(), _
       IRPF_NTRAMSE, IRPF_NTRAMSG(1 To 2), IRPF_RED_PER(), IRPF_RED_PP(), IRPF_RED_RT(), IRPF_RED_RTC(), _
       IRPF_RDIVE, IRPF_TIPUSG(), IRPF_TIPUSE(), IRPF_TRAMSE(), IRPF_TRAMSG()
Public ANOIRPF, A_PROJ, ANY_PROJ, C_PROJ() As Double, DECL_NOMBRE As String, DECL_PROJ As String, DEFLACTOR As
Double, _
       MINIM_EXEMPTE As Double, NOM_IRPF_DADES As String, NOM_IRPF_SIMUL As String, _
       NDEDA1 As Integer, NDEDA2 As Integer, RDIVE As Double
Public AIRPF(), CATEG() As Integer, CIRPF() As Integer, DED(), DEDA1() As Double, DEDA2() As Double, _
       DEDV() As Double, MPF() As Double, NTRAMSE As Integer, NTRAMSG(1 To 2) As Integer, RPER() As Double, _
       RPP() As Double, RT() As Double, RTC() As Double, TE() As Double, TIPUSE() As Double, TIPUSG() As Double

Public IS_ANYREF, IS_BONIF(), IS_COEF(), IS_NTRAMS, IS_R_ASSEGU(), IS_R_BENSCU(), IS_R_DISCAP(), IS_R_EDATGR(),
_
       IS_R_EMPRES(), IS_R_FINQUE(), IS_R_HABITA(), IS_R_PARENT(), IS_R_PARENT_AD(), IS_R_PARTIC(), IS_TIPUS(),
_
       IS_TRAMS()
Public ANOIS, NOM_IS_DADES As String, NOM_IS_SIMUL As String
Public AIS(), CIS() As Integer, R_ASSEGU() As Double, R_BENSCU() As Double, R_DISCAP() As Double, R_EDATGR() As
Double, _
       R_EMPRES() As Double, R_FINQUE() As Double, R_HABITA() As Double, R_PARENT() As Double, R_PARENT_AD() As
Double, _
       R_PARTIC() As Double

Public ID_ANYREF, ID_COEF(), ID_D_QUOTA(), ID_NTRAMS12, ID_NTRAMS34, ID_R_BASE(), ID_TIPUS12(), ID_TIPUS34(), _
       ID_TRAMS12(), ID_TRAMS34()
Public AID(), ANOID, CID() As Integer, D_QUOTA() As Double, NOM_ID_DADES As String, NOM_ID_SIMUL As String, _
       NTRAMS12 As Integer, NTRAMS34 As Integer, R_BASE() As Double, T12() As Double, T34() As Double, _
       TIPUS12() As Double, TIPUS34() As Double

Public IT_ANYREF, IT_TARIFA_AJD() As String, IT_TARIFA_OS() As String, IT_TARIFA_TPO() As String, _
       IT_TIPUS_AJD(), IT_TIPUS_OS(), IT_TIPUS_TPO(), IT_BON_TUB As Double
Public AIT(), ANOIT, BON_TUB As Double, CIT() As Integer, NOM_IT_DADES As String, NOM_IT_SIMUL As String, _
       TIPUS_TPO() As Double, TIPUS_OS() As Double, TIPUS_AJD() As Double

Public IMPORT_AUR() As Double, IT_IMPORT_AUR(), IT_NTRAMS_AUR, IT_TRAMS_AUR(), NTRAMS_AUR As Integer,
TRAMS_AUR() As Double

Public IPPF_ANYREF, IPPF_E() As Integer, IPPF_LIM(1 To 2), IPPF_ME() As Long, IPPF_NTRAMS, IPPF_OP(1 To 2), _
       IPPF_TIPUS(), IPPF_TRAMS()
Public ANOIPPF, BENS_E() As Integer, CONNEXIO_IRPF As Boolean, LBQ As Double, LIMITS() As Double, LVAR() As
String, _
       MINIMS_E() As Long, NOM_IPPF_DADES As String, NOM_IPPF_SIMUL As String, REDUCCIO(1 To 2) As Long
Public AIPPF(), CIPPF() As Integer

Public Const TITOL_IRPF As String * 11 = "SIMCAT-IRPF", _
             TITOL_IS As String * 9 = "SIMCAT-IS", _
             TITOL_ID As String * 9 = "SIMCAT-ID", _
             TITOL_IT As String * 13 = "SIMCAT-ITPOOSAJD", _
             TITOL_IPPF As String * 11 = "SIMCAT-IPPF", _
             SECRET As String * 18 = "36965422Y372749890"
Sub COMUNS_0CREAR(opcio As Integer)

Dim AjudaMenu As CommandBarControl, SMenu As CommandBarPopup

On Error Resume Next
Set SMenu = CommandBars(1).Controls("SIMCAT(v4.2) " & Chr(169) & " " & Chr(174))
If SMenu Is Nothing Then
   Set AjudaMenu = CommandBars(1).FindControl(ID:=30010)
   If AjudaMenu Is Nothing Then
      Set SMenu = CommandBars(1).Controls.Add(Type:=msoControlPopup, Temporary:=True)
   Else
      Set SMenu = CommandBars(1).Controls.Add(Type:=msoControlPopup, Temporary:=True, Before:=AjudaMenu.Index)
```

```
   End If
   With SMenu
     .Caption = "&SIMCAT(v4.2) " & Chr(169) & " " & Chr(174)
     .BeginGroup = True
     .OnAction = "SIMCAT_IMPOSTOS"
   End With
End If

End Sub
Sub COMUNS_0ESBORRAR(opcio As Integer)

Dim SMenu As CommandBarPopup

Set SMenu = CommandBars(1).Controls("SIMCAT(v4.2) " & Chr(169) & " " & Chr(174))
SMenu.Delete

End Sub
Sub COMUNS_0PANTALLA(opcio As Integer)

Dim hdc, hwnd, tm As TEXTMETRIC

ALT_PANTALLA = GetSystemMetrics(0)
AMP_PANTALLA = GetSystemMetrics(1)
XZOOM = Int(ALT_PANTALLA / 8)
XTEXT = False
hwnd = GetDesktopWindow()
hdc = GetWindowDC(hwnd)
If hdc Then GetTextMetrics hdc, tm
If tm.tmHeight = 20 Then XTEXT = True

'MsgBox "tmHeight=" & tm.tmHeight & Chr(10) & _
'       "tmDescent=" & tm.tmDescent & Chr(10) & _
'       "tmAscent=" & tm.tmAscent & Chr(10) & _
'       "tmMaxCharWidth=" & tm.tmMaxCharWidth & Chr(10) & _
'       "tmWeight=" & tm.tmWeight

End Sub
Sub COMUNS_0NETEJA(full As String)

Dim i1 As Integer, i2 As Integer

i2 = Sheets.Count
If i2 > 1 Then
   ActiveWorkbook.Unprotect (SECRET)
   For i1 = 2 To Sheets.Count
       If Sheets(i1).Name = full Then
          Sheets(i1).Delete
          Exit For
       End If
   Next i1
   ActiveWorkbook.Protect (SECRET)
End If

End Sub
Sub COMUNS_0NOMSFULLS(full As String)

Dim f(10) As String, i1 As Integer, i2 As Integer

ActiveWorkbook.Unprotect (SECRET)

i2 = Sheets.Count
f(0) = "SIMULADOR REFORMES IMPOSITIVES"
If i2 > 1 Then
   For i1 = 2 To Sheets.Count
       If Sheets(i1).Name = "IRPF(R)" Then f(1) = "IRPF(R)"
       If Sheets(i1).Name = "IRPF(G-P)" Then f(2) = "IRPF(G-P)"
       If Sheets(i1).Name = "IS(R)" Then f(3) = "IS(R)"
       If Sheets(i1).Name = "IS(G-P)" Then f(4) = "IS(G-P)"
       If Sheets(i1).Name = "ID(R)" Then f(5) = "ID(R)"
       If Sheets(i1).Name = "ID(G-P)" Then f(6) = "ID(G-P)"
       If Sheets(i1).Name = "ITPOOSAJD(R)" Then f(7) = "ITPOOSAJD(R)"
       If Sheets(i1).Name = "ITPOOSAJD(G-P)" Then f(8) = "ITPOOSAJD(G-P)"
       If Sheets(i1).Name = "IPPF(R)" Then f(9) = "IPPF(R)"
       If Sheets(i1).Name = "IPPF(G-P)" Then f(10) = "IPPF(G-P)"
   Next i1
End If

If full = "IRPF(R)" Or full = "IS(R)" Or full = "ID(R)" Or full = "ITPOOSAJD(R)" Or full = "IPPF(R)" Then

   If full = "IRPF(R)" Then
      If f(2) <> "" Then
         Sheets.Add(Before:=Sheets(f(2)), Count:=1).Name = "IRPF(R)"
      Else
```

```
         Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "IRPF(R)"
      End If
   ElseIf full = "IS(R)" Then
      If f(4) <> "" Then
         Sheets.Add(Before:=Sheets(f(4)), Count:=1).Name = "IS(R)"
      Else
         If f(2) <> "" Then
            Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "IS(R)"
         ElseIf f(1) <> "" Then
            Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "IS(R)"
         Else
            Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "IS(R)"
         End If
      End If
   ElseIf full = "ID(R)" Then
      If f(6) <> "" Then
         Sheets.Add(Before:=Sheets(f(6)), Count:=1).Name = "ID(R)"
      Else
         If f(4) <> "" Then
            Sheets.Add(After:=Sheets(f(4)), Count:=1).Name = "ID(R)"
         ElseIf f(3) <> "" Then
            Sheets.Add(After:=Sheets(f(3)), Count:=1).Name = "ID(R)"
         ElseIf f(2) <> "" Then
            Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "ID(R)"
         ElseIf f(1) <> "" Then
            Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "ID(R)"
         Else
            Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "ID(R)"
         End If
      End If
   ElseIf full = "ITPOOSAJD(R)" Then
      If f(6) <> "" Then
         Sheets.Add(After:=Sheets(f(6)), Count:=1).Name = "ITPOOSAJD(R)"
      ElseIf f(5) <> "" Then
         Sheets.Add(After:=Sheets(f(5)), Count:=1).Name = "ITPOOSAJD(R)"
      ElseIf f(4) <> "" Then
         Sheets.Add(After:=Sheets(f(4)), Count:=1).Name = "ITPOOSAJD(R)"
      ElseIf f(3) <> "" Then
         Sheets.Add(After:=Sheets(f(3)), Count:=1).Name = "ITPOOSAJD(R)"
      ElseIf f(2) <> "" Then
         Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "ITPOOSAJD(R)"
      ElseIf f(1) <> "" Then
         Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "ITPOOSAJD(R)"
      Else
         Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "ITPOOSAJD(R)"
      End If
   ElseIf full = "IPPF(R)" Then
      If f(8) <> "" Then
         Sheets.Add(After:=Sheets(f(8)), Count:=1).Name = "IPPF(R)"
      ElseIf f(7) <> "" Then
         Sheets.Add(After:=Sheets(f(7)), Count:=1).Name = "IPPF(R)"
      ElseIf f(6) <> "" Then
         Sheets.Add(After:=Sheets(f(6)), Count:=1).Name = "IPPF(R)"
      ElseIf f(5) <> "" Then
         Sheets.Add(After:=Sheets(f(5)), Count:=1).Name = "IPPF(R)"
      ElseIf f(4) <> "" Then
         Sheets.Add(After:=Sheets(f(4)), Count:=1).Name = "IPPF(R)"
      ElseIf f(3) <> "" Then
         Sheets.Add(After:=Sheets(f(3)), Count:=1).Name = "IPPF(R)"
      ElseIf f(2) <> "" Then
         Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "IPPF(R)"
      ElseIf f(1) <> "" Then
         Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "IPPF(R)"
      Else
         Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "IPPF(R)"
      End If
   End If

ElseIf full = "IRPF(G-P)" Or full = "IS(G-P)" Or full = "ID(G-P)" Or full = "ITPOOSAJD(G-P)" Or full = "IPPF(G-
P)" Then

   If full = "IRPF(G-P)" Then
      If f(1) <> "" Then
         Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "IRPF(G-P)"
      Else
         Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "IRPF(G-P)"
      End If
   ElseIf full = "IS(G-P)" Then
      If f(3) <> "" Then
          Sheets.Add(After:=Sheets(f(3)), Count:=1).Name = "IS(G-P)"
      Else
         If f(2) <> "" Then
            Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "IS(G-P)"
```

```
         ElseIf f(1) <> "" Then
            Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "IS(G-P)"
         Else
            Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "IS(G-P)"
         End If
      End If
   ElseIf full = "ID(G-P)" Then
      If f(5) <> "" Then
         Sheets.Add(After:=Sheets(f(5)), Count:=1).Name = "ID(G-P)"
      Else
         If f(4) <> "" Then
            Sheets.Add(After:=Sheets(f(4)), Count:=1).Name = "ID(G-P)"
         ElseIf f(3) <> "" Then
            Sheets.Add(After:=Sheets(f(3)), Count:=1).Name = "ID(G-P)"
         ElseIf f(2) <> "" Then
            Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "ID(G-P)"
         ElseIf f(1) <> "" Then
            Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "ID(G-P)"
         Else
            Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "ID(G-P)"
         End If
      End If
   ElseIf full = "ITPOOSAJD(G-P)" Then
      If f(7) <> "" Then
         Sheets.Add(After:=Sheets(f(7)), Count:=1).Name = "ITPOOSAJD(G-P)"
      Else
         If f(6) <> "" Then
            Sheets.Add(After:=Sheets(f(6)), Count:=1).Name = "ITPOOSAJD(G-P)"
         ElseIf f(5) <> "" Then
            Sheets.Add(After:=Sheets(f(5)), Count:=1).Name = "ITPOOSAJD(G-P)"
         ElseIf f(4) <> "" Then
            Sheets.Add(After:=Sheets(f(4)), Count:=1).Name = "ITPOOSAJD(G-P)"
         ElseIf f(3) <> "" Then
            Sheets.Add(After:=Sheets(f(3)), Count:=1).Name = "ITPOOSAJD(G-P)"
         ElseIf f(2) <> "" Then
            Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "ITPOOSAJD(G-P)"
         ElseIf f(1) <> "" Then
            Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "ITPOOSAJD(G-P)"
         Else
            Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "ITPOOSAJD(G-P)"
         End If
      End If
   ElseIf full = "IPPF(G-P)" Then
      If f(9) <> "" Then
         Sheets.Add(After:=Sheets(f(9)), Count:=1).Name = "IPPF(G-P)"
      Else
         If f(8) <> "" Then
            Sheets.Add(After:=Sheets(f(8)), Count:=1).Name = "IPPF(G-P)"
         ElseIf f(7) <> "" Then
            Sheets.Add(After:=Sheets(f(7)), Count:=1).Name = "IPPF(G-P)"
         ElseIf f(6) <> "" Then
            Sheets.Add(After:=Sheets(f(6)), Count:=1).Name = "IPPF(G-P)"
         ElseIf f(5) <> "" Then
            Sheets.Add(After:=Sheets(f(5)), Count:=1).Name = "IPPF(G-P)"
         ElseIf f(4) <> "" Then
            Sheets.Add(After:=Sheets(f(4)), Count:=1).Name = "IPPF(G-P)"
         ElseIf f(3) <> "" Then
            Sheets.Add(After:=Sheets(f(3)), Count:=1).Name = "IPPF(G-P)"
         ElseIf f(2) <> "" Then
            Sheets.Add(After:=Sheets(f(2)), Count:=1).Name = "IPPF(G-P)"
         ElseIf f(1) <> "" Then
            Sheets.Add(After:=Sheets(f(1)), Count:=1).Name = "IPPF(G-P)"
         Else
            Sheets.Add(After:=Sheets(f(0)), Count:=1).Name = "IPPF(G-P)"
         End If
      End If
   End If

End If

ActiveWorkbook.Protect (SECRET)

End Sub
Sub COMUNS_1REFERENCIA(tipus_impost As String)

Dim auxntrams As Integer, i1 As Integer

If tipus_impost = "IRPF" Then

   IRPF_ANYREF = 2011

   ReDim IRPF_MPF(1 To 11, 1 To 2)                      'Minims personals
   IRPF_MPF(1, 1) = 5151:  IRPF_MPF(1, 2) = 0           'general
```

```
IRPF_MPF(2, 1) = 1836:  IRPF_MPF(2, 2) = 0          '1er fill
IRPF_MPF(3, 1) = 2040:  IRPF_MPF(3, 2) = 0          '2on. fill
IRPF_MPF(4, 1) = 3672:  IRPF_MPF(4, 2) = 0          '3er. fill
IRPF_MPF(5, 1) = 4182:  IRPF_MPF(5, 2) = 0          '4art. fill
IRPF_MPF(6, 1) = 918:   IRPF_MPF(6, 2) = 0          '>65 anys
IRPF_MPF(7, 1) = 1122:  IRPF_MPF(7, 2) = 0          '>75 anys
IRPF_MPF(8, 1) = 2316:  IRPF_MPF(8, 2) = 0          'Discapacitat 33%-65%
IRPF_MPF(9, 1) = 7038:  IRPF_MPF(9, 2) = 0          'Discapacitat >65%
IRPF_MPF(10, 1) = 2244: IRPF_MPF(10, 2) = 0         'Fills menors 3 anys
IRPF_MPF(11, 1) = 2316: IRPF_MPF(11, 2) = 0         'Assistència discapacitats

ReDim IRPF_RED_RTC(1 To 2)                          'Reducció tributació conjunta
IRPF_RED_RTC(1) = 3400                              'cònjuge
IRPF_RED_RTC(2) = 2150                              'separació

ReDim IRPF_RED_RT(1 To 4, 1 To 3)                   'Reduccions treball
IRPF_RED_RT(1, 1) = 9180
IRPF_RED_RT(1, 2) = 4080
IRPF_RED_RT(2, 1) = 13260
IRPF_RED_RT(3, 2) = 2652
IRPF_RED_RT(4, 1) = 3264:  IRPF_RED_RT(4, 2) = 7242  'Discapacitats

ReDim IRPF_RED_PP(1 To 4)                           'Reduccions Plans Pensions
IRPF_RED_PP(1) = 10000                              'general
IRPF_RED_PP(2) = 12500                              '>50 anys
IRPF_RED_PP(3) = 2000                               'cònjuge
IRPF_RED_PP(4) = 24250                              'discapacitats


IRPF_NTRAMSG(1) = 6                                 'Trams tarifa general ESTAT
IRPF_NTRAMSG(2) = 6                                 'Trams tarifa general CCAA
auxntrams = Application.max(IRPF_NTRAMSG(1), IRPF_NTRAMSG(2))
ReDim IRPF_TRAMSG(1 To auxntrams - IIf(auxntrams = 1, 0, 1), 1 To 2), _
      IRPF_TIPUSG(1 To auxntrams, 1 To 2)
IRPF_TRAMSG(1, 1) = 17707.2:  IRPF_TIPUSG(1, 1) = 0.12
IRPF_TRAMSG(2, 1) = 33007.2:  IRPF_TIPUSG(2, 1) = 0.14
IRPF_TRAMSG(3, 1) = 53407.2:  IRPF_TIPUSG(3, 1) = 0.185
IRPF_TRAMSG(4, 1) = 120000.2: IRPF_TIPUSG(4, 1) = 0.215
IRPF_TRAMSG(5, 1) = 175000.2: IRPF_TIPUSG(5, 1) = 0.225
                              IRPF_TIPUSG(6, 1) = 0.235
IRPF_TRAMSG(1, 2) = 17707.2:  IRPF_TIPUSG(1, 2) = 0.12
IRPF_TRAMSG(2, 2) = 33007.2:  IRPF_TIPUSG(2, 2) = 0.14
IRPF_TRAMSG(3, 2) = 53407.2:  IRPF_TIPUSG(3, 2) = 0.185
IRPF_TRAMSG(4, 2) = 120000.2: IRPF_TIPUSG(4, 2) = 0.215
IRPF_TRAMSG(5, 2) = 175000.2: IRPF_TIPUSG(5, 2) = 0.235
                              IRPF_TIPUSG(6, 2) = 0.255

IRPF_NTRAMSE = 2                                    'Trams tarifa estalvi ESTAT
ReDim IRPF_TRAMSE(1 To IRPF_NTRAMSE - IIf(IRPF_NTRAMSE = 1, 0, 1)), _
      IRPF_TIPUSE(1 To IRPF_NTRAMSE, 1 To 2)
IRPF_TRAMSE(1) = 6000
IRPF_TIPUSE(1, 1) = 0.095
IRPF_TIPUSE(1, 2) = 0.095
IRPF_TIPUSE(2, 1) = 0.105
IRPF_TIPUSE(2, 2) = 0.105
IRPF_RDIVE = 1500: IRPF_EXEMPTE = 0

ReDim IRPF_DED(6), IRPF_DEDV(1 To 4, 1 To 4)        'Deduccions
IRPF_DEDV(1, 1) = 9040                              'límit habitatge habitual general
IRPF_DEDV(1, 2) = 0.075                             '%ESTAT habitatge habitual general
IRPF_DEDV(1, 3) = 0.075                             '%CCAA habitatge habitual general
IRPF_DEDV(1, 4) = 0.09                              '%CCAA habitatge habitual especial
IRPF_DEDV(2, 1) = 12080                             'límit habitatge habitual discapacitats
IRPF_DEDV(2, 2) = 0.1                               '%ESTAT habitatge habitual discapacitats
IRPF_DEDV(2, 3) = 0.15                              '%CCAA habitatge habitual discapacitats
IRPF_DEDV(3, 1) = 24107                             'límit BI per a poder optar a a deducció (lloguer)
IRPF_DEDV(3, 2) = 17707                             'límit 1er. tram de la deducció (lloguer)
IRPF_DEDV(3, 3) = 0.1005                            '% deducció (lloguer)
IRPF_DEDV(3, 4) = 9040                              'límit base deducció (lloguer)
IRPF_DEDV(4, 1) = 71007                             'límit BI per a poder optar a a deducció (obres)
IRPF_DEDV(4, 2) = 53007                             'límit 1er. tram de la deducció (obres)
IRPF_DEDV(4, 3) = 0.2                               '% deducció (obres)
IRPF_DEDV(4, 4) = 6750                              'límit base deducció (obres)

ReDim IRPF_DEDA1(1 To 10, 1 To 2)                   'Deduccions CCAA
IRPF_DEDA1(1, 1) = 150                              'Naixement
IRPF_DEDA1(2, 1) = 0.15:  IRPF_DEDA1(2, 2) = 0.1    'Foment llengua catalana
IRPF_DEDA1(3, 1) = 0.25:  IRPF_DEDA1(3, 2) = 0.1    'Foment innovació científica
IRPF_DEDA1(4, 1) = 0.1:   IRPF_DEDA1(4, 2) = 300    'Lloguer habitatge habitual
IRPF_DEDA1(5, 1) = 1                                'Interessos prèstecs estudis 3er grau
IRPF_DEDA1(6, 1) = 150                              'Vidus
IRPF_DEDA1(7, 1) = 0.015: IRPF_DEDA1(7, 2) = 9040   'Rehabilitació habitatge habitual
IRPF_DEDA1(8, 1) = 0.15:  IRPF_DEDA1(8, 2) = 0.05   'Foment innovació científica
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   IRPF_DEDA1(9, 1) = 0.3:   IRPF_DEDA1(9, 2) = 6000    'Adquisició d'accions d'entitas noves o de recent
creació
   IRPF_DEDA1(10, 1) = 0.2:  IRPF_DEDA1(10, 2) = 10000  'Adquisició d'accions d'entitas del mercat alternatiu
borsari

   ReDim IRPF_DEDA2(8)                                  'Altres deduccions CCAA
   IRPF_DEDA2(1) = 300                                  '>65 anys
   IRPF_DEDA2(2) = 200                                  '>75 anys
   IRPF_DEDA2(3) = 200                                  'Discapacitat fins >33%
   IRPF_DEDA2(4) = 200                                  '3er. descendent
   IRPF_DEDA2(5) = 200                                  '< 3 anys
   IRPF_DEDA2(6) = 225                                  'Despeses d'estudi descendents > 3 anys
   IRPF_DEDA2(7) = 300                                  'Família nombrosa
   IRPF_DEDA2(8) = 12000                                'límit BIT per a què quota líquida CATALUNYA=0

ElseIf tipus_impost = "IS" Then

   IS_ANYREF = 2010

   ReDim IS_R_PARENT(1 To 7, 1 To 4)                    'Reduccions parentiu
   IS_R_PARENT(1, 1) = 275000: IS_R_PARENT(1, 2) = 33000: IS_R_PARENT(1, 3) = 13: IS_R_PARENT(1, 4) = 20
   IS_R_PARENT(2, 1) = 500000
   IS_R_PARENT(3, 1) = 275000
   IS_R_PARENT(4, 1) = 150000
   IS_R_PARENT(5, 1) = 100000
   IS_R_PARENT(6, 1) = 50000
   IS_R_PARENT(7, 1) = 0

   ReDim IS_R_PARENT_AD(1 To 5)                         'Reduccions addicionals parentiu
   IS_R_PARENT_AD(1) = 125000
   IS_R_PARENT_AD(2) = 150000
   IS_R_PARENT_AD(3) = 125000
   IS_R_PARENT_AD(4) = 50000
   IS_R_PARENT_AD(5) = 25000

   ReDim IS_R_DISCAP(1 To 2)                            'Reducció discapacitat
   IS_R_DISCAP(1) = 275000: IS_R_DISCAP(2) = 650000

   ReDim IS_R_EDATGR(1 To 2)                            'Reducció edat
   IS_R_EDATGR(1) = 75: IS_R_EDATGR(2) = 275000

   ReDim IS_R_ASSEGU(1 To 2)                            'Reducció assegurança
   IS_R_ASSEGU(1) = 1: IS_R_ASSEGU(2) = 25000

   ReDim IS_R_HABITA(1 To 2)                            'Reducció habitatge
   IS_R_HABITA(1) = 0.95: IS_R_HABITA(2) = 500000

   ReDim IS_R_EMPRES(1 To 2)                            'reducció empresa familiar
   IS_R_EMPRES(1) = 0.95: IS_R_EMPRES(2) = 0

   ReDim IS_R_PARTIC(1 To 2)                            'reducció participacions
   IS_R_PARTIC(1) = 0.95: IS_R_PARTIC(2) = 0

   ReDim IS_R_BENSCU(1 To 2)                            'reducció béns culturals
   IS_R_BENSCU(1) = 0.95: IS_R_BENSCU(2) = 0

   ReDim IS_R_FINQUE(1 To 2)                            'reducció finques rústiques
   IS_R_FINQUE(1) = 0.95: IS_R_FINQUE(2) = 0

   ReDim IS_COEF(1 To 4, 1 To 4)
   For i1 = 1 To 4
       IS_COEF(1, i1) = 1
       IS_COEF(3, i1) = 1.5882
       IS_COEF(4, i1) = 2
   Next i1

   IS_NTRAMS = 5                                        'Trams i tarifa
   ReDim IS_TRAMS(1 To IS_NTRAMS - IIf(IS_NTRAMS = 1, 0, 1)), IS_TIPUS(1 To IS_NTRAMS)
   IS_TRAMS(1) = 50000:  IS_TIPUS(1) = 0.07
   IS_TRAMS(2) = 150000: IS_TIPUS(2) = 0.11
   IS_TRAMS(3) = 400000: IS_TIPUS(3) = 0.17
   IS_TRAMS(4) = 800000: IS_TIPUS(4) = 0.24
                         IS_TIPUS(5) = 0.32

   ReDim IS_BONIF(1 To 4)
   IS_BONIF(1) = 99
   IS_BONIF(3) = 0
   IS_BONIF(4) = 0

ElseIf tipus_impost = "ID" Then

   ID_ANYREF = 2010
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   ReDim ID_R_BASE(1 To 6, 1 To 4)                      'Reduccions a la base
   ID_R_BASE(1, 1) = 0.95                               'Activitat empresarial
   ID_R_BASE(2, 1) = 0.95                               'Participacions en entitats
   ID_R_BASE(3, 1) = 0.95                               'Béns culturals
   ID_R_BASE(5, 1) = 0.95                               'Altres (adquisició empreses)
   ID_R_BASE(5, 2) = 125000
   ID_R_BASE(5, 3) = 250000
   ID_R_BASE(6, 1) = 0.95                               'Altres (adquisició habitatge)
   ID_R_BASE(6, 2) = 60000
   ID_R_BASE(6, 3) = 120000
   ID_R_BASE(6, 4) = 36

   ID_NTRAMS12 = 3                                      'Trams i tarifa grups parentiu 1 i 2
   ReDim ID_TRAMS12(1 To ID_NTRAMS12 - IIf(ID_NTRAMS12 = 1, 0, 1)), ID_TIPUS12(1 To ID_NTRAMS12)
   ID_TRAMS12(1) = 200000: ID_TIPUS12(1) = 0.05
   ID_TRAMS12(2) = 600000: ID_TIPUS12(2) = 0.07
                           ID_TIPUS12(3) = 0.09

   ID_NTRAMS34 = 5                                      'Trams i tarifa grups parentiu 3 i 4
   ReDim ID_TRAMS34(1 To ID_NTRAMS34 - IIf(ID_NTRAMS34 = 1, 0, 1)), ID_TIPUS34(1 To ID_NTRAMS34)
   ID_TRAMS34(1) = 50000:  ID_TIPUS34(1) = 0.07
   ID_TRAMS34(2) = 150000: ID_TIPUS34(2) = 0.11
   ID_TRAMS34(3) = 400000: ID_TIPUS34(3) = 0.17
   ID_TRAMS34(4) = 800000: ID_TIPUS34(4) = 0.24
                           ID_TIPUS34(5) = 0.32

   ReDim ID_COEF(1 To 4)                                'coeficients correctors
   ID_COEF(1) = 1
   ID_COEF(3) = 1.5882
   ID_COEF(4) = 2

ElseIf tipus_impost = "IT" Then

   IT_ANYREF = 2012

   ReDim IT_TIPUS_TPO(1 To 17), IT_TARIFA_TPO(17)

                               IT_TARIFA_TPO(0) = "Total"
   IT_TIPUS_TPO(1) = 0.08:     IT_TARIFA_TPO(1) = "TUB"
   IT_TIPUS_TPO(2) = 0.08:     IT_TARIFA_TPO(2) = "TRT"
   IT_TIPUS_TPO(3) = 0.08:     IT_TARIFA_TPO(3) = "TV0"
   IT_TIPUS_TPO(4) = 0.08:     IT_TARIFA_TPO(4) = "TAM"
   IT_TIPUS_TPO(5) = 0.07:     IT_TARIFA_TPO(5) = "THP"
   IT_TIPUS_TPO(6) = 0.05:     IT_TARIFA_TPO(6) = "TUF"
   IT_TIPUS_TPO(7) = 0.05:     IT_TARIFA_TPO(7) = "TUJ"
   IT_TIPUS_TPO(8) = 0.05:     IT_TARIFA_TPO(8) = "TUM"
   IT_TIPUS_TPO(9) = 0.04:     IT_TARIFA_TPO(9) = "TMV"
   IT_TIPUS_TPO(10) = 0.04:    IT_TARIFA_TPO(10) = "TAU"
   IT_TIPUS_TPO(11) = 0.01:    IT_TARIFA_TPO(11) = "DRG"
   IT_TIPUS_TPO(12) = 0.01:    IT_TARIFA_TPO(12) = "PFC"
   IT_TIPUS_TPO(13) = 0.03:    IT_TARIFA_TPO(13) = "AUR"
   IT_TIPUS_TPO(14) = 0.04:    IT_TARIFA_TPO(14) = "CEB"
   IT_TIPUS_TPO(15) = 0.04:    IT_TARIFA_TPO(15) = "CEO"
   IT_TIPUS_TPO(16) = 0.04:    IT_TARIFA_TPO(16) = "CES"
   IT_TIPUS_TPO(17) = 0.04:    IT_TARIFA_TPO(17) = "ANE"

'   IT_NTRAMS_AUR = 10          'Trams tarifa AUR
'   ReDim IT_IMPORT_AUR(1 To IT_NTRAMS_AUR), IT_TRAMS_AUR(1 To IT_NTRAMS_AUR)

'   IT_TRAMS_AUR(1) = 30.05:     IT_IMPORT_AUR(1) = 0.09
'   IT_TRAMS_AUR(2) = 60.1:      IT_IMPORT_AUR(2) = 0.18
'   IT_TRAMS_AUR(3) = 120.2:     IT_IMPORT_AUR(3) = 0.39
'   IT_TRAMS_AUR(4) = 240.4:     IT_IMPORT_AUR(4) = 0.78
'   IT_TRAMS_AUR(5) = 480.81:    IT_IMPORT_AUR(5) = 1.68
'   IT_TRAMS_AUR(6) = 961.62:    IT_IMPORT_AUR(6) = 3.37
'   IT_TRAMS_AUR(7) = 1923.24:   IT_IMPORT_AUR(7) = 7.21
'   IT_TRAMS_AUR(8) = 3846.48:   IT_IMPORT_AUR(8) = 14.42
'   IT_TRAMS_AUR(9) = 7692.95:   IT_IMPORT_AUR(9) = 30.77
'   IT_TRAMS_AUR(10) = 6.01:     IT_IMPORT_AUR(10) = 0.02404

   IT_BON_TUB = 0.7            'Bonificació tarifa TUB

   ReDim IT_TIPUS_OS(1 To 7), IT_TARIFA_OS(7)

                               IT_TARIFA_OS(0) = "Total"
   IT_TIPUS_OS(1) = 0.01:      IT_TARIFA_OS(1) = "OSC"
   IT_TIPUS_OS(2) = 0.01:      IT_TARIFA_OS(2) = "OSA"
   IT_TIPUS_OS(3) = 0.01:      IT_TARIFA_OS(3) = "OSS"
   IT_TIPUS_OS(4) = 0.01:      IT_TARIFA_OS(4) = "OST"
   IT_TIPUS_OS(5) = 0.01:      IT_TARIFA_OS(5) = "OSR"
   IT_TIPUS_OS(6) = 0.01:      IT_TARIFA_OS(6) = "OSV"
   IT_TIPUS_OS(7) = 0.01:      IT_TARIFA_OS(7) = "OSF"
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   ReDim IT_TIPUS_AJD(1 To 17), IT_TARIFA_AJD(17)

                                IT_TARIFA_AJD(0) = "Total"
   IT_TIPUS_AJD(1) = 0.015:     IT_TARIFA_AJD(1) = "AJ0"
   IT_TIPUS_AJD(2) = 0.015:     IT_TARIFA_AJD(2) = "AJ1"
   IT_TIPUS_AJD(3) = 0.015:     IT_TARIFA_AJD(3) = "AJ2"
   IT_TIPUS_AJD(4) = 0.015:     IT_TARIFA_AJD(4) = "AJ3"
   IT_TIPUS_AJD(5) = 0.015:     IT_TARIFA_AJD(5) = "AJ4"
   IT_TIPUS_AJD(6) = 0.018:     IT_TARIFA_AJD(6) = "AJ5"
   IT_TIPUS_AJD(7) = 0.015:     IT_TARIFA_AJD(7) = "AJ6"
   IT_TIPUS_AJD(8) = 0.015:     IT_TARIFA_AJD(8) = "AJ7"
   IT_TIPUS_AJD(9) = 0.015:     IT_TARIFA_AJD(9) = "AJ8"
   IT_TIPUS_AJD(10) = 0.001:    IT_TARIFA_AJD(10) = "AJ9"
   IT_TIPUS_AJD(11) = 0.001:    IT_TARIFA_AJD(11) = "AAH"
   IT_TIPUS_AJD(12) = 0.001:    IT_TARIFA_AJD(12) = "APH"
   IT_TIPUS_AJD(13) = 0.005:    IT_TARIFA_AJD(13) = "AP0"
   IT_TIPUS_AJD(14) = 0.005:    IT_TARIFA_AJD(14) = "AJJ"
   IT_TIPUS_AJD(15) = 0.005:    IT_TARIFA_AJD(15) = "AJM"
   IT_TIPUS_AJD(16) = 0.015:    IT_TARIFA_AJD(16) = "AIC"
   IT_TIPUS_AJD(17) = 0.015:    IT_TARIFA_AJD(17) = "AIM"

ElseIf tipus_impost = "IPPF" Then

   IPPF_ANYREF = 2011

   IPPF_OP(1) = 700000:  IPPF_OP(2) = 700000     'Reducció Obligació personal general i discapacitats
   IPPF_LIM(1) = 0.6:    IPPF_LIM(2) = 0.8       'Limit QI IRPF i QI IPPF

   ReDim LVAR(1 To 22) As String                 'Definició dels béns
   LVAR(1) = "Béns immobles de naturalesa urbana"
   LVAR(2) = "Béns immobles de naturalesa rústica"
   LVAR(3) = "Béns i drets no exempts afectes a activitats empresarials i professionals"
   LVAR(4) = "Béns i drets exempts afectes a activitats empresarials i professionals"
   LVAR(5) = "Dipòsits en compte corrent o d'estalvi, a la vista o a termini, comptes financers i altres tipus
d'imposicions en compte"
   LVAR(6) = "Deute públic, obligacions bons, i altres valors equivalents, negociats en mercats organitzats"
   LVAR(7) = "Obligacions, bons, certificats de dipòsit, pagarés, i altres valors equivalents, no negociats en
mercats organitzats"
   LVAR(8) = "Accions i participacions en el capital social o en el fons patrimonial d'institucions d'inversió
col·lectiva (societats i fons d'inversió), negociades en mercats organitzats"
   LVAR(9) = "Accions i participacions en el capital social o en els fons propis de qualsevol altres entitas
jurídiques, negociades en mercats organitzats"
   LVAR(10) = "Accions i participacions en el capital social o en el fons patrimonial d'institucions d'inversió
col·lectiva (societats i fons d'inversió), no negociades en mercats organitzats"
   LVAR(11) = "Accions i participacions en el capital social o en els fons propis de qualsevol altres entitas
jurídiques, no negociades en mercats organitzats, incloses les participacions en el capital social de
cooperatives"
   LVAR(12) = "Accions i participacions exemptes en el capital social o en els fons propis d'entitas jurídiques,
negociades en mercats organitzats"
   LVAR(13) = "Accions i participacions exemptes en el capital social o en els fons propis d'entitas jurídiques,
no negociades en mercats organitzats, incloses les participacions exemptes en el capital social de cooperatives"
   LVAR(14) = "Assegurances de vida"
   LVAR(15) = "Rendes temporals i vitalícies"
   LVAR(16) = "Vehicles, joies, pells de caràcter sumptuari, embarcacions i aeronaus"
   LVAR(17) = "Objectes d'art i antiguitats"
   LVAR(18) = "Drets reals d'ús i gaudi (excepte els que corresponguin, si s'escau, a l'habitatge habitual del
subjecte passiu)"
   LVAR(19) = "Concessions administratives"
   LVAR(20) = "Drets derivats de la propietat intel.lectual i industrial"
   LVAR(21) = "Opcions contractuals"
   LVAR(22) = "Altres béns i drets de contingut econòmic"

   ReDim IPPF_E(1 To 22)                         'Béns exempts=0 o no exempts=1
   For i1 = 1 To 22
       If i1 = 4 Or i1 = 12 Or i1 = 13 Then IPPF_E(i1) = 1 Else IPPF_E(i1) = 0
   Next i1
   ReDim IPPF_ME(1 To 22)                        'Mínims exempts béns
   IPPF_ME(1) = 300000                           'Habitatge habitual
   For i1 = 2 To 22
       IPPF_ME(i1) = 0                           'Resta de béns
   Next i1

   IPPF_NTRAMS = 8                               'Trams i tipus
   ReDim IPPF_TRAMS(1 To IPPF_NTRAMS - 1), IPPF_TIPUS(1 To IPPF_NTRAMS)
   IPPF_TRAMS(1) = 167130:   IPPF_TIPUS(1) = 0.002
   IPPF_TRAMS(2) = 334253:   IPPF_TIPUS(2) = 0.003
   IPPF_TRAMS(3) = 668500:   IPPF_TIPUS(3) = 0.005
   IPPF_TRAMS(4) = 1337000:  IPPF_TIPUS(4) = 0.009
   IPPF_TRAMS(5) = 2674000:  IPPF_TIPUS(5) = 0.013
   IPPF_TRAMS(6) = 5348000:  IPPF_TIPUS(6) = 0.017
   IPPF_TRAMS(7) = 10696000: IPPF_TIPUS(7) = 0.021
                             IPPF_TIPUS(8) = 0.025
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```
End If

End Sub
Sub COMUNS_1REFERENCIA_SIMULS(opcio As String, nsim, p)

Dim i As Integer, j As Integer, nom As String

If opcio = "IRPF" Then nom = NOM_IRPF_SIMUL & "S" & ANOIRPF & "_" & Trim(Str(nsim)) & ".xlsx"
If opcio = "IS" Then nom = NOM_IS_SIMUL & "S" & ANOIS & "_" & Trim(Str(nsim)) & ".xlsx"
If opcio = "ID" Then nom = NOM_ID_SIMUL & "S" & ANOID & "_" & Trim(Str(nsim)) & ".xlsx"
If opcio = "IT" Then nom = NOM_IT_SIMUL & "S" & ANOIT & "_" & Trim(Str(nsim)) & ".xlsx"
If opcio = "IPPF" Then nom = NOM_IPPF_SIMUL & "S" & ANOIPPF & "_" & Trim(Str(nsim)) & ".xlsx"

Application.ScreenUpdating = False

Set LLIBRE_RESULTATS = Workbooks.Open(nom)
Workbooks(Workbooks.Count).Activate
Sheets("PARAMETRES").Activate
For i = 0 To UBound(p, 1)
    For j = 1 To UBound(p, 2)
        p(i, j) = Cells(i + 1, j)
    Next j
Next i

LLIBRE_RESULTATS.Close

Application.ScreenUpdating = True

End Sub
Sub COMUNS_2ORDENA(opcio As String)

Dim i1 As Long, it As Integer

ReDim y(1 To N)

If opcio = "IRPF" Then

   For it = 1 To 3                                      'ord. 0==> com està ord. 1==>RTC  ord.2=BIT   ord.
3==>BLT
       For i1 = 1 To N
           y(i1) = X(i1, it)
           IND(i1, it) = i1
       Next i1
       Call COMUNS_2ORDENA_AUX(1, N, it)                'Crida a la rutina per a ordenar
   Next it

ElseIf opcio = "IS" Then

   For it = 1 To 2                                      'ord. 1==>BI    2==>BL
       For i1 = 1 To N
           y(i1) = X(i1, it)
           IND(i1, it) = i1
       Next i1
       Call COMUNS_2ORDENA_AUX(1, N, it)                'Crida a la rutina per a ordenar
   Next it

ElseIf opcio = "ID" Then

   Dim it1 As Integer, k1 As Integer, d As Integer, v As Integer

   d = (UBound(X, 2) / 3)
   For it = 1 To 2                                      'ord. 1==>BI    2==>BL
       For k1 = 1 To 3
           it1 = it + 2 * (k1 - 1)
           v = it + d * (k1 - 1)
           For i1 = 1 To N
               y(i1) = X(i1, v)
               IND(i1, it1) = i1
           Next i1
           Call COMUNS_2ORDENA_AUX(1, N, it1)           'Crida a la rutina per a ordenar
        Next k1
   Next it

ElseIf opcio = "IT" Then

   Dim i2 As Long, i3 As Long

   For k1 = 1 To 3                                      'k1=1 ==>TPO k1=2 ==>OS k1=3 ==>AJD
       i2 = IIf(k1 = 1, 1, IIf(k1 = 2, N1 + 1, N1 + N2 + 1))
       i3 = IIf(k1 = 1, N1, IIf(k1 = 2, N1 + N2, N1 + N2 + N3))
       For i1 = i2 To i3
           y(i1) = X(i1, 1)
           IND(i1, 1) = i1
```

```
        Next i1
        Call COMUNS_2ORDENA_AUX(i2, i3, 1)                'Crida a la rutina per a ordenar
    Next k1

End If

End Sub
Sub COMUNS_2ORDENA_AUX(lim_i As Long, lim_s As Long, columna As Integer)

Dim i As Long, j As Long, aux As Double, y1 As Double, ind1 As Long

i = lim_i
j = lim_s

aux = y((lim_i + lim_s) / 2)

While i <= j

    While (y(i) < aux) And (i < lim_s)
        i = i + 1
    Wend

    While (aux < y(j)) And (j > lim_i)
        j = j - 1
    Wend

    If i <= j Then
        y1 = y(i)
        y(i) = y(j)
        y(j) = y1
        ind1 = IND(i, columna)
        IND(i, columna) = IND(j, columna)
        IND(j, columna) = ind1
        i = i + 1
        j = j - 1
    End If

Wend

If lim_i < j Then COMUNS_2ORDENA_AUX lim_i, j, columna
If i < lim_s Then COMUNS_2ORDENA_AUX i, lim_s, columna

End Sub
Sub COMUNS_3ESCRIPTURA_AUXILIAR(arxiu As String)

Dim i1 As Integer, i2 As Long, j1 As Integer, nom As String

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea els arxius per a guardar els resultats de la simulació
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

If arxiu = "IRPF" Then

   PARMS(0, 12) = N
   PARMS(0, 13) = NT
   PARMS(0, 14) = PAG(1)
   PARMS(0, 15) = PAG(2)
   PARMS(0, 16) = PAG(3)

   nom = NOM_IRPF_SIMUL & "S" & ANOIRPF & "_" & Trim(Str(CIRPF(ISIMULS(1)) + 1)) & ".xlsx"
   FileCopy ThisWorkbook.Path & "\SIMUL\IRPF\PLANTILLA_IRPF.xlsx", nom
   Set LLIBRE_RESULTATS = Workbooks.Open(nom)
   Workbooks(Workbooks.Count).Activate

   ActiveWorkbook.Unprotect (SECRET)

   Sheets("PARAMETRES").Activate
   For i1 = 0 To UBound(PARMS, 1)
       For j1 = 1 To UBound(PARMS, 2)
           Cells(i1 + 1, j1) = PARMS(i1, j1)
       Next j1
   Next i1
   ActiveSheet.Protect (SECRET)

   Sheets("DESCRIPTIU").Activate
   For i1 = 1 To 22
       For j1 = 1 To 8
           Cells(i1, j1) = VT(i1, j1)
       Next j1
   Next i1
   ActiveSheet.Protect (SECRET)

   Sheets("LIMITS-MITJANES").Activate
```

```
    For i1 = 1 To 4
        For j1 = 1 To 12
            Cells(i1, j1) = VT(22 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("G-P").Activate
    For i1 = 1 To 6
        For j1 = 1 To 12
            Cells(i1, j1) = VT(26 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DECILS-RTC").Activate
    For i1 = 1 To 44
        For j1 = 1 To 12
            Cells(i1, j1) = VT(32 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("TIPUS-RTC").Activate
    For i1 = 1 To 18
        For j1 = 1 To 12
            Cells(i1, j1) = VT(76 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DECILS-BIT").Activate
    For i1 = 1 To 44
        For j1 = 1 To 12
            Cells(i1, j1) = VT(94 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("TIPUS-BIT").Activate
    For i1 = 1 To 18
        For j1 = 1 To 12
            Cells(i1, j1) = VT(138 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("INDEXS").Activate
    For i1 = 1 To 55
        For j1 = 1 To 3
            Cells(i1, j1) = VT(156 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("SOCIO-ECONOMICA").Activate
    For i1 = 1 To 75
        For j1 = 1 To 11
            Cells(i1, j1) = VT(211 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Open NOM_IRPF_SIMUL & "GP" & ANOIRPF & "_" & Trim(Str(CIRPF(ISIMULS(1)) + 1)) & ".dat" For Output As #1
    Write #1, N, DECL_NOMBRE, ANY_PROJ
    For i2 = 1 To N
        Write #1, IND(i2, 1), X(i2, 22), X(i2, 23)
    Next i2
    Close #1

ElseIf arxiu = "IS" Then

    PARMS(0, 4) = N
    PARMS(0, 5) = NT
    PARMS(0, 6) = PAG(1)
    PARMS(0, 7) = PAG(2)
    PARMS(0, 8) = PAG(3)

    nom = NOM_IS_SIMUL & "S" & ANOIS & "_" & Trim(Str(CIS(ISIMULS(2)) + 1)) & ".xlsx"
    FileCopy ThisWorkbook.Path & "\SIMUL\IS\PLANTILLA_IS.xlsx", nom
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    Workbooks(Workbooks.Count).Activate
```

```
    Sheets("PARAMETRES").Activate
    For i1 = 0 To UBound(PARMS, 1)
        For j1 = 1 To UBound(PARMS, 2)
            Cells(i1 + 1, j1) = PARMS(i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DESCRIPTIU").Activate
    For i1 = 1 To 20
        For j1 = 1 To 12
            Cells(i1, j1) = VT(i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("LIMITS-MITJANES").Activate
    For i1 = 1 To 2
        For j1 = 1 To 12
            Cells(i1, j1) = VT(20 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DECILS-TIPUS").Activate
    For i1 = 1 To 22
        For j1 = 1 To 12
            Cells(i1, j1) = VT(22 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("INDEXS").Activate
    For i1 = 1 To 34
        For j1 = 1 To 2
            Cells(i1, j1) = VT(44 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Open NOM_IS_SIMUL & "GP" & ANOIS & "_" & Trim(Str(CIS(ISIMULS(2)) + 1)) & ".dat" For Output As #1
    Write #1, N
    For i2 = 1 To N
        Write #1, IND(i2, 1), X(i2, 10), X(i2, 11)
    Next i2
    Close #1

ElseIf arxiu = "ID" Then

    nom = NOM_ID_SIMUL & "S" & ANOID & "_" & Trim(Str(CID(ISIMULS(3)) + 1)) & ".xlsx"
    FileCopy ThisWorkbook.Path & "\SIMUL\ISD\PLANTILLA_ID.xlsx", nom
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    Workbooks(Workbooks.Count).Activate

    ActiveWorkbook.Unprotect (SECRET)

    Sheets("PARAMETRES").Activate
    For i1 = 0 To UBound(PARMS, 1)
        For j1 = 1 To UBound(PARMS, 2)
            Cells(i1 + 1, j1) = PARMS(i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DESCRIPTIU").Activate
    For i1 = 1 To 18
        For j1 = 1 To 12
            Cells(i1, j1) = VT(i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("LIMITS-MITJANES").Activate
    For i1 = 1 To 6
        For j1 = 1 To 12
            Cells(i1, j1) = VT(18 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DECILS-TIPUS").Activate
    For i1 = 1 To 36
        For j1 = 1 To 12
```

```
            Cells(i1, j1) = VT(24 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("INDEXS").Activate
    For i1 = 1 To 42
        For j1 = 1 To 2
            Cells(i1, j1) = VT(60 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Open NOM_ID_SIMUL & "GP" & ANOID & "_" & Trim(Str(CID(ISIMULS(3)) + 1)) & ".dat" For Output As #1
    Write #1, N1, N2, N, NT1, NT2, NT
    For i2 = 1 To N
        Write #1, IND(i2, 1), X(i2, 5), X(i2, 6), _
                  IND(i2, 3), X(i2, 11), X(i2, 12), _
                  IND(i2, 5), X(i2, 17), X(i2, 18)
    Next i2
    Close #1

ElseIf arxiu = "IT" Then

    nom = NOM_IT_SIMUL & "S" & ANOIT & "_" & Trim(Str(CIT(ISIMULS(4)) + 1)) & ".xlsx"
    FileCopy ThisWorkbook.Path & "\SIMUL\ITPOAJDOS\PLANTILLA_IT.xlsx", nom
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    Workbooks(Workbooks.Count).Activate

    ActiveWorkbook.Unprotect (SECRET)

    LLIBRE_RESULTATS.Protect (SECRET)

    Sheets("PARAMETRES").Activate
    For i1 = 0 To UBound(PARMS, 1)
        For j1 = 1 To UBound(PARMS, 2)
            Cells(i1 + 1, j1) = PARMS(i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DESCRIPTIU").Activate
    For i1 = 0 To 43
        For j1 = 1 To 10
            Cells(i1 + 1, j1) = VT(i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("INDEXS").Activate
    For i1 = 1 To 12
        For j1 = 1 To 1
            Cells(i1, j1) = VT(43 + i1, 1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

ElseIf arxiu = "IPPF" Then

    PARMS(0, 4) = N
    PARMS(0, 5) = PAG(1)
    PARMS(0, 6) = PAG(2)
    PARMS(0, 7) = PAG(3)

    nom = NOM_IPPF_SIMUL & "S" & ANOIPPF & "_" & Trim(Str(CIPPF(ISIMULS(5)) + 1)) & ".xlsx"
    FileCopy ThisWorkbook.Path & "\SIMUL\IPPF\PLANTILLA_IPPF.xlsx", nom
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    Workbooks(Workbooks.Count).Activate

    ActiveWorkbook.Unprotect (SECRET)

    Sheets("PARAMETRES").Activate
    For i1 = 0 To UBound(PARMS, 1)
        For j1 = 1 To UBound(PARMS, 2)
            Cells(i1 + 1, j1) = PARMS(i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DESCRIPTIU").Activate
    For i1 = 1 To 4
        For j1 = 1 To 8
            Cells(i1, j1) = VT(i1, j1)
```

```
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("LIMITS-MITJANES").Activate
    For i1 = 1 To 2
        For j1 = 1 To 12
            Cells(i1, j1) = VT(4 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("DECILS-TIPUS").Activate
    For i1 = 1 To 10
        For j1 = 1 To 12
            Cells(i1, j1) = VT(6 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("INDEXS").Activate
    For i1 = 1 To 6
        For j1 = 1 To 2
            Cells(i1, j1) = VT(16 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Sheets("G-P").Activate
    For i1 = 1 To 6
        For j1 = 1 To 12
            Cells(i1, j1) = VT(22 + i1, j1)
        Next j1
    Next i1
    ActiveSheet.Protect (SECRET)

    Open NOM_IPPF_SIMUL & "GP" & ANOIPPF & "_" & Trim(Str(CIPPF(ISIMULS(5)) + 1)) & ".dat" For Output As #1
    Write #1, N
    For i2 = 1 To N
        Write #1, IND(i2, 0), X(i2, 3), X(i2, 5)
    Next i2
    Close #1

End If

LLIBRE_RESULTATS.Protect (SECRET)
LLIBRE_RESULTATS.Save
LLIBRE_RESULTATS.Close

End Sub
Sub COMUNS_41GRAFICS_CORBESLORENZ(fila, gp, impost_t, nom, r_g, s_r)

'fila     ==> línia on escriu el gràfic
'impost_t ==> "IRPF", "IS" o "ID"
'nom      ==> nom de les corbes
'r_g      ==> rangs dels valors de les sèries dels gràfics
's_r      ==> indicador d'igualtat de les corbes

Dim i1 As Integer, i2 As Integer

For i1 = 1 To 2
    Charts.Add
    With ActiveChart
      .ChartType = xlXYScatterSmoothNoMarkers
      For i2 = 1 To IIf(gp, 7, 4)
          .SeriesCollection.NewSeries
          With .SeriesCollection(i2)
            With .Border
               .ColorIndex = IIf(i2 = 1 Or i2 = 5, 32, IIf(i2 = 2 Or i2 = 6, 3, IIf(i2 = 3 Or i2 = 7, 60, 1)))
               If i2 > 4 And s_r(i2, i1) Then .LineStyle = xlDot
               .Weight = xlMedium
            End With
            .MarkerStyle = xlNone
            .Name = nom(i2, i1)
            If i2 <> 4 Then
               .Values = r_g(i2, i1)
               If i2 <> 3 And i2 <> 7 Then
                  .XValues = Array(0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 0.95, 0.98, 1)
               Else
                  .XValues = r_g(i2 - 2, i1)
               End If
            Else
               .Values = Array(0, 1)
```

```
                .XValues = Array(0, 1)
            End If
        End With
    Next i2
    For i2 = 1 To 2
        With .Axes(IIf(i2 = 1, xlCategory, xlValue))
          .HasMajorGridlines = True
          .HasDisplayUnitLabel = False
          .MinorUnit = 0.1
          .MajorUnit = 0.1
          .MinimumScale = 0
          .MaximumScale = 1
          .TickLabels.Font.Bold = True
          .TickLabels.Font.Name = "Calibri"
          .TickLabels.Font.Size = 7
          .TickLabels.NumberFormat = "0%"
        End With
    Next i2
    .HasTitle = True
    With .ChartTitle
      .Characters.Text = "Corbes de Lorenz i Concentració (ordenació abscissa "
      If impost_t = "IRPF" Then .Characters.Text = .Characters.Text & IIf(i1 = 1, "RTC)", "BIT)")
      If impost_t <> "IRPF" Then .Characters.Text = .Characters.Text & IIf(i1 = 1, "BI)", "BL)")
      .Font.Bold = True
      .Font.Name = "Calibri"
      .Font.Size = 8.5
      .Top = 0
    End With
    With .Legend
      .Border.LineStyle = xlNone
      .Font.Bold = True
      .Font.Name = "Calibri"
      .Font.Size = IIf(gp, 5.5, 6)
      For i2 = .LegendEntries.Count To IIf(gp, 8, 5) Step -1
          .LegendEntries(i2).Delete
      Next i2
      .LegendEntries(4).Delete
      .Position = xlLegendPositionBottom
    End With
    With .PlotArea
      .Interior.ColorIndex = 2
      .Left = 0
      .Top = 20   '15
      .Width = 805
      .Height = IIf(gp, 390, 410)
    End With
    .Location Where:=xlLocationAsObject, Name:=impost_t & "(R)"

    '''''''''''''''''''''''''''''''''''''''''
    'Definició d'alçada i amplada dels gràfics'
    '''''''''''''''''''''''''''''''''''''''''

    With Worksheets(impost_t & "(R)")
      .ChartObjects(1).Height = 218
      .ChartObjects(1).Width = 260
    End With

    '''''''''''''''''''''''''''''''''''''''
    'Reconversió dels gràfics en imatges'
    '''''''''''''''''''''''''''''''''''''''

    ActiveSheet.ChartObjects(1).CopyPicture
    ActiveWindow.Visible = False
    Cells(fila, IIf(i1 = 1, 1, 8)).Select
    ActiveSheet.Paste
    Worksheets(impost_t & "(R)").ChartObjects(1).Delete
  End With
Next i1

End Sub
Sub COMUNS_42GRAFICS_TIPUS(fila, gp, impost_t, m, r_g, s_r, sim)

'fila     ==> línia on escriu el gràfic
'impost_t ==> "IRPF", "IS" o "ID"
'm        ==> valor màxim de l'escala vertical del gràfic
'r_g      ==> rangs dels valors de les sèries dels gràfics
'sim      ==> nombre de la simulació
's_r      ==> indicador d'igualtat dels tipus

Dim i1 As Integer, i2 As Integer

For i1 = 1 To IIf(impost_t = "IRPF", 6, 2)
    Charts.Add
```

```
    With ActiveChart
      .ChartType = xlXYScatterSmoothNoMarkers
      For i2 = 1 To IIf(gp, 2, 1)
          .SeriesCollection.NewSeries
          With .SeriesCollection(i2)
            .Border.ColorIndex = IIf(i2 = 1, 32, IIf(s_r(i1, 3), 40, 32))
            .Border.Weight = xlMedium
            .MarkerStyle = xlNone
            .Name = IIf(i2 = 1, "Simulació-" & sim, "Referència")
            .Values = r_g(i2, i1 + 2)
            .XValues = Array(0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 0.95, 0.98, 1)
          End With
      Next i2
      For i2 = 1 To 2
          With .Axes(IIf(i2 = 1, xlCategory, xlValue))
            .HasMajorGridlines = True
            .HasDisplayUnitLabel = False
            .MinorUnit = IIf(i2 = 1, 0.1, m / 10)
            .MajorUnit = IIf(i2 = 1, 0.1, m / 10)
            .MinimumScale = IIf(i2 = 1, 0.1, 0)
            .MaximumScale = IIf(i2 = 1, 1, m)
            .TickLabels.Font.Bold = True
            .TickLabels.Font.Name = "Calibri"
            .TickLabels.Font.Size = 7
            .TickLabels.NumberFormat = IIf(i2 = 1, "0%", "0.00%")
          End With
      Next i2
      .HasTitle = True
      With .ChartTitle
        If impost_t = "IRPF" Then
           If i1 = 1 Then .Characters.Text = "QR s/RTC (ordenació abscissa RTC)"
           If i1 = 2 Then .Characters.Text = "QA s/RTC (ordenació abscissa RTC)"
           If i1 = 3 Then .Characters.Text = "QR s/BIT (ordenació abscissa BIT)"
           If i1 = 4 Then .Characters.Text = "QA s/BIT (ordenació abscissa BIT)"
           If i1 = 5 Then .Characters.Text = "QR s/BLT (ordenació abscissa BIT)"
           If i1 = 6 Then .Characters.Text = "QA s/BLT (ordenació abscissa BIT)"
        Else
           .Characters.Text = "Tipus efectius s/Base " & IIf(i1 = 1, "Imposable", "Liquidable") & " (ordenació
abscissa BI)"
        End If
        .Font.Bold = True
        .Font.Name = "Calibri"
        .Font.Size = 8.5
        .Top = 0
      End With
      With .Legend
        .Border.LineStyle = xlNone
        .Font.Bold = True
        .Font.Name = "Calibri"
        .Font.Size = 6
        For i2 = .LegendEntries.Count To IIf(gp, 3, 2) Step -1
            .LegendEntries(i2).Delete
        Next i2
        .Position = xlLegendPositionBottom
      End With
      With .PlotArea
        .Interior.ColorIndex = 2
        .Left = 0
        .Top = 20 '15
        .Width = 805
        .Height = 415
      End With
      .Location Where:=xlLocationAsObject, Name:=impost_t & "(R)"

      '''''''''''''''''''''''''''''''''''''''''''
      'Definició d'alçada i amplada dels gràfics'
      '''''''''''''''''''''''''''''''''''''''''''

      With Worksheets(impost_t & "(R)")
        .ChartObjects(1).Height = 218
        .ChartObjects(1).Width = 260
      End With

      '''''''''''''''''''''''''''''''''''''''
      'Reconversió dels gràfics en imatges'
      '''''''''''''''''''''''''''''''''''''''

      ActiveSheet.ChartObjects(1).CopyPicture
      ActiveWindow.Visible = False
      If impost_t <> "IRPF" Then
         Cells(fila, IIf(i1 = 1 Or i1 = 3 Or i1 = 5, 1, 8)).Select
      Else
         Cells(IIf(i1 < 3, fila, IIf(i1 < 5, fila + 23, fila + 46)), _
```

```
               IIf(i1 = 1 Or i1 = 3 Or i1 = 5, 1, 8)).Select
      End If
      ActiveSheet.Paste
      Worksheets(impost_t & "(R)").ChartObjects(1).Delete
    End With
Next i1

End Sub
Sub COMUNS_43GRAFICS_GP(fila, iany, impost_t, opcio, r_gp, sim)

'fila     ==> línia on escriu el gràfic
'iany     ==> ANOIRPF, ANOIS, ANOID, ANOIPPF
'impost_t ==> "IRPF", "IS" , "ID" "IPPF"
'opcio    ==> "(R)" o "(GP)"
'r_gp     ==> rangs dels valors de les sèries dels gràfics
'sim      ==> nombre de la simulació o 1 quan es la comparació de dues simulacions

Dim i1 As Integer, i2 As Integer, j1 As Integer, m As Double

If opcio = "(R)" And impost_t = "IRPF" Then
   With Range(Cells(fila - 1, 1), Cells(fila + 45, 15))
     .ColumnWidth = 6.43
     .Interior.ColorIndex = 2
     .RowHeight = 10
   End With
   With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
     .Font.Bold = True
     .Font.Size = 10
     .HorizontalAlignment = xlLeft
     .RowHeight = 14
     .Value = "GRÀFICS DE LA SIMULACIÓ-" & sim & " (Base de dades: " & iany & ") cont."
   End With
End If

For i1 = 1 To 4
    If i1 = 1 Then
       m = Application.max(r_gp(1, 1), r_gp(2, 1))
       For i2 = 100 To 0 Step -10
           If m * 100 > i2 Then Exit For
       Next i2
       m = (i2 / 100) + 0.1
    End If
    Charts.Add
    With ActiveChart
      .ChartType = IIf(i1 = 1, xlColumnClustered, xlColumnStacked)
      For j1 = .SeriesCollection.Count To 1 Step -1
          .SeriesCollection(j1).Delete
      Next j1
      For i2 = 1 To 2
          .SeriesCollection.NewSeries
          With .SeriesCollection(i2)
            .Interior.ColorIndex = IIf(i1 = 1, IIf(i2 = 1, 32, 40), IIf(i2 = 1, 1, 3))
            If opcio = "(G-P)" Then
               .Name = IIf(i1 = 1, IIf(i2 = 1, "Simulació-" & COMP(1), "Simulació-" & COMP(2)), _
                       IIf(i1 = 2, IIf(i2 = 1, "Guanyadors", "Perdedors"), _
                       IIf(i2 = 1, "Guanys", "Pèrdues")))
            Else
               .Name = IIf(i1 = 1, IIf(i2 = 1, "Simulació-" & sim, "Referència"), _
                       IIf(i1 = 2, IIf(i2 = 1, "Guanyadors", "Perdedors"), _
                       IIf(i2 = 1, "Guanys", "Pèrdues")))
            End If
            .Values = r_gp(i2, i1)
            .XValues = Array(0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 0.95, 0.98, 1)
          End With
      Next i2
      For i2 = 1 To 2
          With .Axes(IIf(i2 = 1, xlCategory, xlValue))
            If i2 = 1 Then
               .TickLabelSpacing = 1
               .TickLabelPosition = xlLow
            Else
               .HasDisplayUnitLabel = False
               If i1 <= 2 Then
                  .MinorUnit = IIf(i1 = 1, m / 10, 0.2)
                  .MajorUnit = IIf(i1 = 1, m / 10, 0.2)
                  .MinimumScale = IIf(i1 = 1, 0, -1)
                  .MaximumScale = IIf(i1 = 1, m, 1)
               End If
            End If
            .TickLabels.Font.Bold = True
            .TickLabels.Font.Name = "Calibri"
            .TickLabels.Font.Size = 7
            .TickLabels.NumberFormat = IIf(i2 = 1, "0%", IIf(i1 <= 2, "0%", "#0,0"))
```

```
        End With
      Next i2
      .HasTitle = True
      With .ChartTitle
        If opcio = "(G-P)" Then
           If i1 = 1 Then
              If impost_t = "IRPF" Then .Characters.Text = "Distribució de la QR"
              If impost_t = "IPPF" Then .Characters.Text = "Distribució de la QPI"
              If impost_t <> "IRPF" And impost_t <> "IPPF" Then .Characters.Text = "Distribució de la QT"
           End If
           If i1 = 2 Then .Characters.Text = "Guanyadors  i  Perdedors. Simulació-" & COMP(1) & "  vs.
Simulació-" & COMP(2)
           If i1 = 3 Then .Characters.Text = "Guanys  i  Pèrdues  totals (milers  d'€). Simulació-" & COMP(1) &
"  vs.  Simulació-" & COMP(2)
           If i1 = 4 Then .Characters.Text = "Guanys  i  Pèrdues  per  capita(€). Simulació-" & COMP(1) & "  vs.
Simulació-" & COMP(2)
        Else
           If i1 = 1 Then
              If impost_t = "IRPF" Then .Characters.Text = "Distribució de la QR (ordenació abscissa RTC)"
              If impost_t <> "IRPF" Then .Characters.Text = "Distribució de la QT (ordenació abscissa BI)"
           End If
           If i1 = 2 Then .Characters.Text = "Guanyadors  i  Perdedors. Simulació-" & sim & "  vs. Referència"
           If i1 = 3 Then .Characters.Text = "Guanys i Pèrdues  totals (milers  d'€). Simulació-" & sim & "  vs.
Referència"
           If i1 = 4 Then .Characters.Text = "Guanys i Pèrdues  per  capita(€). Simulació-" & sim & "  vs.
Referència"
        End If
        .Font.Bold = True
        .Font.Name = "Calibri"
        .Font.Size = 7
        .Top = 0
      End With
      With .Legend
        .Border.LineStyle = xlNone
        .Font.Bold = True
        .Font.Name = "Calibri"
        .Font.Size = 7
        For i2 = .LegendEntries.Count To 3 Step -1
            .LegendEntries(i2).Delete
        Next i2
        .Position = xlLegendPositionBottom
      End With
      With .PlotArea
        .Interior.ColorIndex = 2
        .Left = 0
        .Top = 20 '15
        .Width = 805
        .Height = 415
      End With
      .Location Where:=xlLocationAsObject, Name:=impost_t & opcio

      '''''''''''''''''''''''''''''''''''''''''''''
      'Definició d'alçada i amplada dels gràfics'
      '''''''''''''''''''''''''''''''''''''''''''''

      Dim iheight As Integer, iwidth As Integer
      With Worksheets(impost_t & opcio)
        If opcio = "(R)" Then
           iheight = 218
           iwidth = 260
        Else
           iheight = 218
           iwidth = 260
        End If
        .ChartObjects(1).Height = iheight
        .ChartObjects(1).Width = iwidth
      End With

      '''''''''''''''''''''''''''''''''''''''''''''
      'Reconversió dels gràfics en imatges'
      '''''''''''''''''''''''''''''''''''''''''''''

      ActiveSheet.ChartObjects(1).CopyPicture
      ActiveWindow.Visible = False
      Cells(IIf(i1 < 3, fila, fila + 23), IIf(i1 = 1 Or i1 = 3, 1, 8)).Select
      ActiveSheet.Paste
      Worksheets(impost_t & opcio).ChartObjects(1).Delete
    End With
Next i1

End Sub
Sub COMUNS_5IMPRESSIO(impost_t, opcio)
```

```
''''''''''''''''''''''''''''''''
'Configura el full de resultats'
''''''''''''''''''''''''''''''''

With ActiveSheet.PageSetup
  .BlackAndWhite = True
  .BottomMargin = Application.InchesToPoints(0.393700787401575)
  .FooterMargin = Application.InchesToPoints(0.196850393700787)
  .HeaderMargin = Application.InchesToPoints(0.196850393700787)
  .LeftFooter = "&""Arial,Negrita""&8" & "Data: " & "&D" & "  Hora: " & "&T"
  .LeftMargin = Application.InchesToPoints(0.393700787401575)
  .RightFooter = "&""Arial,Negrita""&8" & "Pàgina: " & "&P" & " de " & "&N"
  .RightHeader = "&""Arial,Negrita""&8" & _
                 "GENERALITAT DE CATALUNYA: SIMCAT(v4.2) " & Chr(169) & " " & Chr(174) & _
                 " (" & impost_t & ")"
  .RightMargin = Application.InchesToPoints(0.393700787401575)
  .TopMargin = Application.InchesToPoints(0.393700787401575)
  If opcio = "R" Then
     .Zoom = IIf(impost_t = "ITPOOSAJD", 70, 75)
  Else
     .Zoom = IIf(impost_t = "ITPOOSAJD", 100, 90)
  End If
End With
ActiveWindow.View = xlPageBreakPreview
'ActiveSheet.VPageBreaks(1).DragOff Direction:=xlToRight, RegionIndex:=1
With ActiveWindow
  .DisplayWorkbookTabs = True
  .View = xlNormalView
  .Zoom = Int(XZOOM * IIf(XTEXT, 0.646, 1))
  If impost_t = "ITPOOSAJD" Then .Zoom = 130
End With
Cells(1, 1).Activate
'ActiveSheet.Protect (SECRET), DrawingObjects:=False
ActiveWorkbook.Protect (SECRET)

With Sheets("SIMULADOR REFORMES IMPOSITIVES")
  .Activate
  .Esperar.Visible = False
End With
Application.ScreenUpdating = True

End Sub
```

```
Attribute VB_Name = "Impostos"
Option Explicit
Sub SIMCAT_IMPOSTOS()

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate

ActiveWindow.DisplayWorkbookTabs = False

Application.DisplayAlerts = False

SORTIR = False

If OBRIR = 1 Then
   SIMCAT_Caratula.MultiPage1.Value = 0
   SIMCAT_Caratula.Show
   If SORTIR Then GoTo SURT
End If

Dim ianyb(1 To 5) As Integer, isim(1 To 5) As Integer, i1 As Integer, j1 As Integer, temps As Date

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Determina els anys de les bases de dades dels tres impostos'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For j1 = 1 To 5
    ianyb(j1) = 0
    For i1 = 2015 To 2007 Step -1
        If Dir(IIf(j1 = 1, NOM_IRPF_DADES, IIf(j1 = 2, NOM_IS_DADES, IIf(j1 = 3, NOM_ID_DADES, _
               IIf(j1 = 4, NOM_IT_DADES, NOM_IPPF_DADES)))) & Trim(Str(i1)) & ".dat") <> "" Then
           ianyb(j1) = ianyb(j1) + 1
           If j1 = 1 Then
              ReDim Preserve AIRPF(0 To ianyb(j1) - 1)
              AIRPF(ianyb(j1) - 1) = i1
           ElseIf j1 = 2 Then
              ReDim Preserve AIS(0 To ianyb(j1) - 1)
              AIS(ianyb(j1) - 1) = i1
           ElseIf j1 = 3 Then
              ReDim Preserve AID(0 To ianyb(j1) - 1)
              AID(ianyb(j1) - 1) = i1
           ElseIf j1 = 4 Then
              ReDim Preserve AIT(0 To ianyb(j1) - 1)
              AIT(ianyb(j1) - 1) = i1
           ElseIf j1 = 5 Then
              ReDim Preserve AIPPF(0 To ianyb(j1) - 1)
              AIPPF(ianyb(j1) - 1) = i1
           End If
        End If
    Next i1
Next j1
For j1 = 1 To 5
    If j1 = 1 Then IMPOST(j1) = True Else IMPOST(j1) = False
    ISIMULS(j1) = 0
    If ianyb(j1) = 0 Then
       If j1 = 1 Then
          ReDim AIRPF(0)
          AIRPF(0) = "Sense dades"
       ElseIf j1 = 2 Then
          ReDim AIS(0)
          AIS(0) = "Sense dades"
       ElseIf j1 = 3 Then
          ReDim AID(0)
          AID(0) = "Sense dades"
       ElseIf j1 = 4 Then
          ReDim AIT(0)
          AIT(0) = "Sense dades"
       ElseIf j1 = 5 Then
          ReDim AIPPF(0)
          AIPPF(0) = "Sense dades"
       End If
    End If
Next j1

INICI:

COMPARA = 0
ERR_LEC = True
RES = 0
SIMUL = 0
SORTIR = False

Do While ERR_LEC
   Application.ScreenUpdating = True
   With Inicial
```

```
     If IMPOST(1) Then
        .MultiPage1.Value = 0
     ElseIf IMPOST(2) Then
        .MultiPage1.Value = 1
     ElseIf IMPOST(3) Then
        .MultiPage1.Value = 2
     ElseIf IMPOST(4) Then
        .MultiPage1.Value = 3
     ElseIf IMPOST(5) Then
        .MultiPage1.Value = 4
     End If
     .ListBox_IRPF.List = AIRPF
     .ListBox_IS.List = AIS
     .ListBox_ID.List = AID
     .ListBox_IT.List = AIT
     .ListBox_IPPF.List = AIPPF
     If AIRPF(0) = "Sense dades" Then .ListBox_IRPF.Enabled = False
     If AIS(0) = "Sense dades" Then .ListBox_IS.Enabled = False
     If AID(0) = "Sense dades" Then .ListBox_ID.Enabled = False
     If AIT(0) = "Sense dades" Then .ListBox_IT.Enabled = False
     If AIPPF(0) = "Sense dades" Then .ListBox_IPPF.Enabled = False
     .Show
   End With
   If SORTIR Then GoTo SURT
Loop

If SORTIR Then GoTo SURT Else Application.ScreenUpdating = False

If SIMUL <> 0 Then

   Application.ScreenUpdating = False
   Call COMUNS_1REFERENCIA(IIf(SIMUL = 1, "IRPF", IIf(SIMUL = 2, "IS", _
                           IIf(SIMUL = 3, "ID", IIf(SIMUL = 4, "IT", "IPPF"))))) 'Valors referència
   Application.ScreenUpdating = True

   If SIMUL = 1 Then Call IRPF_10PARAMETRES(1)                          'Paràmetres simulació
   If SIMUL = 2 Then Call IS_10PARAMETRES(1)
   If SIMUL = 3 Then Call ISD_10PARAMETRES(1)
   If SIMUL = 4 Then Call IT_10PARAMETRES(1)
   If SIMUL = 5 Then Call IPPF_10PARAMETRES(1)

   If SORTIR Then GoTo INICI

   Application.DisplayStatusBar = True
   Application.StatusBar = "Inici del procés de simulació"
   Sheets("SIMULADOR REFORMES IMPOSITIVES").Esperar.Visible = True
   temps = Now
   Application.ScreenUpdating = False

   If SIMUL = 1 Then Call IRPF_10PROJECCIO_PES(2)                       'Projeccions IRPF

   If SIMUL = 1 Then Call IRPF_20SIMULACIO(1)                           'Simulació IRPF
   If SIMUL = 2 Then Call IS_20SIMULACIO(temps)                         'Simulació IS
   If SIMUL = 3 Then Call ISD_20SIMULACIO(temps)                        'Simulació ISD
   If SIMUL = 4 Then Call IT_20SIMULACIO(temps)                         'Simulació IT
   If SIMUL = 5 Then Call IPPF_20SIMULACIO(temps)                       'Simulació IPPF

   Application.ScreenUpdating = True
   Application.ScreenUpdating = False
   Call COMUNS_3ESCRIPTURA_AUXILIAR(IIf(SIMUL = 1, "IRPF", IIf(SIMUL = 2, "IS", IIf(SIMUL = 3, "ID", _
                                    IIf(SIMUL = 4, "IT", "IPPF"))))   'Escriptura resultats auxiliars

   Application.StatusBar = "Final del procés de simulació: Temps de càlcul invertit=" & DateDiff("s", temps,
Now) & " segons. Registres processats=" & N & "."
   If Application.Wait(Now + TimeValue("0:00:05")) Then
      Application.StatusBar = False
      Application.DisplayStatusBar = False
   End If
   Sheets("SIMULADOR REFORMES IMPOSITIVES").Esperar.Visible = False
   GoTo INICI

End If

If COMPARA <> 0 Then

   Dim avis_c As Boolean
   avis_c = False

   Sheets("SIMULADOR REFORMES IMPOSITIVES").Esperar.Visible = True
   Application.ScreenUpdating = True
   Application.DisplayStatusBar = True
   Application.StatusBar = "Inici del procés de comparació"
   Application.ScreenUpdating = False
```

```
   If COMPARA = 1 Then Call IRPF_30COMPARACIO(avis_c)
   If COMPARA = 2 Then Call IS_30COMPARACIO(1)
   If COMPARA = 3 Then Call ISD_30COMPARACIO(1)
   If COMPARA = 4 Then Call IT_30COMPARACIO(1)
   If COMPARA = 5 Then Call IPPF_30COMPARACIO(1)

   Sheets("SIMULADOR REFORMES IMPOSITIVES").Esperar.Visible = False
   If avis_c Then
      Application.StatusBar = ""
      Application.StatusBar = False
      Application.DisplayStatusBar = False
   Else
      Application.StatusBar = "Final del procés de comparació. Registres processats=" & N & "."
      If Application.Wait(Now + TimeValue("0:00:03")) Then
         Application.StatusBar = False
         Application.DisplayStatusBar = False
      End If
   End If
   GoTo INICI

End If

If RES <> 0 Then

   Sheets("SIMULADOR REFORMES IMPOSITIVES").Esperar.Visible = True
   Application.ScreenUpdating = True
   Application.ScreenUpdating = False
   If RES = 1 Then Call IRPF_40ESCRIPTURA(1)                              'Escriptura simulacions
   If RES = 2 Then Call IS_40ESCRIPTURA(1)
   If RES = 3 Then Call ISD_40ESCRIPTURA(1)
   If RES = 4 Then Call IT_40ESCRIPTURA(1)
   If RES = 5 Then Call IPPF_40ESCRIPTURA(1)
   Sheets("SIMULADOR REFORMES IMPOSITIVES").Esperar.Visible = False
   GoTo INICI
End If

SURT:

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate

ActiveWindow.DisplayWorkbookTabs = True

Application.DisplayAlerts = True
Application.ScreenUpdating = True

OBRIR = 0

End Sub
Private Sub IRPF_10PARAMETRES(opcio As Integer)

Dim i1 As Integer

Call IRPF_10PROJECCIO_PES(1)   'Projeccions

ReDim aux1(300), aux2(100), aux3(40), aux4(15), _
      aux5(10), aux6(10), tram1(9) As Integer, tram2(5) As Integer
For i1 = -150 To 150
    aux1(150 - i1) = i1 / 10
    If i1 >= 0 And i1 <= 100 Then aux2(100 - i1) = i1
    If i1 >= 0 And i1 <= 40 Then aux3(40 - i1) = i1
    If i1 >= 0 And i1 <= 15 Then aux4(15 - i1) = i1
    If i1 >= 0 And i1 <= 9 Then tram1(9 - i1) = i1 + 1
    If i1 >= 0 And i1 <= 5 Then tram2(5 - i1) = i1 + 1
Next i1
aux5(0) = 100: aux5(1) = 90: aux5(2) = 80: aux5(3) = 70: aux5(4) = 60: aux5(5) = 50
aux5(6) = 40: aux5(7) = 30: aux5(8) = 20: aux5(9) = 10: aux5(10) = 0
aux6(0) = 5: aux6(1) = 4.5: aux6(2) = 4: aux6(3) = 3.5: aux6(4) = 3: aux6(5) = 2.5
aux6(6) = 2: aux6(7) = 1.5: aux6(8) = 1: aux6(9) = 0.5: aux6(10) = 0

If ISIMULS(1) <> 0 Then
   ReDim sims(1 To ISIMULS(1))
   For i1 = ISIMULS(1) To 1 Step -1
       sims(ISIMULS(1) - i1 + 1) = CIRPF(i1)
   Next i1
End If

PAGINA = -1
TORNA:
PAGINA = PAGINA + 1
ERR_LEC = True

Do While ERR_LEC
```

```
   With IRPF
     .MultiPage1.Value = PAGINA
     If .MultiPage1.Value = 0 Then .Caption = "SIMCAT-IRPF: Mínims Personals i Familiars i Reduccions"
     If .MultiPage1.Value = 1 Then .Caption = "SIMCAT-IRPF: Tarifa"
     If .MultiPage1.Value = 2 Then .Caption = "SIMCAT-IRPF: Deduccions Generals"
     If .MultiPage1.Value = 3 Then .Caption = "SIMCAT-IRPF: Deduccions Autonòmiques"
     .Caption = .Caption & " (Base de dades: " & ANOIRPF & ")"
     If ISIMULS(1) <> 0 Then
        .ListBox_SimulRef.List = sims
        .SimulRef.Visible = True
     End If
     .ListBox_Deflactor.List = aux1
     .ListBox21.List = tram1
     .ListBox22.List = tram1
     .ListBox23.List = tram2
     .ListBox_Proj.List = A_PROJ     'això es genera a la subrutina IRPF_10PROJECCIO_PES()
     .ListBox4121.List = aux3
     .ListBox4122.List = aux4
     .ListBox4131.List = aux3
     .ListBox4132.List = aux4
     .ListBox4141.List = aux3
     .ListBox4151.List = aux5
     .ListBox4171.List = aux6
     .ListBox4181.List = aux3
     .ListBox4182.List = aux4
     .ListBox4191.List = aux3
     .ListBox41101.List = aux3
     .ListBox051.List = aux1
     .ListBox052.List = aux1
     .ListBox053.List = aux1
     .ListBox054.List = aux1
     .ListBox055.List = aux1
     .Llei.Value = True
     .Show
   End With
   If SORTIR Then Exit Sub
Loop
If PAGINA < 3 Then GoTo TORNA
If PAGINA = 3 Then Exit Sub

End Sub
Private Sub IRPF_10PROJECCIO_PES(opcio As Integer)

Dim d_proj As Integer, i As Integer, j As Integer, j0 As Integer, j1 As Integer, nom As String

nom = ThisWorkbook.Path & "\DADES\Projeccions.xlsx"

Application.ScreenUpdating = False

Set LLIBRE_PROJECCIONS = Workbooks.Open(nom)

Workbooks(Workbooks.Count).Activate
Sheets("ValorsAEAT").Activate

If opcio = 1 Then

   d_proj = 0        'Quants anys apareixen en les possibilitats de projecció
   For j = 2 To 10
       If Cells(1, j) > ANOIRPF And Cells(2, j) <> "" Then d_proj = d_proj + 1
   Next j

   ReDim A_PROJ(d_proj)
   For i = 0 To d_proj
       A_PROJ(d_proj - i) = ANOIRPF + i
   Next i

   GoTo ACABAT_PROJ

ElseIf opcio = 2 Then

   ReDim C_PROJ(1 To 10)
   For i = 1 To 10
       C_PROJ(i) = 1
   Next i

   If ANY_PROJ = ANOIRPF Then GoTo ACABAT_PROJ

   For j = 2 To 10
       If Cells(1, j) = ANOIRPF Then
          j0 = j
          Exit For
       End If
   Next j
```

```
    For j = 2 To 10
        If Cells(1, j) = ANY_PROJ Then
           j1 = j
           Exit For
        End If
    Next j

    For i = 0 To 9
        C_PROJ(i + 1) = Cells(i + 2, j1) / Cells(i + 2, j0)
    Next i

'For i = 1 To 10
'Debug.Print Format(C_PROJ(i), "0.0000")
'Next i

End If

ACABAT_PROJ:

LLIBRE_PROJECCIONS.Close
Application.ScreenUpdating = True

End Sub
Private Sub IRPF_10PROJECCIO_RENDIMENTS(p140, p170, p197, p223, _
                                        p024, p035, p047, p050, p221, _
                                        p015, p075, p080, p085, p220, p222, p245, p255, p265, p275, p686687,
p688, _
                                        p450, p451, p453, p454, _
                                        p457, p458)

'rendes empresarials --> p140,p170,p197,p223
'capital mobiliari   --> p024,p035,p047,p050,p221
'resta rendes        --> p015,p075,p080,p085,p220,p222,p245,p255,p265,p275,p686687,p688
'plusvàlues < 1 any  --> p450,p451,p453,p454
'plusvàlues > 1 any  --> p457,p458

p140 = p140 * PROJ(1): p170 = p170 * PROJ(1): p197 = p197 * PROJ(1): p223 = p223 * PROJ(1)

p024 = p024 * PROJ(2): p035 = p035 * PROJ(2): p047 = p047 * PROJ(2): p050 = p050 * PROJ(2): p221 = p221 *
PROJ(2)

p015 = p015 * PROJ(3): p075 = p075 * PROJ(3): p080 = p080 * PROJ(3): p085 = p085 * PROJ(3)
p220 = p220 * PROJ(3): p222 = p222 * PROJ(3): p245 = p245 * PROJ(3): p255 = p255 * PROJ(3): p265 = p265 *
PROJ(3)
p275 = p275 * PROJ(3): p686687 = p686687 * PROJ(3):                  p688 = p688 * PROJ(3)

p450 = p450 * PROJ(4): p451 = p451 * PROJ(4): p453 = p453 * PROJ(4): p454 = p454 * PROJ(4)

p457 = p457 * PROJ(5): p458 = p458 * PROJ(5)

End Sub
Private Sub IRPF_20SIMULACIO(opcio As Integer)
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''
'Això és per fer comprovacions
'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''
'Open "C:\SIMCAT\Errors.txt" For Output As #100
'Write #100, "registre", "obligado", "prov", "cd", "uf", "estciv", "sex", "ed", "dminus", "des", "especial",
"especial1", _
'             "catsoc", "ec", "cminus", "nd", "nd3", "nd3_15", "nd16_17", "nd18_24", "nd25", "nd_331", "nd_33",
"nd_65", _
'             "na", "na65", "na75", "na_331", "na_33", "na_65", "estrat", _
'             "p015", "i018", "i019", "i020", "p024", "p035", "p047", "p050", "p075", "p080", "p085", "p140",
"p170", _
'             "p197", "p220", "p221", "p222", "p223", "p245", "p255", "p265", "p275", "p450", "p451", "p453",
"p454", _
'             "p457", "p458", "p461", "p500", "p505", "p530", "p560", "p585", "p600", "p617", "p619", "p623", _
'             "p686687", "p688", _
'             "b_viv1", "b_viv2", _
'             "p702", "p704", "p706", "p708", "p710", "p712", "p714", "p716", "p773", "p733", _
'             "p703", "p705", "p707", "p709", "p711", "p713", "p715", "p772", _
'             "p876", "p877", "p878", "p879", "p880", "p881", "p882", "p883", "p566", "p567", _
'             "p722725", "p726729", "p734737", "p735", "p738739", "p740", "p756", "qfinal", "pes", _
'             "X(i1, 10)", "X(i1, 11)", "X(i1, 22)"
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''
```

```
'Això és per la Memòria Tributària
'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''
'Dim auxmpf, auxred As Double
'Open "C:\SIMCAT\TaulaA34a_A34b.txt" For Output As #100
'Write #100, "rtc", "bit", "big", "bie", "blt", "red", "mpf", "qra", "pes"
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''
'X(i1, 1)  renda total contribuent .................... (p455 + p465 + redrt + p686687) sempre positiva
'
'X(i1, 2)  base imposable total ....................... (p455 + p465) sempre positiva
'
'X(i1, 3)  base liquidable total ...................... (p620 + p695) sempre positiva
'
'X(i1, 4)  base imposable general ..................... (p455) sempre positiva
'
'X(i1, 5)  base liquidable general .................... (p620) sempre positiva
'
'X(i1, 6)  reduccions plans pensions .................. (p500 + p505 + p530 + p560 + p600)
'
'X(i1, 7)  reducció tributació conjunta ............... (p610 + p621)
'
'X(i1, 8)  quota deduïda pel MPF ESTAT ................
'
'X(i1, 9)  quota deduïda pel MPF Catalunya ............
'
'X(i1, 10) quota íntegra estatal ...................... (p693 + p696)
'
'X(i1, 11) quota íntegra autonòmica ................... (p694 + p697)
'
'X(i1, 12) quota íntegra total
'
'X(i1, 13) deducció habitatge habitual ESTAT S/QIE .... (p700 + p716 + p773)
'
'X(i1, 14) resta deduccions ESTAT s/QIE ............... (p702 + p704 + p706 + p708 + p710 + p712 + p714)
'
'X(i1, 15) deducció habitatge habitual CCAA S/QIA ..... (p701 + p772)
'
'X(i1, 16) resta deduccions CCAA s/QIA ................ (p703 + p705 + p707 + p709 + p711 + p713 + p715)
'
'X(i1, 17) Deduccions CCAA específiques s/QIA ......... (p876 + p877 + p878 + p879 + p880 + p881 + p882 + p883 +
p566 + p567)'
'X(i1, 18) quota líquida incrementada ESTAT ........... X(i1,10) - X(i1,13) - X(i1,14) + p722725
'
'X(i1, 19) quota líquida incrementada Catalunya ....... X(i1,11) - X(i1,15) - X(i1,16) - X(i1,17) + p726729
'                                                                        '
'X(i1, 20) deduccions i compensacions posteriors ...... (p734737 + p735 + p738739 + p740)
'
'X(i1, 21) deduccions maternitat i naixement .......... p756
'
'X(i1, 22) quota resultant autoliquidació ............. X(i1,20) + X(i1,21)
'
'X(i1, 23) factor elevació
'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''

'Application.ScreenUpdating = True
'Application.ScreenUpdating = False

Dim i1 As Long, ii1 As Long, it As Integer, j1 As Integer, j2 As Integer, k1 As Integer, l1 As Integer

''''''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul preliminar sobre trams i tipus impositius'
''''''''''''''''''''''''''''''''''''''''''''''''''

Dim auxntramsg As Integer
auxntramsg = Application.max(NTRAMSG(1), NTRAMSG(2))
ReDim tt(1 To auxntramsg - IIf(auxntramsg = 1, 0, 1), 1 To 2) As Double
For j1 = 1 To 2
    tt(1, j1) = T(1, j1) * TIPUSG(1, j1)
    If NTRAMSG(j1) > 2 Then
       For it = 2 To NTRAMSG(j1) - 1
           tt(it, j1) = tt(it - 1, j1) + ((T(it, j1) - T(it - 1, j1)) * TIPUSG(it, j1))
       Next it
    End If
Next j1

ReDim tte(1 To NTRAMSE - IIf(NTRAMSE = 1, 0, 1), 1 To 2) As Double
```

```
For j1 = 1 To 2
    tte(1, j1) = TE(1, j1) * TIPUSE(1, j1)
    If NTRAMSE > 2 Then
       For it = 2 To NTRAMSE - 1
           tte(it, j1) = tte(it - 1, j1) + ((TE(it, j1) - TE(it - 1, j1)) * TIPUSE(it, j1))
       Next it
    End If
Next j1

''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables del fitxer de lectura'
''''''''''''''''''''''''''''''''''''''''''''''''

Dim catsoc As Integer, cd As Integer, cminus As Integer, des As Integer, dminus As Integer, ec As Integer, ed As
Integer, _
    especial As Integer, especial1 As Integer, estciv As Integer, estrat As Integer, na As Integer, na65 As
Integer, _
    na75 As Integer, na_33 As Integer, na_331 As Integer, na_65 As Integer, nd As Integer, nd3 As Integer,
nd3_15 As Integer, _
    nd16_17 As Integer, nd18_24 As Integer, nd25 As Integer, nd_33 As Integer, nd_331 As Integer, nd_65 As
Integer, _
    obligado As Integer, prov As Integer, registre As Long, sex As Integer, uf As Integer, _
    p015, i018 As Integer, i019 As Integer, i020 As Integer, p024, p035, _
    p047, p050, p075, p080, p085, p140, p170, _
    p197, p220, p221, p222, p223, p245, p255, _
    p265, p275, p450, p451, p453, p454, p457, _
    p458, p461, p500, p505, p530, p560, p585, _
    p600, p617, p619, p623, p686687, p688, _
    b_viv1, b_viv2, _
    p702, p704, p706, p708, p710, p712, p714, p716, p773, p733, _
    p703, p705, p707, p709, p711, p713, p715, p772, p876, p877, p878, p879, p880, p881, p882, p883, p566, p567,
_
    p722725, p726729, p734737, p735, p738739, p740, p756, _
    pes, qfinal As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables pel càlcul de la simulació'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Dim auxp1 As Integer, auxp2, auxr As Integer, auxv, be, daut, redrt, _
    p017, p018, p019, p020, p021, p452, p460, _
    p465, p615, p621, p630, p680c, p680e, p693, p694, _
    p695, p696, p697, p771 As Double

''''''''''''''''''''''''''''''
'Lectura definitiva de dades'
''''''''''''''''''''''''''''''

Open NOM_IRPF_DADES & ANOIRPF & ".dat" For Input As #1
Input #1, N1, N2   'N1=Obligats  N2=No Obligats

''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables després de conèixer N'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''

N = N1 + IIf(DECL_NOMBRE = "TOTS", N2, 0)

Dim spes2, vgp, i_pag As Integer
ReDim bg(1 To 3), CATEG(1 To N) As Integer, IND(1 To N, 3), MITJANA(1 To 23), PAG(1 To 3), _
      q(1 To 3, 1 To 2), qe(1 To 2), SUMA(1 To 22), vpag(1 To 4), vx(1 To 22, 1 To 6), _
      VT(1 To 286, 12), X(1 To N, 1 To 27)
NT = 0
spes2 = 0
j2 = 1
i1 = 0
For ii1 = 1 To N1 + N2
    i_pag = 0
    Input #1, registre, obligado, prov, cd, uf, estciv, sex, ed, dminus, des, especial, especial1, catsoc, ec,
cminus, _
              nd, nd3, nd3_15, nd16_17, nd18_24, nd25, nd_331, nd_33, nd_65, _
              na, na65, na75, na_331, na_33, na_65, estrat, _
              p015, i018, i019, i020, p024, p035, p047, p050, p075, p080, p085, p140, p170, p197, p220, p221,
p222, _
              p223, p245, p255, p265, p275, p450, p451, p453, p454, p457, p458, p461, p500, p505, p530, p560,
p585, p600, _
              p617, p619, p623, p686687, p688, b_viv1, b_viv2, p702, p704, p706, p708, p710, p712, p714, p716,
p773, p733, _
              p703, p705, p707, p709, p711, p713, p715, p772, p876, p877, p878, p879, p880, p881, p882, p883,
p566, p567, _
              p722725, p726729, p734737, p735, p738739, p740, p756, qfinal, pes

If DECL_NOMBRE <> "TOTS" And obligado = 0 Then GoTo SALTA_TOTS
```

```
    i1 = i1 + 1

    CATEG(i1) = catsoc
    IND(i1, 0) = i1             'index ordenació per riquesa del contribuent. tal com està ordenada la base de
dades

    X(i1, 23) = pes

    For j1 = 1 To 10
        If estrat = j1 Then X(i1, 23) = X(i1, 23) * C_PROJ(j1)  'projecció dels declarants
    Next j1

    If (ANY_PROJ = ANOIRPF) And (PROJ(1) <> 1 Or PROJ(2) <> 1 Or PROJ(3) <> 1 Or PROJ(4) <> 1 Or PROJ(5) <> 1)
Then

       'rendes empresarials --> p140,p170,p197,p223
       'capital mobiliari   --> p024,p035,p047,p050,p221
       'resta rendes        --> p015,p075,p080,p085,p220,p222,p245,p255,p265,p275,p686687,p688
       'plusvàlues < 1 any  --> p450,p451,p453,p454
       'plusvàlues > 1 any  --> p457,p458

       Call IRPF_10PROJECCIO_RENDIMENTS(p140, p170, p197, p223, _
                                        p024, p035, p047, p050, p221, _
                                        p015, p075, p080, p085, p220, p222, p245, p255, p265, p275, p686687,
p688, _
                                        p450, p451, p453, p454, _
                                        p457, p458)

    End If

If p024 = 0 And p221 <= 0 Then GoTo SALTA_DIVIDENDS  'Ajustament de la reducció per dividends
    If p024 > 0 Then p035 = p035 - p024
    If p024 > 0 And p221 > 0 Then
       p024 = p024 + 1500 - RDIVE
       If p024 < 0 Then
          p221 = Application.max(0, p221 + p024)
          p024 = 0
       End If
    Else
       If p221 = 0 Then
          p024 = Application.max(0, p024 + 1500 - RDIVE)
GoTo JA
       Else
          p221 = Application.max(0, p221 + 1500 - RDIVE)
       End If
    End If
JA: If p024 > 0 Then p035 = p035 + p024             'Rdt net reduït Capital mobiliari BI estalvi
SALTA_DIVIDENDS:

    p460 = Application.max(0, p035 + p221)

    p465 = p457 - p458 + p460 - p461                'Base Imposable Estalvi=BIE

    If (p047 + p080 + p075 + p140 + p170 + p197 + _
        p220 + p222 + p223 + p245 + p255 + p265 + _
        p275 + p450 + p465) < 6501 Then auxr = 0 Else auxr = 1

    p465 = Application.max(0, p457 - p458 + p460 - p461) 'Base Imposable Estalvi=BIE

                                                    'Rdt net treball=p015
    redrt = 0
    p021 = p015

If RT(0, 0) <> 1 Or p021 <= 0 Then GoTo SALTA_RENDIMENTS_TREBALL:

    If p015 <= RT(1, 2) Then
       p017 = RT(1, 3)
    ElseIf p015 > RT(1, 2) And p015 <= RT(2, 2) Then
       p017 = RT(1, 3) - 0.35 * (p015 - RT(1, 2))
    ElseIf p015 > RT(2, 2) Then
       p017 = RT(3, 3)
    End If
    If auxr = 0 Then p017 = Application.min(p017, p021) Else p017 = Application.min(p021, RT(3, 3))

    If i018 = 1 Then p018 = Application.min(p017, p021 - p017) Else p018 = 0

    If i019 = 1 Then p019 = Application.min(p017, p021 - p017 - p018) Else p019 = 0

    p020 = 0
    If i020 = 1 Then
       If cd = 1 Then
          If dminus = 33 Or cminus = 33 Then p020 = Application.min(RT(4, 1), p021 - p017 - p018 - p019)
          If dminus = 331 Or dminus = 65 Or cminus = 331 Or cminus = 65 Then _
```

```
               p020 = Application.min(RT(4, 2), p021 - p017 - p018 - p019)
       ElseIf cd = 2 Then
          If dminus = 33 Then p020 = Application.min(RT(4, 1), p021 - p017 - p018 - p019)
          If dminus = 331 Or dminus = 65 Then p020 = Application.min(RT(4, 2), p021 - p017 - p018 - p019)
       End If
    End If

    redrt = p017 + p018 + p019 + p020

SALTA_RENDIMENTS_TREBALL:

    p021 = p021 - redrt                              'Rdt net reduït treball

    p452 = p021 + p050 + p080 + p085 + p140 + _
           p170 + p197 + p220 + p222 + p223 + _
           p245 + p255 + p265 + p275                 'Saldo net de rendiments

'-------------------------------------------------------------------------------------------------'
    X(i1, 4) = Application.max(0, p450 - p451 + p452 - p453 - p454)  'Base Imposable General=BIG '
    X(i1, 1) = X(i1, 4) + p465 + redrt + Application.max(0, p686687) 'Renda total contribuent=RTC'
    X(i1, 2) = X(i1, 4) + p465                                        'Base Imposable total=BIT   '
'-------------------------------------------------------------------------------------------------'

    p615 = p585                                      'Red efec. BIG pensions compens. i anual. aliments
    X(i1, 5) = X(i1, 4)                              'BLG sotmesa a gravamen

If X(i1, 5) = 0 Then GoTo SALTA_BLG

If RTC(0) <> 1 Then GoTo SALTA_TRIBUTACIO_CONJUNTA

    If cd = 1 Then
       If uf = 1 Then X(i1, 7) = Application.min(RTC(1), X(i1, 5)) 'Red efec. BIG tributació conjunta
       If uf = 2 Then X(i1, 7) = Application.min(RTC(2), X(i1, 5)) 'Red efec. BIG tributació conjunta
       If uf = 3 Then X(i1, 7) = 0                                 'Red efec. BIG tributació conjunta
       X(i1, 5) = X(i1, 5) - X(i1, 7)
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If

SALTA_TRIBUTACIO_CONJUNTA:

If RPP(0) <> 1 Then GoTo SALTA_PLANSPENSIONS

    If p500 > 0 Then                                 'plans pensions contribuent
       If cd = 1 And estciv = 2 Then auxp1 = 2 Else auxp1 = 1
       auxp2 = Application.max(0, p015 + p140 + p170 + p197)
       If ed <= 50 Then
          p500 = Application.min(p500, RPP(1) * auxp1, 0.3 * auxp2, X(i1, 5))
       Else
          p500 = Application.min(p500, RPP(2) * auxp1, 0.5 * auxp2, X(i1, 5))
       End If
       X(i1, 6) = p500
       X(i1, 5) = X(i1, 5) - p500
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If

    If p505 > 0 Then                                 'plans pensions cònjuge
       p505 = Application.min(p505, RPP(3), X(i1, 5))
       X(i1, 6) = X(i1, 6) + p505
       X(i1, 5) = X(i1, 5) - p505
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If

    If p530 > 0 Then                                 'plans pensions discapacitats
       p530 = Application.min(p530, RPP(4), X(i1, 5))
       X(i1, 6) = X(i1, 6) + p530
       X(i1, 5) = X(i1, 5) - p530
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If

    If p560 > 0 Then                                 'patrimonis protegits discapacitats
       p560 = Application.min(p560, RPP(4), X(i1, 5))
       X(i1, 6) = X(i1, 6) + p560
       X(i1, 5) = X(i1, 5) - p560
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If

    If p600 > 0 Then                                 'plans pensions esportistes professionals
       p600 = Application.min(p600, RPP(4), X(i1, 5))
       X(i1, 6) = X(i1, 6) + p600
       X(i1, 5) = X(i1, 5) - p600
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If
```

```
SALTA_PLANSPENSIONS:

    If p585 > 0 Then                                    'pensions compens. i anual. aliments
       p615 = Application.min(p585, X(i1, 5))
       X(i1, 5) = X(i1, 5) - p615
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If

    If p617 > 0 Then                                    'quotes d'afiliació
       p617 = Application.min(p617, X(i1, 5))
       X(i1, 5) = X(i1, 5) - p617
If X(i1, 5) = 0 Then GoTo SALTA_BLG
    End If

    X(i1, 5) = X(i1, 5) - Application.min(X(i1, 5), p619)

SALTA_BLG:

    p621 = 0                                            'Red efec. BIE tributació conjunta
    p630 = p465                                         'BL estalvi

If p630 = 0 Then GoTo SALTA_BLE

If RTC(0) <> 1 Then GoTo SALTA_TRIBUTACIO_CONJUNTA2

    If cd = 1 Then
       If uf = 1 Then p621 = Application.min(RTC(1) - X(i1, 7), p630) 'Red efec. BIE tributació conjunta
       If uf = 2 Then p621 = Application.min(RTC(2) - X(i1, 7), p630) 'Red efec. BIE tributació conjunta
       If uf = 3 Then p621 = 0
       X(i1, 7) = X(i1, 7) + p621
       p630 = p630 - p621
If p630 = 0 Then GoTo SALTA_BLE
    End If

SALTA_TRIBUTACIO_CONJUNTA2:

    If p585 - p615 > 0 Then p630 = p630 - Application.min(p585 - p615, p630) 'Red efec. BIE pensions compens. i
anual. aliments
If p630 = 0 Then GoTo SALTA_BLE

    If p623 > 0 Then p630 = p630 - Application.min(p623, p630)        'Red efec. BIE quotes d'afiliació

SALTA_BLE:

    ReDim p680(1 To 2) As Double                        'mpf BLG (1)=ESTAT, (2)=CCAA
    ReDim p681(1 To 2) As Double                        'mpf BLE (1)=ESTAT, (2)=CCAA

If MPF(0, 0) <> 1 Then GoTo SALTA_MPF

    For k1 = 1 To 2
        p680(k1) = MPF(1, k1)
        If ed > 65 Then p680(k1) = p680(k1) + MPF(6, k1)
        If ed > 75 Then p680(k1) = p680(k1) + MPF(7, k1)
        If dminus = 33 Or dminus = 331 Then p680(k1) = p680(k1) + MPF(8, k1)
        If dminus = 65 Then p680(k1) = p680(k1) + MPF(9, k1)
        If dminus = 331 Or dminus = 65 Then p680(k1) = p680(k1) + MPF(11, k1)

        If cd = 1 Then
           If ec > 65 Then p680(k1) = p680(k1) + MPF(6, k1)
           If ec > 75 Then p680(k1) = p680(k1) + MPF(7, k1)
           If (cminus = 33 Or cminus = 331) Then p680(k1) = p680(k1) + MPF(8, k1)
           If cminus = 65 Then p680(k1) = p680(k1) + MPF(9, k1)
           If (cminus = 331 Or cminus = 65) Then p680(k1) = p680(k1) + MPF(11, k1)
        End If

        If nd <> 0 Then
           If nd >= 1 Then p680(k1) = p680(k1) + (MPF(2, k1) / cd)
           If nd >= 2 Then p680(k1) = p680(k1) + (MPF(3, k1) / cd)
           If nd >= 3 Then p680(k1) = p680(k1) + (MPF(4, k1) / cd)
           If nd >= 4 Then p680(k1) = p680(k1) + ((nd - 3) * MPF(5, k1) / cd)
           If nd3 <> 0 Then p680(k1) = p680(k1) + (nd3 * MPF(10, k1) / cd)
           If nd_33 <> 0 Or nd_331 <> 0 Then p680(k1) = p680(k1) + ((nd_33 + nd_331) * MPF(8, k1) / cd)
           If nd_65 <> 0 Then p680(k1) = p680(k1) + (nd_65 * MPF(9, k1) / cd)
           If nd_331 <> 0 Or nd_65 <> 0 Then p680(k1) = p680(k1) + ((nd_331 + nd_65) * MPF(11, k1) / cd)
        End If

        If na <> 0 Then
           If na65 <> 0 Then p680(k1) = p680(k1) + (na65 * MPF(6, k1))
           If na65 = 0 And (na_33 <> 0 Or na_331 <> 0 Or na_65 <> 0) Then p680(k1) = p680(k1) + ((na_33 + na_331
+ na_65) * MPF(6, k1))
           If na75 <> 0 Then p680(k1) = p680(k1) + (na75 * MPF(7, k1))
           If na_33 <> 0 Or na_331 <> 0 Then p680(k1) = p680(k1) + ((na_33 + na_331) * MPF(8, k1))
           If na_65 <> 0 Then p680(k1) = p680(k1) + (na_65 * MPF(9, k1))
```

```
           If na_331 <> 0 Or na_65 <> 0 Then p680(k1) = p680(k1) + ((na_331 + na_65) * MPF(11, k1))
        End If

        p681(k1) = Application.min(Application.max(0, p680(k1) - X(i1, 5)), p630)  'mpf romanent a la BE
        p680(k1) = Application.min(p680(k1), X(i1, 5))                            'mpf efectiu a la BG
    Next k1

SALTA_MPF:

    p693 = 0                                        'quota ESTAT BL general
    p694 = 0                                        'quota CCAA  BL general
    q(1, 1) = 0: q(1, 2) = 0: q(2, 1) = 0: q(2, 2) = 0: q(3, 1) = 0: q(3, 2) = 0

If X(i1, 5) = 0 Then GoTo SALTA_QUOTA_GENERAL

    bg(1) = Application.max(0, X(i1, 5) - p688)                       '1a. quota BL general
    If MPF(0, 0) = 1 Then
       p680e = p680(1) + IIf(p688 <> 0, 1600, 0)                      '2a. quota mpf ESTAT
       p680c = p680(2) + IIf(p688 <> 0, 1600, 0)                      '2a. quota mpf Catalunya
    End If
    bg(3) = p688                                                      '3a. quota anualitats aliments decisió
judicial

    For k1 = 1 To IIf(p688 <> 0, 3, 2)                                '2 o 3 passades per tarifa en funció de
p688

        For l1 = 1 To 2                                               'l1=1 ESTAT, l1=2 CCAA
            If l1 = 1 Then bg(2) = p680e
            If l1 = 2 Then bg(2) = p680c

If bg(k1) = 0 Then GoTo SALTA_BASEG0

            If NTRAMSG(l1) = 1 Then
               q(k1, l1) = bg(k1) * TIPUSG(1, l1)
            Else
               it = NTRAMSG(l1)
               If bg(k1) <= T(1, l1) Then q(k1, l1) = bg(k1) * TIPUSG(1, l1)
               If NTRAMSG(l1) > 2 Then
                  For j1 = 2 To NTRAMSG(l1) - 1
                      If bg(k1) > T(j1 - 1, l1) And bg(k1) <= T(j1, l1) Then _
                      q(k1, l1) = tt(j1 - 1, l1) + ((bg(k1) - T(j1 - 1, l1)) * TIPUSG(j1, l1))
                  Next j1
               End If
               If bg(k1) > T(it - 1, l1) Then q(k1, l1) = tt(it - 1, l1) + ((bg(k1) - T(it - 1, l1)) *
TIPUSG(it, l1))
            End If

SALTA_BASEG0:

        Next l1
    Next k1

    p693 = q(1, 1) + q(3, 1)
    p694 = q(1, 2) + q(3, 2)
    If MPF(0, 0) = 1 Then
       q(2, 1) = Application.min(q(2, 1), p693)
       q(2, 2) = Application.min(q(2, 2), p694)
    Else
       q(2, 1) = 0
       q(2, 2) = 0
    End If
    X(i1, 8) = q(2, 1)                              'quota deduïda pel MPF ESTAT
    X(i1, 9) = q(2, 2)                              'quota deduïda pel MPF Catalunya
    p693 = p693 - q(2, 1)                           'quota ESTAT BL general
    p694 = p694 - q(2, 2)                           'quota CCAA  BL general

SALTA_QUOTA_GENERAL:

    p695 = p630 - p681(1)                           'BL estalvi sotmesa a gravamen ESTAT
    p695 = p695 - Application.min(p695, MINIM_EXEMPTE)
    p771 = p630 - p681(2)                           'BL estalvi sotmesa a gravamen CCAA
    p771 = p771 - Application.min(p771, MINIM_EXEMPTE)

'-------------------------------------------------------------------------------------------'
    If p695 >= p771 Then X(i1, 3) = X(i1, 5) + p695                'Base Liquidable Total=BLT  '
    If p695 < p771 Then X(i1, 3) = X(i1, 5) + p771                 'Base Liquidable Total=BLT  '
'-------------------------------------------------------------------------------------------'

    p696 = 0                                        'quota ESTAT base estalvi
    p697 = 0                                        'quota CCAA  base estalvi

If p695 = 0 And p771 = 0 Then GoTo SALTA_QUOTA_ESTALVI
```

```
    qe(1) = 0: qe(2) = 0
    For k1 = 1 To 2
        If k1 = 1 Then be = p695
        If k1 = 2 Then be = p771

If be = 0 Then GoTo SALTA_BASEE0

        If NTRAMSE = 1 Then
           qe(k1) = be * TIPUSE(1, k1)
        Else
           it = NTRAMSE
           If be <= TE(1, k1) Then qe(k1) = be * TIPUSE(1, k1)
           If NTRAMSE > 2 Then
              For j1 = 2 To NTRAMSE - 1
                  If be > TE(j1 - 1, k1) And be <= TE(j1, k1) Then _
                     qe(k1) = tte(j1 - 1, k1) + ((be - TE(j1 - 1, k1)) * TIPUSE(j1, k1))
              Next j1
           End If
           If be > TE(it - 1, k1) Then qe(k1) = tte(it - 1, k1) + ((be - TE(it - 1, k1)) * TIPUSE(it, k1))
        End If

SALTA_BASEE0:

    Next k1
    p696 = qe(1)                                    'quota ESTAT base estalvi
    p697 = qe(2)                                    'quota CCAA  base estalvi

SALTA_QUOTA_ESTALVI:

    X(i1, 10) = p693 + p696                         'quota íntegra ESTAT
    X(i1, 11) = p694 + p697                         'quota íntegra CCAA
    X(i1, 12) = X(i1, 10) + X(i1, 11)               'quota íntegra total
    daut = 0                                        'deduccions autonòmiques afegides

If obligado = 0 Then GoTo NO_OBLIGATS
If X(i1, 10) = 0 Then GoTo NO_PAGADORS

If DED(0) <> 1 Then GoTo DEDUCCIONS_ESTAT

If DED(1) <> 1 Or (b_viv1 = 0 And b_viv2 = 0) Then GoTo DEDUCCIONS702703

    b_viv1 = Application.min(DEDV(1, 1), b_viv1)
    b_viv2 = Application.min(DEDV(2, 1), b_viv2)
    X(i1, 13) = b_viv1 * DEDV(1, 2) + b_viv2 * DEDV(2, 2)                      'ESTAT
    X(i1, 15) = b_viv1 * DEDV(1, 3) + b_viv2 * DEDV(2, 3)                      'CCAA, normal
    If especial = 1 Then X(i1, 15) = b_viv1 * DEDV(1, 4) + b_viv2 * DEDV(2, 3) 'CCAA, especial

    X(i1, 13) = Application.min(X(i1, 13), X(i1, 10))
    X(i1, 15) = Application.min(X(i1, 15), X(i1, 11))
    X(i1, 10) = X(i1, 10) - X(i1, 13)
    X(i1, 11) = X(i1, 11) - X(i1, 15)
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS702703:

If DED(2) <> 1 Or (p702 = 0 And p703 = 0) Then GoTo DEDUCCIONS704705

    p702 = Application.min(p702, X(i1, 10))         'Béns culturals ESTAT
    p703 = Application.min(p703, X(i1, 11))         'Béns culturals CCAA
    X(i1, 14) = p702
    X(i1, 16) = p703
    X(i1, 10) = X(i1, 10) - p702
    X(i1, 11) = X(i1, 11) - p703
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS704705:

If DED(3) <> 1 Or (p704 = 0 And p705 = 0) Then GoTo DEDUCCIONS706_711

    p704 = Application.min(p704, X(i1, 10))         'Donatius ESTAT
    p705 = Application.min(p705, X(i1, 11))         'Donatius CCAA
    X(i1, 14) = X(i1, 14) + p704
    X(i1, 16) = X(i1, 16) + p705
    X(i1, 10) = X(i1, 10) - p704
    X(i1, 11) = X(i1, 11) - p705
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS706_711:

If DED(4) <> 1 Or (p706 = 0 And p707 = 0 And p708 = 0 And p709 = 0 And p710 = 0 And p711 = 0) Then GoTo
DEDUCCIONS712713

If p706 = 0 And p707 = 0 Then GoTo DEDUCCIONS708709
```

```
    p706 = Application.min(p706, X(i1, 10))          'Activitats econòmiques, general ESTAT
    p707 = Application.min(p707, X(i1, 11))          'Activitats econòmiques, general CCAA
    X(i1, 14) = X(i1, 14) + p706
    X(i1, 16) = X(i1, 16) + p707
    X(i1, 10) = X(i1, 10) - p706
    X(i1, 11) = X(i1, 11) - p707
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS708709:

If p708 = 0 And p709 = 0 Then GoTo DEDUCCIONS710711

    p708 = Application.min(p708, X(i1, 10))          'Activitats econòmiques, RIC ESTAT
    p709 = Application.min(p709, X(i1, 11))          'Activitats econòmiques, RIC CCAA
    X(i1, 14) = X(i1, 14) + p708
    X(i1, 16) = X(i1, 16) + p709
    X(i1, 10) = X(i1, 10) - p708
    X(i1, 11) = X(i1, 11) - p709
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS710711:

If p710 = 0 And p711 = 0 Then GoTo DEDUCCIONS712713

    p710 = Application.min(p710, X(i1, 10))          'Activitats econòmiques, Canàries ESTAT
    p711 = Application.min(p711, X(i1, 11))          'Activitats econòmiques, Canàries CCAA
    X(i1, 14) = X(i1, 14) + p710
    X(i1, 16) = X(i1, 16) + p711
    X(i1, 10) = X(i1, 10) - p710
    X(i1, 11) = X(i1, 11) - p711
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS712713:

If DED(5) <> 1 Or (p712 = 0 And p713 = 0) Then GoTo DEDUCCIONS714715

    p712 = Application.min(p712, X(i1, 10))          'Ceuta-Melilla ESTAT
    p713 = Application.min(p713, X(i1, 11))          'Ceuta-Melilla CCAA
    X(i1, 14) = X(i1, 14) + p712
    X(i1, 16) = X(i1, 16) + p713
    X(i1, 10) = X(i1, 10) - p712
    X(i1, 11) = X(i1, 11) - p713
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS714715:

If DED(6) <> 1 Or (p714 = 0 And p715 = 0) Then GoTo DEDUCCIONS716772

    p714 = Application.min(p714, X(i1, 10))          'Comptes empresa ESTAT
    p715 = Application.min(p715, X(i1, 11))          'Comptes empresa CCAA
    X(i1, 14) = X(i1, 14) + p714
    X(i1, 16) = X(i1, 16) + p715
    X(i1, 10) = X(i1, 10) - p714
    X(i1, 11) = X(i1, 11) - p715
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS716772:

If DED(1) <> 1 Or (p716 = 0 And p772 = 0) Then GoTo DEDUCCIONS773

    If X(i1, 2) <= DEDV(3, 1) Then
       If X(i1, 2) <= DEDV(3, 2) Then
          p716 = DEDV(3, 3) * Application.min(DEDV(3, 4), p716 / 0.1005)
          p772 = DEDV(3, 3) * Application.min(DEDV(3, 4), p772 / 0.1005)
       Else
          p716 = DEDV(3, 3) * Application.min(DEDV(3, 4) - 1.4125 * (X(i1, 2) - DEDV(3, 2)), p716 / 0.1005)
          p772 = DEDV(3, 3) * Application.min(DEDV(3, 4) - 1.4125 * (X(i1, 2) - DEDV(3, 2)), p772 / 0.1005)
       End If
       p716 = Application.min(p716, X(i1, 10))       'Lloguer habitatge ESTAT
       p772 = Application.min(p772, X(i1, 11))       'Lloguer habitatge CCAA
       X(i1, 13) = X(i1, 13) + p716
       X(i1, 15) = X(i1, 15) + p772
       X(i1, 10) = X(i1, 10) - p716
       X(i1, 11) = X(i1, 11) - p772
     End If
If X(i1, 10) = 0 Then GoTo DEDUCCIONS_ESTAT

DEDUCCIONS773:

If DED(1) <> 1 Or (p773 = 0 And p733 = 0) Then GoTo DEDUCCIONS_ESTAT

    p773 = Application.min(p773, X(i1, 10))          'Obres millora habitatge ESTAT(1)
```

```
    X(i1, 13) = X(i1, 13) + p773
    X(i1, 10) = X(i1, 10) - p773

    If X(i1, 2) <= DEDV(4, 1) Then
       If X(i1, 2) <= DEDV(4, 2) Then
          p733 = DEDV(4, 3) * Application.min(DEDV(4, 4), p733 / 0.2)
       Else
          p733 = DEDV(4, 3) * Application.min(DEDV(4, 4) - 0.375 * (X(i1, 2) - DEDV(4, 2)), p733 / 0.2)
       End If
       p733 = Application.min(p733, X(i1, 10))       'Obres millora habitatge ESTAT(2)
       X(i1, 13) = X(i1, 13) + p733
       X(i1, 10) = X(i1, 10) - p733
    End If

DEDUCCIONS_ESTAT:

If DEDA1(0, 0) <> 1 Then GoTo DEDUCCIONS_CCAA1
If p876 = 0 And p877 = 0 And p878 = 0 And p879 = 0 And p880 = 0 And _
   p881 = 0 And p882 = 0 And p883 = 0 And p566 = 0 And p567 = 0 Then GoTo DEDUCCIONS_CCAA1

If p876 = 0 Then GoTo DEDUCCIO877                    'Naixement o adopció

    If cd = 1 Then p876 = Application.min(DEDA1(1, 1) * 2 * p876 / 300, X(i1, 11))
    If cd = 2 Then p876 = Application.min(DEDA1(1, 1) * p876 / 150, X(i1, 11))
    X(i1, 17) = p876
    X(i1, 11) = X(i1, 11) - p876
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO877:

If p877 = 0 Then GoTo DEDUCCIO878                    'Donatius entitats llengua catalana

    p877 = Application.min(DEDA1(2, 1) * p877 / 0.15, DEDA1(2, 2) * (p694 + p697), X(i1, 11))
    X(i1, 17) = X(i1, 17) + p877
    X(i1, 11) = X(i1, 11) - p877
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO878:

If p878 = 0 Then GoTo DEDUCCIO879                    'Donatius entitats innovació científica

    p878 = Application.min(DEDA1(3, 1) * p878 / 0.25, DEDA1(3, 2) * (p694 + p697), X(i1, 11))
    X(i1, 17) = X(i1, 17) + p878
    X(i1, 11) = X(i1, 11) - p878
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO879:

If p879 = 0 Then GoTo DEDUCCIO880                    'Lloguer vivenda habitual

   If nd < 3 Then p879 = Application.min(DEDA1(4, 1) * p879 / 0.1, DEDA1(4, 2), X(i1, 11))
   If nd >= 3 Or cd = 1 Then p879 = Application.min(DEDA1(4, 1) * p879 / 0.1, DEDA1(4, 2) * 2, X(i1, 11))
   X(i1, 17) = X(i1, 17) + p879
   X(i1, 11) = X(i1, 11) - p879
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO880:

If p880 = 0 Then GoTo DEDUCCIO881                    'Interessos de prèstecs estudis 3er. cicle

    p880 = Application.min(DEDA1(5, 1) * p880, X(i1, 11))
    X(i1, 17) = X(i1, 17) + p880
    X(i1, 11) = X(i1, 11) - p880
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO881:

If p881 = 0 Then GoTo DEDUCCIO882                    'Contribuents vidus o vídues

    If p881 > 150 Then p881 = Application.min(DEDA1(6, 1) * 2 * p881 / 300, X(i1, 11))
    If p881 <= 150 Then p881 = Application.min(DEDA1(6, 1) * p881 / 150, X(i1, 11))
    X(i1, 17) = X(i1, 17) + p881
    X(i1, 11) = X(i1, 11) - p881
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO882:

If p882 = 0 Then GoTo DEDUCCIO883                    'Rehabilitació vivenda habitual

      p882 = Application.min(DEDA1(7, 1) * p882 / 0.015, DEDA1(7, 2), X(i1, 11))
      X(i1, 17) = X(i1, 17) + p882
      X(i1, 11) = X(i1, 11) - p882
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1
```

```
DEDUCCIO883:

If p883 = 0 Then GoTo DEDUCCIO566                    'Donacions en benefici del medi ambient

      p883 = Application.min(DEDA1(8, 1) * p883 / 0.15, DEDA1(8, 2) * (p694 + p697), X(i1, 11))
      X(i1, 17) = X(i1, 17) + p883
      X(i1, 11) = X(i1, 11) - p883
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO566:

If p566 = 0 Then GoTo DEDUCCIO567                    'Inversió en empreses noves o de creació recent

      p566 = Application.min(DEDA1(9, 1) * p566 / 0.3, DEDA1(9, 2), X(i1, 11))
      X(i1, 17) = X(i1, 17) + p566
      X(i1, 11) = X(i1, 11) - p566
If X(i1, 11) = 0 Then GoTo DEDUCCIONS_CCAA1

DEDUCCIO567:

If p567 = 0 Then GoTo DEDUCCIONS_CCAA1               'Inversió en empreses del mercat alernatiu borsari

      p567 = Application.min(DEDA1(10, 1) * p567 / 0.2, DEDA1(10, 2), X(i1, 11))
      X(i1, 17) = X(i1, 17) + p567
      X(i1, 11) = X(i1, 11) - p567

DEDUCCIONS_CCAA1:

If DEDA2(0) <> 1 Then GoTo DEDUCCIONS_CCAA2          'deduccions autonòmiques afegides

    If ed > 65 Then daut = daut + DEDA2(1)
    If ed > 75 Then daut = daut + DEDA2(2)
    If dminus <> 0 Then daut = daut + DEDA2(3)

    If cd = 1 Then
       If ec > 65 Then daut = daut + DEDA2(1)
       If ec > 75 Then daut = daut + DEDA2(2)
       If cminus <> 0 Then daut = daut + DEDA2(3)
    End If

    If nd <> 0 Then
       daut = daut + ((nd_33 + nd_65) * DEDA2(3) / cd)
       If nd > 2 Then daut = daut + ((nd - 2) * DEDA2(4) / cd)
       If nd3 <> 0 Then daut = daut + (nd3 * DEDA2(5) / cd)
       If nd - nd3 <> 0 Then daut = daut + ((nd - nd3) * DEDA2(6) / cd)
       If nd > 2 Then daut = daut + (DEDA2(7) / cd)
    End If

    If na <> 0 Then
       daut = daut + (na * DEDA2(1))
       daut = daut + (na75 * DEDA2(2))
       daut = daut + ((na_33 + na_65) * DEDA2(3))
    End If

    daut = Application.min(daut, X(i1, 11))
    X(i1, 17) = X(i1, 17) + daut
    X(i1, 11) = X(i1, 11) - daut

DEDUCCIONS_CCAA2:

    X(i1, 18) = X(i1, 10) + p722725                  'increment per deduccions de les que s'ha perdut el dret
ESTAT
    X(i1, 19) = X(i1, 11) + p726729                  'increment per deduccions de les que s'ha perdut el dret
CCAA

    If DEDA2(0) = 1 Then
       If X(i1, 5) + p695 <= DEDA2(8) Then           'deducció autonòmica a la quota
          X(i1, 17) = X(i1, 17) + X(i1, 11)          'Afegeix a les deducciones autonòmiques X(i1,11)
          X(i1, 11) = 0                              'X(i1,11)=0 quota íntegr autonòmica=0
          X(i1, 19) = 0                              'X(i1,19)=0 quota líquida incrementada autonòmica=0
       End If
    End If

    X(i1, 22) = X(i1, 18) + X(i1, 19)                'quota resultant autoliquidació

If X(i1, 22) = 0 Then GoTo NO_OBLIGATS

If p734737 = 0 Then GoTo DEDUCCIO735

    p734737 = Application.min(p734737, X(i1, 22))    'Deduccions doble imposició
    X(i1, 20) = p734737
    X(i1, 22) = X(i1, 22) - p734737
```

```
If X(i1, 22) = 0 Then GoTo NO_OBLIGATS

DEDUCCIO735:

If p735 = 0 Then GoTo COMPENSACIONS

    p735 = Application.min(p735, X(i1, 22))               'Deduccions 400€
    X(i1, 20) = X(i1, 20) + p735
    X(i1, 22) = X(i1, 22) - p735
If X(i1, 22) = 0 Then GoTo NO_OBLIGATS

COMPENSACIONS:

If p738739 = 0 Then GoTo RETENCIONS

    p738739 = Application.min(p738739, X(i1, 22))         'Compensacions fiscals
    X(i1, 20) = X(i1, 20) + p738739
    X(i1, 22) = X(i1, 22) - p738739
If X(i1, 22) = 0 Then GoTo NO_OBLIGATS

RETENCIONS:

If p740 = 0 Then GoTo NO_OBLIGATS:
    p740 = Application.min(p740, X(i1, 22))               'Retencions bonificades
    X(i1, 20) = X(i1, 20) + p740
    X(i1, 22) = X(i1, 22) - p740

NO_OBLIGATS:

    X(i1, 10) = p693 + p696                               'Recupera la quota íntegra ESTAT
    X(i1, 11) = p694 + p697                               'Recupera la quota íntegra CCAA

    If obligado = 0 Then
       X(i1, 18) = X(i1, 10)
       X(i1, 19) = X(i1, 11)
       X(i1, 22) = X(i1, 18) + X(i1, 19)
    End If

NO_PAGADORS:

    X(i1, 21) = p756                                      'Maternitat

    ''''''''''''''''
    'Càlcul pagadors'
    ''''''''''''''''

    If X(i1, 22) > 0 Then i_pag = 1

    ''''''''''''''''''''''''''''''
    'Càlcul de guanyadors-perdedors'
    ''''''''''''''''''''''''''''''

    If ANOIRPF = IRPF_ANYREF And ANY_PROJ = ANOIRPF Then
       vgp = qfinal - X(i1, 22)
       If Abs(vgp) > 1 Then
          If vgp > 0 Then
             X(i1, 24) = 1
             X(i1, 26) = 0
          Else
             X(i1, 24) = 0
             X(i1, 26) = 1
          End If
          X(i1, 25) = vgp * X(i1, 24)
          X(i1, 27) = vgp * X(i1, 26)

       End If
    End If
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'''
'Això és per fer comprovacions
'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'''
'If Abs(vgp) > 1 Then
'Write #100, registre, obligado, prov, cd, uf, estciv, sex, ed, dminus, des, especial, especial1, catsoc, ec,
cminus, _
'            nd, nd3, nd3_15, nd16_17, nd18_24, nd25, nd_331, nd_33, nd_65, _
'            na, na65, na75, na_331, na_33, na_65, estrat, _
'            p015, i018, i019, i020, p024, p035, p047, p050, p075, p080, p085, p140, _
'            p170, p197, p220, p221, p222, p223, p245, p255, p265, p275, p450, p451, p453, _
'            p454, p457, p458, p461, p500, p505, p530, p560, p585, p600, p617, p619, p623, _
'            p686687, p688, _
```

```
'            b_viv1, b_viv2, _
'            p702, p704, p706, p708, p710, p712, p714, p716, p773, p733, _
'            p703, p705, p707, p709, p711, p713, p715, p772, p876, p877, p878, p879, p880, p881, p882, p883,
p566, p567, _
'            p722725, p726729, p734737, p735, p738739, p740, p756, qfinal, pes, X(i1, 10), X(i1, 11), X(i1, 22)
'End If
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''
'Això és per a la Memòria Tributària
'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''
'auxred = X(i1, 6) + X(i1, 7)
'auxmpf = p680(1) + p680(2) + p681(1)
'Write #100, X(i1, 1), X(i1, 2), X(i1, 4), p465, X(i1, 3), auxred, auxmpf, X(i1, 22), X(i1, 23)
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''
'X(i1, 18) = p735
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''
'X(i1, 4) = p465
'X(i1, 5) = p695
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''

    ''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina les variables per al càlcul descriptiu
    ''''''''''''''''''''''''''''''''''''''''''''''''

    For j1 = 1 To 22
        If X(i1, j1) <> 0 Then
           vx(j1, 1) = vx(j1, 1) + (X(i1, j1) * X(i1, 23))
           vx(j1, 2) = vx(j1, 2) + (X(i1, j1) * X(i1, 23) * X(i1, 23))
           vx(j1, 3) = vx(j1, 3) + (X(i1, j1) * X(i1, j1) * X(i1, 23) * X(i1, 23))
           vx(j1, 4) = vx(j1, 4) + 1
           vx(j1, 5) = vx(j1, 5) + X(i1, 23)
           vx(j1, 6) = vx(j1, 6) + (X(i1, 23) * X(i1, 23))
        End If
    Next j1

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina les variables per al càlcul dels "no-pagadors"'
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    spes2 = spes2 + (X(i1, 23) * X(i1, 23))
    vpag(1) = vpag(1) + (i_pag * X(i1, 23))
    vpag(2) = vpag(2) + (i_pag * X(i1, 23) * X(i1, 23))
    vpag(3) = vpag(3) + (i_pag * X(i1, 23) * X(i1, 23))

    NT = NT + X(i1, 23)

SALTA_TOTS:
Next ii1
Close #1

''''''''''''''''''''''''''''''
'Això és per fer comprovacions'
''''''''''''''''''''''''''''''
'Close #100                   '
''''''''''''''''''''''''''''''

For j1 = 1 To 22
    SUMA(j1) = vx(j1, 1)
    MITJANA(j1) = SUMA(j1) / NT
Next j1
MITJANA(23) = NT / N

''''''''''''''''''''''''
'Guarda(Descriptiu) a VT'
''''''''''''''''''''''''

VT(1, 0) = "Descriptiu"
For j1 = 1 To 22
    If vx(j1, 4) <> 0 Then
       VT(j1, 1) = vx(j1, 1) / vx(j1, 5)
       VT(j1, 2) = Sqr(vx(j1, 3) - (2 * VT(j1, 1) * vx(j1, 2)) + ((VT(j1, 1) ^ 2) * vx(j1, 6))) / vx(j1, 5)
       VT(j1, 3) = VT(j1, 1) - 1.96 * VT(j1, 2)
```

```
       VT(j1, 4) = VT(j1, 1) + 1.96 * VT(j1, 2)
       VT(j1, 5) = vx(j1, 1) / 1000000
       VT(j1, 6) = Sqr(vx(j1, 3) - ((vx(j1, 1) ^ 2) / vx(j1, 4))) / 1000000
       VT(j1, 7) = VT(j1, 5) - 1.96 * VT(j1, 6)
       VT(j1, 8) = VT(j1, 5) + 1.96 * VT(j1, 6)
    End If
Next j1

PAG(1) = vpag(1) / NT
vpag(4) = (Sqr(vpag(3) - (2 * PAG(1) * vpag(2)) + ((PAG(1) ^ 2) * spes2)) / NT)
PAG(2) = PAG(1) - 1.95996 * vpag(4)
PAG(3) = PAG(1) + 1.95996 * vpag(4)

Call COMUNS_2ORDENA("IRPF")

Call IRPF_22DECILS_INDEXS_GP(23)

Call IRPF_26DECILS_CLASE(1)

End Sub
Private Sub IRPF_22DECILS_INDEXS_GP(pes As Integer)

Dim aux, i1 As Long, it As Integer, j1 As Integer

ReDim xx_b(1 To N, 1 To 3), xx_p(1 To N) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_b(1 to N, 1 to 3)=(RTC,BIT,BLT*factor) acumulades / s(variables*factor)
'Calcula: xx_p(1 to N)        =població acumulada/NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For it = 1 To 3
    aux = 0
    For j1 = 1 To 3
        If SUMA(j1) <> 0 Then
           aux = 0
           For i1 = 1 To N
               aux = aux + (X(IND(i1, it), j1) * X(IND(i1, it), pes))
               xx_b(i1, j1) = aux / SUMA(j1)              'RTC,BIT,BLT
           Next i1
        End If
    Next j1
    aux = 0
    For i1 = 1 To N
        aux = aux + X(IND(i1, it), pes)
        xx_p(i1) = aux / NT                               'pes
    Next i1

    If it < 3 Then Call IRPF_23DECILS(it, pes, xx_b, xx_p) 'DECILS
    Call IRPF_24INDEXS(it, pes, xx_b, xx_p)                'INDEXS

Next it

If ANOIRPF = IRPF_ANYREF And ANY_PROJ = ANOIRPF Then Call IRPF_25GP(pes)          'G-P

End Sub
Private Sub IRPF_23DECILS(it, pes, xx_b, xx_p)

Dim aux, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer, l1 As Long

ReDim ds(44, 12), p(1 To 12, 2), ts(18, 12), xx_r(1 To N, 1 To pes - 4) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_r(1 to N, 1 to pes-4)=(resta * factor) acumulades / s(variables * factor)
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

aux = 0
For j1 = 1 To pes - 4
    If SUMA(j1 + 3) <> 0 Then
       aux = 0
       For i1 = 1 To N
           aux = aux + (X(IND(i1, it), j1 + 3) * X(IND(i1, it), pes))
           xx_r(i1, j1) = aux / SUMA(j1 + 3) 'resta variables
       Next i1
    End If
Next j1

For k1 = 1 To 12
    p(k1, 1) = IIf(k1 < 10, k1 / 10, IIf(k1 = 10, 0.95, IIf(k1 = 11, 0.98, 1)))
    p(k1, 2) = IIf(k1 < 10, 0.1, IIf(k1 = 10, 0.05, IIf(k1 = 11, 0.03, 0.02)))
Next k1

i2 = 1
```

```
For k1 = 1 To 11
    For i1 = i2 To N
        If xx_p(i1) >= p(k1, 1) Then
           p(k1, 0) = i1                     'p(1 to 12, 0 = Observació on comença cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next k1
p(12, 0) = N

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul DECILS (1a dimensió parell decil acumulat)                                   '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'VT(33 o  95,1 to 12)=Renda total contribuent                    ( 1)=ds( 1, 1 to 12)'
'VT(35 o  97,1 to 12)=Base imposable total                       ( 2)=ds( 3, 1 to 12)'
'VT(37 o  99,1 to 12)=Base liquidable total                      ( 3)=ds( 5, 1 to 12)'
'VT(39 o 101,1 to 12)=Base imposable general                     ( 4)=ds( 7, 1 to 12)'
'VT(41 o 103,1 to 12)=Base liquidable general                    ( 5)=ds( 9, 1 to 12)'
'VT(43 o 105,1 to 12)=Reduccions plans pensions                  ( 6)=ds(11, 1 to 12)'
'VT(45 o 107,1 to 12)=Reducció tributació conjunta               ( 7)=ds(13, 1 to 12)'
'VT(47 o 109,1 to 12)=Minim personal i familiar                  ( 8)=ds(15, 1 to 12)'
'VT(49 o 111,1 to 12)=Quota deduïda per MPF                      ( 9)=ds(17, 1 to 12)'
'VT(51 o 113,1 to 12)=Quota íntegra estatal                      (10)=ds(19, 1 to 12)'
'VT(53 o 115,1 to 12)=Quota íntegra autonòmica                   (11)=ds(21, 1 to 12)'
'VT(55 o 117,1 to 12)=Quota íntegra total                        (12)=ds(23, 1 to 12)'
'VT(57 o 119,1 to 12)=deducció habitatge habitual S/QIE          (13)=ds(25, 1 to 12)'
'VT(59 o 121,1 to 12)=resta deduccions s/QIE                     (14)=ds(27, 1 to 12)'
'VT(61 o 123,1 to 12)=deducció habitatge habitual S/QIA          (15)=ds(29, 1 to 12)'
'VT(63 o 125,1 to 12)=resta deduccions s/QIA                     (16)=ds(31, 1 to 12)'
'VT(65 o 127,1 to 12)=altres deduccions CCAA s/QIA               (17)=ds(33, 1 to 12)'
'VT(67 o 129,1 to 12)=Quota líquida incrementada ESTAT           (18)=ds(35, 1 to 12)'
'VT(69 o 131,1 to 12)=Quota líquida incrementada CATALUNYA       (19)=ds(37, 1 to 12)'
'VT(71 o 133,1 to 12)=Deduccions doble imposició i compensacions (20)=ds(39, 1 to 12)'
'VT(73 o 135,1 to 12)=Deduccions maternitat i naixement          (21)=ds(41, 1 to 12)'
'VT(75 o 137,1 to 12)=Quota reultant autoliquidació              (22)=ds(43, 1 to 12)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 3
        ds(2 * j1, k1) = xx_b(l1, j1)        'RTC, BIT, BLT
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
    For j1 = 4 To pes - 1
        ds(2 * j1, k1) = xx_r(l1, j1 - 3)    'resta
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
Next k1

''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul tipus efectius                                 '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'VT(77 o 139,1 to 12)= QIE s/ RTC  (19/1)=ts( 1, 1 to 12)'
'VT(78 o 140,1 to 12)= QIA s/ RTC  (21/1)=ts( 2, 1 to 12)'
'VT(79 o 141,1 to 12)= QIT s/ RTC  (23/1)=ts( 3, 1 to 12)'
'VT(80 o 142,1 to 12)= QIE s/ BIT  (19/3)=ts( 4, 1 to 12)'
'VT(81 o 143,1 to 12)= QIA s/ BIT  (21/3)=ts( 5, 1 to 12)'
'VT(82 o 144,1 to 12)= QIT s/ BIT  (23/3)=ts( 6, 1 to 12)'
'VT(83 o 145,1 to 12)= QIE s/ BLT  (19/5)=ts( 7, 1 to 12)'
'VT(84 o 146,1 to 12)= QIA s/ BLT  (21/5)=ts( 8, 1 to 12)'
'VT(85 o 147,1 to 12)= QIT s/ BLT  (23/5)=ts( 9, 1 to 12)'
'VT(86 o 148,1 to 12)= QE  s/ RTC  (35/1)=ts(10, 1 to 12)'
'VT(87 o 149,1 to 12)= QA  s/ RTC  (37/1)=ts(11, 1 to 12)'
'VT(88 o 150,1 to 12)= QR  s/ RTC  (43/1)=ts(12, 1 to 12)'
'VT(89 o 151,1 to 12)= QE  s/ BIT  (35/3)=ts(13, 1 to 12)'
'VT(90 o 152,1 to 12)= QA  s/ BIT  (37/3)=ts(14, 1 to 12)'
'VT(91 o 153,1 to 12)= QR  s/ BIT  (43/3)=ts(15, 1 to 12)'
'VT(92 o 154,1 to 12)= QE  s/ BLT  (35/5)=ts(16, 1 to 12)'
'VT(93 o 155,1 to 12)= QA  s/ BLT  (37/5)=ts(17, 1 to 12)'
'VT(94 o 156,1 to 12)= QR  s/ BLT  (43/5)=ts(18, 1 to 12)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'ts( 1, 1 to 12) = (ds((19, 1 to 12) * SUMA(10)) / (ds((1, 1 to 12) * SUMA(1))'
'ts(18, 1 to 12) = (ds((43, 1 to 12) * SUMA(22)) / (ds((5, 1 to 12) * SUMA(3))'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For k1 = 1 To 12
    If SUMA(1) <> 0 And ds(1, k1) <> 0 Then
       ts(1, k1) = (ds(19, k1) * SUMA(10)) / (ds(1, k1) * SUMA(1))
       ts(2, k1) = (ds(21, k1) * SUMA(11)) / (ds(1, k1) * SUMA(1))
```

```
        ts(3, k1) = (ds(23, k1) * SUMA(12)) / (ds(1, k1) * SUMA(1))
        ts(10, k1) = (ds(35, k1) * SUMA(18)) / (ds(1, k1) * SUMA(1))
        ts(11, k1) = (ds(37, k1) * SUMA(19)) / (ds(1, k1) * SUMA(1))
        ts(12, k1) = (ds(43, k1) * SUMA(22)) / (ds(1, k1) * SUMA(1))
     End If
     If SUMA(2) <> 0 And ds(3, k1) <> 0 Then
        ts(4, k1) = (ds(19, k1) * SUMA(10)) / (ds(3, k1) * SUMA(2))
        ts(5, k1) = (ds(21, k1) * SUMA(11)) / (ds(3, k1) * SUMA(2))
        ts(6, k1) = (ds(23, k1) * SUMA(12)) / (ds(3, k1) * SUMA(2))
        ts(13, k1) = (ds(35, k1) * SUMA(18)) / (ds(3, k1) * SUMA(2))
        ts(14, k1) = (ds(37, k1) * SUMA(19)) / (ds(3, k1) * SUMA(2))
        ts(15, k1) = (ds(43, k1) * SUMA(22)) / (ds(3, k1) * SUMA(2))
     End If
     If SUMA(3) <> 0 And ds(5, k1) <> 0 Then
        ts(7, k1) = (ds(19, k1) * SUMA(10)) / (ds(5, k1) * SUMA(3))
        ts(8, k1) = (ds(21, k1) * SUMA(11)) / (ds(5, k1) * SUMA(3))
        ts(9, k1) = (ds(23, k1) * SUMA(12)) / (ds(5, k1) * SUMA(3))
        ts(16, k1) = (ds(35, k1) * SUMA(18)) / (ds(5, k1) * SUMA(3))
        ts(17, k1) = (ds(37, k1) * SUMA(19)) / (ds(5, k1) * SUMA(3))
        ts(18, k1) = (ds(43, k1) * SUMA(22)) / (ds(5, k1) * SUMA(3))
     End If
Next k1

''''''''''''''''''''''''''''''''''''''''''''''
'Guarda límits i mitjanes, decils i tipus a VT
''''''''''''''''''''''''''''''''''''''''''''''

VT(IIf(it = 1, 23, 25), 0) = "Límits i mitjanes " & IIf(it = 1, "RTC", "BIT")
VT(IIf(it = 1, 33, 95), 0) = "Decils-" & IIf(it = 1, "RTC", "BIT")
VT(IIf(it = 1, 77, 139), 0) = "Tipus-" & IIf(it = 1, "RTC", "BIT")
For k1 = 1 To 12
    VT(IIf(it = 1, 23, 25), k1) = (X(IND(p(k1, 0), it), it)) / 1000
    VT(IIf(it = 1, 24, 26), k1) = (ds(IIf(it = 1, 1, 3), k1) * SUMA(it) / (NT * IIf(k1 < 10, 0.1, IIf(k1 = 10, 
0.05, IIf(k1 = 11, 0.03, 0.02))))) / 1000
    For j1 = 1 To 44
        VT(IIf(it = 1, 32, 94) + j1, k1) = ds(j1, k1)
    Next j1
    For j1 = 1 To 18
        VT(IIf(it = 1, 76, 138) + j1, k1) = ts(j1, k1)
    Next j1
Next k1

End Sub
Private Sub IRPF_24INDEXS(it, pes, xx_b, xx_p)

'''''''''''''''''''''''''''
'INDEXS 55                '
'''''''''''''''''''''''''''
'Gini:                g  3
'''''''''''''''''''''''''''
'Concentració:        c 13
'Kakwani:             k 13
'Suits:               s 13
'Efecte Redistributiu: e 13
'''''''''''''''''''''''''''

Dim aconc, aefre, agini, asuit, daux(1 To 4), _
    i1 As Long, j1 As Integer, k1 As Integer, l1 As Integer, sxx_b As Double

Dim i(1 To 13) As Integer, g As Double
ReDim c(1 To 13), k(1 To 13), s(1 To 13), e(1 To 13) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Identifica les variables per a les que calcula els índexs
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

i(1) = 6
i(2) = 7
i(3) = 8
i(4) = 9
i(5) = 12
i(6) = 13
i(7) = 14
i(8) = 15
i(9) = 16
i(10) = 17
i(11) = 20
i(12) = 21
i(13) = 22

agini = 0
sxx_b = 0
If SUMA(it) <> 0 Then
```

```
   For i1 = 1 To N
       daux(1) = X(IND(i1, it), it) - MITJANA(it)
       daux(2) = xx_p(i1) - MITJANA(pes)
       daux(3) = X(IND(i1, it), pes)
       agini = agini + (daux(1) * daux(2) * daux(3))
       sxx_b = sxx_b + xx_b(i1, it)                                  's.acum. RTC,BIT,BLT
   Next i1

   If agini <> 0 Then g = 2 / MITJANA(it) * (agini / NT)             'gini

End If

For j1 = 1 To 13

    aconc = 0
    aefre = 0
    asuit = 0
    If SUMA(i(j1)) <> 0 Then

       For i1 = 1 To N
           daux(1) = X(IND(i1, it), i(j1)) - MITJANA(i(j1))
           daux(2) = xx_p(i1) - MITJANA(pes)
           daux(3) = X(IND(i1, it), pes)
           daux(4) = xx_b(i1, it) - (sxx_b / N)
           aconc = aconc + (daux(1) * daux(2) * daux(3))
           asuit = asuit + (daux(1) * daux(4) * daux(3))
       Next i1

       If aconc <> 0 Then c(j1) = 2 / MITJANA(i(j1)) * (aconc / NT) 'concentració
       k(j1) = c(j1) - g                                            'kakwani
       s(j1) = (2 * (asuit / NT) / MITJANA(i(j1))) - g              'suits

       If SUMA(it) <> 0 Then aefre = SUMA(i(j1)) / SUMA(it)
       e(j1) = (aefre / (1 - aefre)) * k(j1)                        'ef red.

    End If
Next j1

'''''''''''''''''''''''''''''''''''
'Guarda els resultats(Índexs) a VT'
'''''''''''''''''''''''''''''''''''

If it = 1 Then VT(157, 0) = "Índexs"
VT(156 + it, it) = g
For k1 = 1 To 4
    For j1 = 1 To 13
        l1 = (13 * (k1 - 1)) + j1 - 1
        If k1 = 1 Then VT(160 + l1, it) = c(j1)
        If k1 = 2 Then VT(160 + l1, it) = k(j1)
        If k1 = 3 Then VT(160 + l1, it) = s(j1)
        If k1 = 4 Then VT(160 + l1, it) = e(j1)
    Next j1
Next k1

End Sub
Private Sub IRPF_25GP(pes)

Dim aux, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer

ReDim gp(1 To 6, 1 To 12), p(1 To 12, 2), xx_gp(1 To N, 1 To 4), _
      xx_p(1 To N), y(4, 12) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_gp(1 to N, pes + 1 to pes + 4) = (GP * factor) acumulades
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

aux = 0
For j1 = pes + 1 To pes + 4
    aux = 0
    For i1 = 1 To N
        aux = aux + (X(IND(i1, 0), j1) * X(IND(i1, 0), pes))
        xx_gp(i1, j1 - pes) = aux
    Next i1
Next j1
aux = 0
For i1 = 1 To N
    aux = aux + X(IND(i1, 0), pes)
    xx_p(i1) = aux / NT
Next i1

For k1 = 1 To 12
    p(k1, 1) = IIf(k1 < 10, k1 / 10, IIf(k1 = 10, 0.95, IIf(k1 = 11, 0.98, 1)))
```

```
    p(k1, 2) = IIf(k1 < 10, 0.1, IIf(k1 = 10, 0.05, IIf(k1 = 11, 0.03, 0.02)))
Next k1

i2 = 1
For k1 = 1 To 11
    For i1 = i2 To N
        If xx_p(i1) >= p(k1, 1) Then
           p(k1, 0) = i1               'p(1 to 12, 0 = Observació on comença cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next k1
p(12, 0) = N

For k1 = 1 To 12
    i1 = p(k1, 0)
    For j1 = 1 To 4
        y(j1, k1) = xx_gp(i1, j1)
        gp(IIf(j1 <= 2, j1, j1 + 1), k1) = y(j1, k1) - y(j1, k1 - 1)
    Next j1
Next k1
For k1 = 1 To 12
    For j1 = 3 To 6 Step 3
        If gp(j1 - 2, k1) <> 0 Then gp(j1, k1) = gp(j1 - 1, k1) / gp(j1 - 2, k1) Else gp(j1, k1) = 0
    Next j1
    For j1 = 1 To 5
        If j1 <> 3 Then gp(j1, k1) = gp(j1, k1) * IIf(j1 = 1 Or j1 = 4, 1 / (p(k1, 2) * NT), 0.001)
    Next j1
Next k1
For k1 = 1 To 12
    For j1 = 1 To 4 Step 3
        If gp(j1, k1) >= 0.995 Then gp(j1, k1) = 1
        If gp(j1, k1) <= 0.005 Then gp(j1, k1) = 0
    Next j1
'    gp(4, k1) = -gp(4, k1)
Next k1

'''''''''''''''''''''''''
'Guarda(Guanyadors) a VT)
'''''''''''''''''''''''''

VT(27, 0) = "Guanyadors"
For k1 = 1 To 12
    For j1 = 1 To 6
        VT(j1 + 26, k1) = IIf(j1 = 4, -1, 1) * gp(j1, k1)
    Next j1
Next k1

End Sub
Private Sub IRPF_26DECILS_CLASE(opcio As Integer)

Dim auxx, ix(1 To 15) As Integer, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer, _
    l1 As Integer, l2 As Integer, m1 As Integer, N1, N2 As Double
ReDim aux(1 To 2), dc(1 To 15, 1 To 5, 10), p(10), _
      xx(1 To N) As Double

'''''''''''''''''''''''''
'Selecciona les variables
'''''''''''''''''''''''''

ix(1) = 20
ix(2) = 1
ix(3) = 6
ix(4) = 7
ix(5) = 8
ix(6) = 9
ix(7) = 11
ix(8) = 12
ix(9) = 13
ix(10) = 14
ix(11) = 15
ix(12) = 16
ix(13) = 17
ix(14) = 19
ix(15) = 22

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula xx(1 to N, 1 to 14)=(variables * factor) acumulades / suma(variables * factor)'
'        xx(1 to N, 15)     = població acumulada/NT                                       '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For i1 = 1 To N
```

```
    aux(1) = aux(1) + X(IND(i1, 1), 23)
    xx(i1) = aux(1) / NT
Next i1

''''''''''''''''''''''''''''''''''''''''''''''''
'p(1 to 10) = Observació on comença cada decil'
''''''''''''''''''''''''''''''''''''''''''''''''

p(0) = 1
i2 = 1
For j1 = 1 To 9
    For i1 = i2 To N
        If xx(i1) >= j1 / 10 Then
           p(j1) = i1
           i2 = i1 + 1
           Exit For
        End If
    Next i1
Next j1
p(10) = N

''''''''
'DECILS'
''''''''

For l1 = 1 To 15
    m1 = ix(l1)
    For j1 = 0 To 9
        For i1 = p(j1) + IIf(j1 = 0, 0, 1) To p(j1 + 1)
            N1 = X(IND(i1, 1), m1)
            N2 = X(IND(i1, 1), 23)
            For k1 = 1 To 5
                If CATEG(IND(i1, 1)) = k1 Then
                   If l1 = 1 Then
                      dc(l1, k1, j1 + 1) = dc(l1, k1, j1 + 1) + N2 / NT
                   Else
                      If SUMA(m1) <> 0 Then
                         dc(l1, k1, j1 + 1) = dc(l1, k1, j1 + 1) + (N1 * N2 / SUMA(m1))
                      Else
                         dc(l1, k1, j1 + 1) = 0
                      End If
                   End If
                End If
            Next k1
        Next i1
    Next j1
Next l1

''''''''''''''''''''''
'Guarda(DECILS) a VT)'
''''''''''''''''''''''

VT(212, 0) = "Decils"
For l1 = 1 To 15
    For k1 = 1 To 5
        For j1 = 1 To 10
            If k1 = 1 Then VT(212 + (15 * (k1 - 1)), 1) = "Jubilats"
            If k1 = 2 Then VT(212 + (15 * (k1 - 1)), 1) = "Assalari"
            If k1 = 3 Then VT(212 + (15 * (k1 - 1)), 1) = "Empresar"
            If k1 = 4 Then VT(212 + (15 * (k1 - 1)), 1) = "Agricult"
            If k1 = 5 Then VT(212 + (15 * (k1 - 1)), 1) = "Rendiste"
            VT(211 + l1 + (15 * (k1 - 1)), j1 + 1) = dc(l1, k1, j1)
        Next j1
    Next k1
Next l1

End Sub
Private Sub IRPF_30COMPARACIO(avis As Boolean)

Dim aux, i1 As Long, j1 As Integer, k1 As Integer
ReDim auxdec(1 To 2) As String, auxproj(1 To 2), ds(1 To 4, 1 To 12), gp(1 To 6, 1 To 12), s(1 To 7) As Double

Open NOM_IRPF_SIMUL & "GP" & ANOIRPF & "_" & Trim(Str(COMP(1))) & ".dat" For Input As #1
Open NOM_IRPF_SIMUL & "GP" & ANOIRPF & "_" & Trim(Str(COMP(2))) & ".dat" For Input As #2

Input #1, N, auxdec(1), auxproj(1)
Input #2, N, auxdec(2), auxproj(2)

If auxdec(1) = auxdec(2) And auxproj(1) = auxproj(2) Then

   ReDim X(1 To N, 1 To 7), IND(1 To N)

   For i1 = 1 To N
```

```
        Input #1, IND(i1), X(i1, 1), X(i1, 7)
        Input #2, aux, X(i1, 2), aux
        aux = X(i1, 1) - X(i1, 2)
        If Abs(aux) > 1 Then
           If aux > 0 Then
              X(i1, 3) = 1
              X(i1, 5) = 0
           Else
              X(i1, 3) = 0
              X(i1, 5) = 1
           End If
           X(i1, 4) = aux * X(i1, 3)
           X(i1, 6) = aux * X(i1, 5)
        End If
        For j1 = 1 To 6
            s(j1) = s(j1) + (X(i1, j1) * X(i1, 7))
        Next j1
        s(7) = s(7) + X(i1, 7)
    Next i1
    Close #1
    Close #2

    Call IRPF_31COMPARACIO_DECILS_GP(ds, gp, s)
    Call IRPF_32COMPARACIO_ESCRIPTURA(auxdec(1), auxproj(1), ds, gp, s(1), s(2), s(7))
    Call COMUNS_5IMPRESSIO("IRPF", "G-P")

Else

    avis = True
    ERR_LEC = True
    Inicial.Hide
    If auxdec(1) <> auxdec(2) Then
       MsgBox "Les simulacions que es volen comparar corresponen a diferent nombre de declarants.", vbCritical,
TITOL_IRPF
    End If
    If auxproj(1) <> auxproj(2) Then
       MsgBox "Les simulacions que es volen comparar corresponen a diferent any de projecció.", vbCritical,
TITOL_IRPF
    End If
    Close #1
    Close #2
    Exit Sub

End If

End Sub
Private Sub IRPF_31COMPARACIO_DECILS_GP(ds, gp, s)

Dim aux, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer, l1 As Long
ReDim p(1 To 12, 2), xx(1 To N, 1 To 7), y(4, 12) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula xx(1 to N, 1 to 6)=(variables * factor) acumulades / s(variables * factor)
'         xx(1 to N, 7)      = població acumulada/s(7)   s(7)=NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

aux = 0
For j1 = 1 To 6
    If s(j1) <> 0 Then
       aux = 0
       For i1 = 1 To N
           aux = aux + (X(IND(i1), j1) * X(IND(i1), 7))
           xx(i1, j1) = aux / IIf(j1 <= 2, s(j1), 1)
       Next i1
    End If
Next j1

aux = 0
For i1 = 1 To N
    aux = aux + X(IND(i1), 7)
    xx(i1, 7) = aux / s(7)
Next i1

For j1 = 1 To 12
    p(j1, 1) = IIf(j1 < 10, j1 / 10, IIf(j1 = 10, 0.95, IIf(j1 = 11, 0.98, 1)))
    p(j1, 2) = IIf(j1 < 10, 0.1, IIf(j1 = 10, 0.05, IIf(j1 = 11, 0.03, 0.02)))
Next j1

i2 = 1
For j1 = 1 To 11
    For i1 = i2 To N
        If xx(i1, 7) >= p(j1, 1) Then
           p(j1, 0) = i1                    'p(1 to 12, 0 = Observació on comença cada decil
```

```
            i2 = i1
            Exit For
        End If
    Next i1
Next j1
p(12, 0) = N

''''''''
'DECILS'
''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 2
        ds(2 * j1, k1) = xx(l1, j1)
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
Next k1

''''''''''''''''''''''
'GUANYADORS-PERDEDORS'
''''''''''''''''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 4
        y(j1, k1) = xx(l1, j1 + 2)
        gp(IIf(j1 <= 2, j1, j1 + 1), k1) = y(j1, k1) - y(j1, k1 - 1)
    Next j1
Next k1
For j1 = 1 To 12
    For k1 = 3 To 6 Step 3
        If gp(k1 - 2, j1) <> 0 Then gp(k1, j1) = gp(k1 - 1, j1) / gp(k1 - 2, j1) Else gp(k1, j1) = 0
    Next k1
    For k1 = 1 To 5
        If k1 <> 3 Then gp(k1, j1) = gp(k1, j1) * IIf(k1 = 1 Or k1 = 4, 1 / (p(j1, 2) * s(7)), 0.001)
    Next k1
Next j1
For j1 = 1 To 12
    For k1 = 1 To 4 Step 3
        If gp(k1, j1) >= 0.995 Then gp(k1, j1) = 1
        If gp(k1, j1) <= 0.005 Then gp(k1, j1) = 0
    Next k1
    gp(4, j1) = -gp(4, j1)
Next j1


End Sub
Private Sub IRPF_32COMPARACIO_ESCRIPTURA(declarants, anyproj, ds, gp, s1, s2, s7)

Dim avisgp As Boolean, nom As String, i1 As Integer, llibre As Integer, nota As String, _
    r_f(1 To 2, 1 To 3) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 2, 1)==> formats del llibre "FORMATS", full "IRPF"               '
'r_f(1 to 2, 2)==> formats del llibre "SIMCAT", full "(G-P)"               '
'r_f(1 to 2, 3)==> formats del llibre "SIMCAT", full "(G-P)" (només valors)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre = Workbooks.Count

Workbooks(llibre).Activate                          'llibre "FORMATS"

Sheets("IRPF").Activate

Set r_f(1, 1) = Range(Cells(297, 1), Cells(305, 15)) 'Decils
Set r_f(2, 1) = Range(Cells(82, 1), Cells(89, 15))   'Guanyadors

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                               'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("IRPF(G-P)")

ActiveWorkbook.Unprotect (SECRET)
```

```
Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("IRPF(G-P)").Activate

''''''''''''''''''''''''''''''''
'Configura el rang d'escriptura'
''''''''''''''''''''''''''''''''

With Range(Cells(1, 1), Cells(66, 15))
  .ColumnWidth = 6.43
  With .Font
    .Name = "Arial"
    .Size = 7
  End With
  .HorizontalAlignment = xlCenter
  .Interior.ColorIndex = 2
  .RowHeight = 11
End With
With Range(Cells(1, 1), Cells(2, 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
End With
Cells(1, 1).Value = "IMPOST DE LA RENDA DE LES PERSONES FÍSIQUES"
Cells(2, 1).Value = "COMPARACIÓ SIMULACIÓ-" & COMP(1) & " vs. SIMULACIÓ-" & COMP(2) & _
                    " (Base de dades: " & ANOIRPF & _
                    IIf(anyproj <> ANOIRPF, " projectada al " & ANY_PROJ, "") & _
                    IIf(declarants = "TOTS", ", Total declarants", ", Només declarants obligats") & ")"
Set r_f(1, 2) = Range(Cells(3, 1), Cells(11, 15))    'Decils     Rangs d'escriptura
Set r_f(2, 2) = Range(Cells(13, 1), Cells(20, 15))   'Guanyadors Rangs d'escriptura
Set r_f(1, 3) = Range(Cells(6, 4), Cells(9, 15))     'Decils     Rangs de valors
Set r_f(2, 3) = Range(Cells(15, 4), Cells(20, 15))   'Guanyadors Rangs de valors

''''''''''''''''''''''''''''''''
'Escriu els resultats numèrics'
''''''''''''''''''''''''''''''''

r_f(1, 1).Copy Destination:=r_f(1, 2)
r_f(1, 2).Rows(4).Columns(1).Value = "QRA SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(6).Columns(1).Value = "QRA SIMULACIÓ-" & COMP(2)
r_f(1, 2).Rows(8).Columns(2).Value = "SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(8).Columns(4).Value = s1
r_f(1, 2).Rows(9).Columns(4).Value = s2
If s1 = s2 Then
   nota = "Neutral"
ElseIf s1 > s2 Then
   nota = "Pèrdua en recaptació"
Else
   nota = "Guany en recaptació"
End If
r_f(1, 2).Rows(8).Columns(6).Value = nota
If nota <> "Neutral" Then
   r_f(1, 2).Rows(8).Columns(8).Value = s2 - s1
Else
   With Range(Cells(10, 8), Cells(11, 13))
     .Interior.Pattern = xlCrissCross
     .MergeCells = True
     .Value = ""
   End With
End If
r_f(1, 2).Rows(8).Columns(14).Value = s7
r_f(1, 2).Rows(9).Columns(2).Value = "SIMULACIÓ-" & COMP(2)
r_f(2, 1).Copy Destination:=r_f(2, 2)
r_f(1, 3).Value = ds

r_f(2, 3).Value = gp
r_f(2, 3).ShrinkToFit = True

LLIBRE_FORMATS.Close

''''''''''''
'Gràfics G-P'
''''''''''''

For i1 = 1 To 12
    If Abs(r_f(2, 3).Rows(1).Columns(i1)) > 0.001 Or _
       Abs(r_f(2, 3).Rows(4).Columns(i1)) > 0.001 Then
       avisgp = True
       Exit For
    End If
Next i1

If avisgp Then
```

```
   Dim r_gp(1 To 2, 1 To 4) As Range

   Set r_gp(1, 1) = r_f(1, 3).Rows(1)  'Quota Simulació-1'
   Set r_gp(2, 1) = r_f(1, 3).Rows(3)  'Quota Simulació-2'
   Set r_gp(1, 2) = r_f(2, 3).Rows(1)  '% guanyadors'
   Set r_gp(2, 2) = r_f(2, 3).Rows(4)  '% perdedors'
   Set r_gp(1, 3) = r_f(2, 3).Rows(2)  'Total guanys'
   Set r_gp(2, 3) = r_f(2, 3).Rows(5)  'Total pèrdues'
   Set r_gp(1, 4) = r_f(2, 3).Rows(3)  'Mitjana guanyadors'
   Set r_gp(2, 4) = r_f(2, 3).Rows(6)  'Mitjana perdedors'
   r_gp(2, 2).NumberFormat = "0.00%;[Red]0.00%"

   Call COMUNS_43GRAFICS_GP(23, ANOIRPF, "IRPF", "(G-P)", r_gp, 1)

   For i1 = 1 To Worksheets("IRPF(G-P)").Shapes.Count
       Worksheets("IRPF(G-P)").Shapes(i1).Left = IIf(i1 = 1 Or i1 = 3, 10, 280) 'Reposicionament imatges
   Next i1

End If

ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(67, 1))

End Sub
Private Sub IRPF_40ESCRIPTURA(opcio)

Dim fila As Integer, gp As Boolean, i As Integer, i1 As Integer, j1 As Integer, _
    llibre(1 To 2) As Integer, nom As String, _
    r_ref(1 To 3) As Range, r_f(1 To 9, 1 To 4) As Range, r_parms(1 To 2) As Range, _
    r_gp(1 To 2, 1 To 4) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 9, 1) ==> formats del llibre "FORMATS", full "IRPF"                '
'r_f(1 to 9, 2) ==> formats del llibre "RESULTATS" temporals                 '
'r_f(1 to 9, 3) ==> formats del llibre "SIMCAT", full "IRPF(R)"              '
'r_f(1 to 9, 4) ==> formats del llibre "SIMCAT", full "IRPF(R)" (només valors)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre(1) = Workbooks.Count

Workbooks(llibre(1)).Activate                       'llibre "FORMATS"

Sheets("IRPF").Activate

Set r_parms(1) = Range(Cells(2, 1), Cells(45, 15))   'Paràmetres

Set r_f(1, 1) = Range(Cells(47, 1), Cells(73, 15))   'Descriptiu  +2  +26
Set r_f(2, 1) = Range(Cells(75, 1), Cells(80, 15))   'Límits i mitjanes per decils  +1 +5
Set r_f(3, 1) = Range(Cells(82, 1), Cells(89, 15))   'Guanyadors-Perdedors  +2 +7
Set r_f(4, 1) = Range(Cells(91, 1), Cells(137, 15))  'Decils(BII) +2 +46
Set r_f(5, 1) = Range(Cells(139, 1), Cells(158, 15)) 'Tipus (BII) +2 +19
Set r_f(6, 1) = Range(Cells(91, 1), Cells(137, 15))  'Decils(BIT)
Set r_f(7, 1) = Range(Cells(139, 1), Cells(158, 15)) 'Tipus (BIT)
Set r_f(8, 1) = Range(Cells(160, 1), Cells(217, 8))  'Indexs      + 2 +57
Set r_f(9, 1) = Range(Cells(219, 1), Cells(295, 15)) 'Decils Classificació Socio-econ.  +2 +76

Set r_ref(1) = Range(Cells(307, 1), Cells(406, 15))  'Referència

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                               'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("IRPF(R)")

ActiveWorkbook.Unprotect (SECRET)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Escriu els resultats de la referència
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("IRPF(R)").Activate
Set r_ref(2) = Range(Cells(1, 1), Cells(100, 15))
With r_ref(2)
  .ColumnWidth = 6.43
  .RowHeight = 10
End With
```

```
r_ref(2).Rows(2).RowHeight = 14
r_ref(2).Rows(40).RowHeight = 12
r_ref(2).Rows(67).RowHeight = 12
r_ref(2).Rows(74).RowHeight = 12
r_ref(2).Rows(83).RowHeight = 12
r_ref(1).Copy Destination:=r_ref(2)
ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(101, 1))

fila = 102

For i1 = 1 To UBound(IRESULTS)

    '''''''''''''''''''''''''''''''''''''''''''''
    'Lectura en els arxius temporals de resultats'
    '''''''''''''''''''''''''''''''''''''''''''''

    nom = NOM_IRPF_SIMUL & "S" & ANOIRPF & "_" & Trim(Str(IRESULTS(i1))) & ".xlsx"
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    llibre(2) = Workbooks.Count

    Workbooks(llibre(2)).Activate                    'llibre "RESULTATS"

    Sheets("PARAMETRES").Activate                    'Paràmetres
    ReDim p(53, 18)
    For i = 0 To UBound(p, 1)
        For j1 = 1 To UBound(p, 2)
            p(i, j1) = Cells(i + 1, j1)
        Next j1
    Next i

    Sheets("DESCRIPTIU").Activate                    'Descriptiu
    Set r_f(1, 2) = Range(Cells(1, 1), Cells(22, 8))

    Sheets("LIMITS-MITJANES").Activate               'Límits i mitjanes
    Set r_f(2, 2) = Range(Cells(1, 1), Cells(4, 12))

    Sheets("G-P").Activate                           'Guanyadors-Perdedors
    Set r_f(3, 2) = Range(Cells(1, 1), Cells(6, 12))

    Sheets("DECILS-RTC").Activate                    'Decils (RTC)
    Set r_f(4, 2) = Range(Cells(1, 1), Cells(44, 12))

    Sheets("TIPUS-RTC").Activate                     'Tipus (RTC)
    Set r_f(5, 2) = Range(Cells(1, 1), Cells(18, 12))

    Sheets("DECILS-BIT").Activate                    'Decils (BIT)
    Set r_f(6, 2) = Range(Cells(1, 1), Cells(44, 12))

    Sheets("TIPUS-BIT").Activate                     'Tipus (BIT)
    Set r_f(7, 2) = Range(Cells(1, 1), Cells(18, 12))

    Sheets("INDEXS").Activate                        'Indexs
    Set r_f(8, 2) = Range(Cells(1, 1), Cells(55, 3))

    Sheets("SOCIO-ECONOMICA").Activate               'Classificació socio-econòmica
    Set r_f(9, 2) = Range(Cells(1, 2), Cells(75, 11))

    '''''''''''''''''''''''''''''''''''''''''''''
    'Escriptura en el full definitiu de resultats'
    '''''''''''''''''''''''''''''''''''''''''''''

    ThisWorkbook.Activate                            'llibre "SIMCAT"

    With Range(Cells(fila - 1, 1), Cells(fila + 362, 15))    '354
      .ColumnWidth = 6.43
      With .Font
        .Name = "Arial"
        .Size = 7
      End With
      .HorizontalAlignment = xlCenter
      .Interior.ColorIndex = 2
      .RowHeight = 10
    End With
    With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
      .HorizontalAlignment = xlLeft
      With .Font
        .Bold = True
        .Size = 10
      End With
      .RowHeight = 14
      .Value = "SIMULACIÓ-" & IRESULTS(i1) & " (Base de dades: " & ANOIRPF & _
               IIf(p(0, 18) <> ANOIRPF, " projectada al " & p(0, 18), "") & _
               IIf(p(0, 17) = "TOTS", ", Total declarants", ", només declarants obligats") & ")"
```

```
    End With

    Call IRPF_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Rangs per a l'escriptura en el llibre SIMCAT full IRPF(R)'
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    Set r_f(1, 3) = Range(Cells(fila + 45, 1), Cells(fila + 71, 13))   'Descriptiu
    Set r_f(1, 4) = Range(Cells(fila + 49, 6), Cells(fila + 70, 13))
    Set r_f(2, 3) = Range(Cells(fila + 73, 1), Cells(fila + 78, 15))   'Límits i mitjanes per decils
    Set r_f(2, 4) = Range(Cells(fila + 75, 4), Cells(fila + 78, 15))
    Set r_f(3, 3) = Range(Cells(fila + 80, 1), Cells(fila + 87, 15))   'Guanyadors-Perdedors
    Set r_f(3, 4) = Range(Cells(fila + 82, 4), Cells(fila + 87, 15))
    Set r_f(4, 3) = Range(Cells(fila + 89, 1), Cells(fila + 135, 15))  'Decils(RTC)
    Set r_f(4, 4) = Range(Cells(fila + 92, 4), Cells(fila + 135, 15))
    Set r_f(5, 3) = Range(Cells(fila + 137, 1), Cells(fila + 156, 15)) 'Tipus (RTC)
    Set r_f(5, 4) = Range(Cells(fila + 139, 4), Cells(fila + 156, 15))
    Set r_f(6, 3) = Range(Cells(fila + 158, 1), Cells(fila + 204, 15)) 'Decils(BIT)
    Set r_f(6, 4) = Range(Cells(fila + 161, 4), Cells(fila + 204, 15))
    Set r_f(7, 3) = Range(Cells(fila + 206, 1), Cells(fila + 225, 15)) 'Tipus (BIT)
    Set r_f(7, 4) = Range(Cells(fila + 208, 4), Cells(fila + 225, 15))
    Set r_f(8, 3) = Range(Cells(fila + 227, 1), Cells(fila + 284, 8))  'Índexs
    Set r_f(8, 4) = Range(Cells(fila + 230, 6), Cells(fila + 284, 8))
    Set r_f(9, 3) = Range(Cells(fila + 286, 1), Cells(fila + 362, 15)) 'Decils classificació
    Set r_f(9, 4) = Range(Cells(fila + 288, 6), Cells(fila + 362, 15))

    For j1 = 1 To 2
        r_f(j1, 1).Copy Destination:=r_f(j1, 3)
        r_f(j1, 2).Copy: r_f(j1, 4).PasteSpecial xlPasteValues
        If j1 = 1 Then
           r_f(j1, 3).Rows(3).Columns(1).Value = p(0, 12)
           r_f(j1, 3).Rows(3).Columns(2).Value = p(0, 13)
           r_f(j1, 3).Rows(3).Columns(3).Value = p(0, 15)
           r_f(j1, 3).Rows(3).Columns(4).Value = p(0, 14)
           r_f(j1, 3).Rows(3).Columns(5).Value = IIf(p(0, 16) > 1, 1, p(0, 16))
        End If
    Next j1

    If p(0, 17) = "TOTS" And p(0, 1) = ANOIRPF And p(0, 18) = ANOIRPF Then gp = True Else gp = False
    If gp Then
       r_f(3, 1).Copy Destination:=r_f(3, 3)
       r_f(3, 2).Copy: r_f(3, 4).PasteSpecial xlPasteValues
       r_f(3, 4).ShrinkToFit = True
    End If

    For j1 = 4 To 9
        r_f(j1, 1).Copy Destination:=r_f(j1, 3)
        r_f(j1, 2).Copy: r_f(j1, 4).PasteSpecial xlPasteValues
        If j1 = 4 Or j1 = 5 Then Cells(fila + IIf(j1 = 4, 89, 137), 1).Value = Cells(fila + IIf(j1 = 4, 89,
137), 1).Value & " (ordenació segons RTC)"
        If j1 = 6 Or j1 = 7 Then Cells(fila + IIf(j1 = 6, 158, 206), 1).Value = Cells(fila + IIf(j1 = 6, 158,
206), 1).Value & " (ordenació segons BIT)"
    Next j1

    LLIBRE_RESULTATS.Close

    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 88, 1))
    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 157, 1))
    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 226, 1))
    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 285, 1))
    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 363, 1))

    ''''''''''''''''''''
    'Rangs pels gràfics'
    ''''''''''''''''''''

    Set r_ref(3) = Range(Cells(82, 4), Cells(100, 15))

    ReDim r_g(1 To IIf(gp, 7, 3), 1 To 8) As Range

    Set r_g(1, 1) = r_f(4, 4).Rows(2)      'Renda total contribuent       (RTC) acumulada (sim)
    Set r_g(2, 1) = r_f(4, 4).Rows(44)     'Quota resultant autoliquidació(QR)  acumulada (sim)
    Set r_g(3, 1) = r_f(4, 4).Rows(44)     'Quota resultant autoliquidació(QR)  acumulada (sim)
    Set r_g(1, 2) = r_f(6, 4).Rows(4)      'Base Imposable total          (BIT) acumulada (sim)
    Set r_g(2, 2) = r_f(6, 4).Rows(44)     'Quota resultant autoliquidació(QR)  acumulada (sim)
    Set r_g(3, 2) = r_f(6, 4).Rows(44)     'Quota resultant autoliquidació(QR)  acumulada (sim)
    If gp Then
       Set r_g(5, 1) = r_ref(3).Rows(4)    'Renda total contribuent       (RTC) acumulada (ref)
       Set r_g(6, 1) = r_ref(3).Rows(6)    'Quota resultant autoliquidació(QR)  acumulada (ref)
       Set r_g(7, 1) = r_ref(3).Rows(6)    'Quota resultant autoliquidació(QR)  acumulada (ref)
       Set r_g(5, 2) = r_ref(3).Rows(13)   'Base Imposable total          (BIT) acumulada (ref)
       Set r_g(6, 2) = r_ref(3).Rows(15)   'Quota resultant autoliquidació(QR)  acumulada (ref)
```

```
       Set r_g(7, 2) = r_ref(3).Rows(15)   'Quota resultant autoliquidació(QR)  acumulada (ref)
    End If

    Set r_g(1, 3) = r_f(5, 4).Rows(12)     'Tipus efectiu QR s/RTC (sim)
    Set r_g(1, 4) = r_f(5, 4).Rows(11)     'Tipus efectiu QA s/RTC (sim)
    If gp Then
       Set r_g(2, 3) = r_ref(3).Rows(8)    'Tipus efectiu QR s/RTC (ref)
       Set r_g(2, 4) = r_ref(3).Rows(7)    'Tipus efectiu QA s/RTC (ref)
    End If

    Set r_g(1, 5) = r_f(7, 4).Rows(15)     'Tipus efectiu QR s/BIT (sim)
    Set r_g(1, 6) = r_f(7, 4).Rows(14)     'Tipus efectiu QA s/BIT (sim)
    If gp Then
       Set r_g(2, 5) = r_ref(3).Rows(17)   'Tipus efectiu QR s/BIT (ref)
       Set r_g(2, 6) = r_ref(3).Rows(16)   'Tipus efectiu QA s/BIT (ref)
    End If

    Set r_g(1, 7) = r_f(7, 4).Rows(18)     'Tipus efectiu QR s/BLT (sim)
    Set r_g(1, 8) = r_f(7, 4).Rows(17)     'Tipus efectiu QA s/BLT (sim)
    If gp Then
       Set r_g(2, 7) = r_ref(3).Rows(19)   'Tipus efectiu QR s/BLT (ref)
       Set r_g(2, 8) = r_ref(3).Rows(18)   'Tipus efectiu QA s/BLT (ref)
    End If

    If gp Then
       Set r_gp(1, 1) = r_f(4, 4).Rows(43) 'Quota resultant autoliquidació (sim)
       Set r_gp(2, 1) = r_ref(3).Rows(5)   'Quota resultant autoliquidació (ref)
       Set r_gp(1, 2) = r_f(3, 4).Rows(1)  '% guanyadors'
       Set r_gp(2, 2) = r_f(3, 4).Rows(4)  '% perdedors'
       Set r_gp(1, 3) = r_f(3, 4).Rows(2)  'Total guanys'
       Set r_gp(2, 3) = r_f(3, 4).Rows(5)  'Total pèrdues'
       Set r_gp(1, 4) = r_f(3, 4).Rows(3)  'Mitjana guanyadors'
       Set r_gp(2, 4) = r_f(3, 4).Rows(6)  'Mitjana perdedors'
       r_gp(2, 2).NumberFormat = "0.00%;[Red]0.00%"
    End If

    Call IRPF_42ESCRIPTURA_GRAFICS(fila + 364, gp, p(0, 17), p(0, 18), r_g, r_gp, IRESULTS(i1))

    fila = fila + 456 + IIf(gp, 47, 0)   '442

Next i1

LLIBRE_FORMATS.Close

Call COMUNS_5IMPRESSIO("IRPF", "R")

End Sub
Private Sub IRPF_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

Dim i1 As Integer, j1 As Integer

Set r_parms(2) = Range(Cells(fila, 1), Cells(fila + 44, 15)) 'Paràmetres

r_parms(1).Copy Destination:=r_parms(2)
With r_parms(2)

  For i1 = 1 To p(0, 6)                      'Tarifa BG estat
      For j1 = 1 To 3
          .Rows(i1 + 4).Columns(j1).Value = p(8 + i1, j1)
      Next j1
  Next i1
  If p(0, 6) <> 10 Then
     With Range(Cells(fila + p(0, 6) + 4, 1), Cells(fila + 14, 3))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
     End With
     With Range(Cells(fila + p(0, 6) + 3, 1), Cells(fila + p(0, 6) + 3, 3)).Borders(xlEdgeBottom)
       .LineStyle = xlContinuous
       .Weight = xlMedium
     End With
  End If
  For i1 = 1 To p(0, 7)                      'Tarifa BG CCAA
      For j1 = 1 To 3
          .Rows(i1 + 4).Columns(j1 + 3).Value = p(8 + i1, j1 + 3)
      Next j1
  Next i1
  If p(0, 7) <> 10 Then
     With Range(Cells(fila + p(0, 7) + 4, 4), Cells(fila + 14, 6))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
     End With
     With Range(Cells(fila + p(0, 7) + 3, 4), Cells(fila + p(0, 7) + 3, 6)).Borders(xlEdgeBottom)
       .LineStyle = xlContinuous
```

```
      .Weight = xlMedium
    End With
End If
j1 = Application.max(p(0, 6), p(0, 7))
If j1 <> 10 Then
    For i1 = j1 To 10
        Cells(fila + 4 + i1, 3).Borders(xlEdgeRight).LineStyle = xlNone
    Next i1
End If

For i1 = 1 To p(0, 8)                       'Tarifa BE
    For j1 = 1 To 4
        .Rows(i1 + 4).Columns(10 + j1).Value = p(18 + i1, j1)
    Next j1
Next i1
.Rows(5).Columns(15).Value = p(25, 1)       'Reducció dividends
With Range(Cells(fila + p(0, 8) + 4, 11), Cells(fila + 14, 14))
  With .Borders(xlEdgeTop)
    .LineStyle = xlContinuous
    .Weight = xlMedium
  End With
  .Borders(xlEdgeRight).LineStyle = xlNone
  .Interior.Pattern = xlCrissCross
  .MergeCells = True
End With

If p(25, 2) <> 0 Then                       'Mínim exempt base estalvi
    .Rows(15).Columns(10).Value = p(25, 2)
Else
    With Range(Cells(fila + 14, 7), Cells(fila + 14, 10))
      .Interior.Pattern = xlCrissCross
      .MergeCells = True
      .Value = ""
    End With
End If

If p(0, 2) = 1 Then                         'Mínims personals i familiars
    For j1 = 1 To 2
        For i1 = 1 To 11
            If j1 = 1 Then .Rows(i1 + 3).Columns(9).Value = p(1, i1)
            If j1 = 2 Then .Rows(i1 + 3).Columns(10).Value = p(2, i1) - p(1, i1)
        Next i1
    Next j1
End If
If p(0, 2) = 0 Then
    With Range(Cells(fila + 1, 7), Cells(fila + 13, 10))
      .Font.Bold = True
      .HorizontalAlignment = xlCenter
      .Interior.Pattern = xlCrissCross
      .MergeCells = True
      .Value = "SENSE MÍNIMS PERSONALS i FAMILIARS"
      .VerticalAlignment = xlCenter
      .WrapText = True
    End With
End If

If p(0, 3) = 1 Then                         'Reducció Tributació conjunta
    .Rows(20).Columns(1).Value = p(3, 1)    'cònjuge
    .Rows(20).Columns(2).Value = p(3, 2)    'separació
Else
    With Range(Cells(fila + 15, 1), Cells(fila + 19, 2))
      .HorizontalAlignment = xlCenter
      .Interior.Pattern = xlCrissCross
      .MergeCells = True
      .Value = "SENSE REDUCCIÓ PER TRIBUTACIÓ CONJUNTA"
      .VerticalAlignment = xlCenter
      .WrapText = True
    End With
End If

If p(0, 4) = 1 Then                         'Reducció rend. treball
    For i1 = 1 To 3
        For j1 = 1 To 3
            .Rows(17 + i1).Columns(j1 + 2).Value = p(3 + i1, j1)
        Next j1
    Next i1
    .Rows(19).Columns(8).Value = p(5, 1)
    .Rows(20).Columns(9).Value = p(7, 1)
    .Rows(20).Columns(10).Value = p(7, 2)
Else
    With Range(Cells(fila + 15, 3), Cells(fila + 19, 10))
      .HorizontalAlignment = xlCenter
      .Interior.Pattern = xlCrissCross
```

```
      .MergeCells = True
      .Value = "SENSE REDUCCIONS PER RENDIMENTS DEL TREBALL o ACTIVITATS ECONÒMIQUES"
      .VerticalAlignment = xlCenter
      .WrapText = True
    End With
  End If

  If p(0, 5) = 1 Then                         'Reducció Plans Pensions
    .Rows(18).Columns(11).Value = p(8, 1)
    .Rows(18).Columns(12).Value = p(8, 2)
    .Rows(18).Columns(13).Value = p(8, 3)
    .Rows(18).Columns(14).Value = p(8, 4)
    .Rows(18).Columns(15).Value = p(8, 4)
  Else
    With Range(Cells(fila + 15, 11), Cells(fila + 19, 15))
      With .Borders(xlEdgeTop)
        .LineStyle = xlContinuous
        .Weight = xlMedium
      End With
      .HorizontalAlignment = xlCenter
      .Interior.Pattern = xlCrissCross
      .MergeCells = True
      .Value = "SENSE REDUCCIONS PER PLANS DE PENSIONS"
      .VerticalAlignment = xlCenter
    End With
  End If

  If p(0, 9) = 1 Then
    .Rows(40).Columns(4).Value = IIf(p(26, 2) = 1, "SI", "NO")
    .Rows(41).Columns(4).Value = IIf(p(26, 3) = 1, "SI", "NO")
    .Rows(42).Columns(4).Value = IIf(p(26, 4) = 1, "SI", "NO")
    .Rows(43).Columns(4).Value = IIf(p(26, 5) = 1, "SI", "NO")
    .Rows(44).Columns(4).Value = IIf(p(26, 6) = 1, "SI", "NO")
    If p(26, 1) = 1 Then                       'Deducció vivenda
       .Rows(25).Columns(1).Value = p(27, 1)
       .Rows(25).Columns(2).Value = p(27, 2)
       .Rows(25).Columns(3).Value = p(27, 3)
       .Rows(25).Columns(4).Value = p(27, 4)
       .Rows(27).Columns(1).Value = p(28, 1)
       .Rows(27).Columns(2).Value = p(28, 2)
       .Rows(27).Columns(3).Value = p(28, 3)
       .Rows(29).Columns(4).Value = p(29, 1)
       .Rows(31).Columns(1).Value = p(29, 3)
       .Rows(31).Columns(2).Value = p(29, 4)
       .Rows(31).Columns(3).Value = p(29, 2)
'       .Rows(32).Columns(4).Value = p(29, 1)
       .Rows(33).Columns(1).Value = p(29, 4)
'       .Rows(33).Columns(4).Value = p(29, 1)
       .Rows(35).Columns(4).Value = p(30, 1)
       .Rows(37).Columns(1).Value = p(30, 3)
       .Rows(37).Columns(2).Value = p(30, 4)
       .Rows(37).Columns(3).Value = p(30, 2)
'       .Rows(38).Columns(4).Value = p(30, 1)
       .Rows(39).Columns(1).Value = p(30, 4)
'       .Rows(39).Columns(4).Value = p(30, 1)
    Else
       With Range(Cells(fila + 21, 1), Cells(fila + 38, 4))
         With .Borders(xlEdgeTop)
           .LineStyle = xlContinuous
           .Weight = xlMedium
         End With
         .HorizontalAlignment = xlCenter
         .Interior.Pattern = xlCrissCross
         .MergeCells = True
         .WrapText = True
         .Value = "SENSE DEDUCCIÓ HABITATGE ESTAT i CATALUNYA"
       End With
    End If
  Else
    With Range(Cells(fila + 20, 1), Cells(fila + 43, 4))
      .HorizontalAlignment = xlCenter
      .Interior.Pattern = xlCrissCross
      .MergeCells = True
      .Value = "SENSE DEDUCCIONS GENERALS"
      .VerticalAlignment = xlCenter
      .WrapText = True
    End With
  End If

  If p(0, 10) = 1 Then                        'Deduccions CA
    For i1 = 1 To 10
        .Rows(22 + i1).Columns(8).Value = p(30 + i1, 1)
        If i1 = 2 Or i1 = 3 Or i1 = 8 Then .Rows(22 + i1).Columns(9).Value = p(30 + i1, 2)
```

```
        If i1 = 4 Or i1 = 7 Or i1 = 9 Or i1 = 10 Then .Rows(22 + i1).Columns(10).Value = p(30 + i1, 2)
     Next i1
  Else
     With Range(Cells(fila + 20, 5), Cells(fila + 31, 10))
       .HorizontalAlignment = xlCenter
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = "SENSE DEDUCCIONS ESPECÍFIQUES DE CATALUNYA"
       .VerticalAlignment = xlCenter
       .WrapText = True
     End With
  End If

  If p(0, 11) = 1 Then                        'Altres deduccions CA
     For i1 = 1 To 7
         .Rows(22 + i1).Columns(15).Value = p(40 + i1, 1)
     Next i1
     If p(48, 1) < 0 Then .Rows(30).Columns(11).Value = "" Else .Rows(30).Columns(15).Value = p(48, 1)
  Else
     With Range(Cells(fila + 19, 11), Cells(fila + 30, 15))
       .Font.Bold = True
       .HorizontalAlignment = xlCenter
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = "SENSE ALTRES DEDUCCIONS CATALUNYA"
       .VerticalAlignment = xlCenter
       .WrapText = True
     End With
  End If

  If p(49, 1) <> 1 Or p(50, 1) <> 1 Or p(51, 1) <> 1 Or p(52, 1) <> 1 Or p(53, 1) <> 1 Then
     .Rows(40).Columns(15).Value = p(49, 1) - 1
     .Rows(41).Columns(15).Value = p(50, 1) - 1
     .Rows(42).Columns(15).Value = p(51, 1) - 1
     .Rows(43).Columns(15).Value = p(52, 1) - 1
     .Rows(44).Columns(15).Value = p(53, 1) - 1
  Else
     With Range(Cells(fila + 38, 11), Cells(fila + 43, 15))
       .HorizontalAlignment = xlCenter
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = "SENSE PROJECTAR ELS RENDIMENTS"
       .VerticalAlignment = xlCenter
       .Orientation = 0
     End With
  End If

End With

End Sub
Private Sub IRPF_42ESCRIPTURA_GRAFICS(fila, gp, p017, p018, r_g, r_gp, sim)

Dim avisgp As Boolean, i1 As Integer, i2 As Integer, j1 As Integer, m, nom() As String, s_r() As Boolean

'''''''''''''''''''''''''''''''''''''''''''''''
'Escriptura en el full definitiu de resultats'
'''''''''''''''''''''''''''''''''''''''''''''''

With Range(Cells(fila - 1, 1), Cells(fila + 90, 15))
  .ColumnWidth = 6.43
  .Interior.ColorIndex = 2
  .RowHeight = 10
End With
With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
  .Value = "GRÀFICS DE LA SIMULACIÓ-" & sim & " (Base de dades: " & ANOIRPF & _
           IIf(p018 <> ANOIRPF, " projectada al " & p018, "") & _
           IIf(p017 = "TOTS", ", Total declarants", ", només declarants obligats") & ")"
End With

ReDim nom(1 To 7, 1 To 2), s_r(1 To 7, 1 To 5)

For i1 = 1 To 2
    nom(1, i1) = "Sim-" & sim & IIf(i1 = 1, "(RTC)", "(BIT)")
    nom(2, i1) = "Sim-" & sim & "(QR)"
    nom(3, i1) = "Sim-" & sim & "(QR relativa)"
    nom(4, i1) = "Equitat"
    nom(5, i1) = "Ref." & IIf(i1 = 1, "(RTC)", "(BIT)")
    nom(6, i1) = "Ref.(QR)"
    nom(7, i1) = "Ref.(QR relativa)"
```

```
    If gp Then    'si hi ha referència s'ha de calcular si les corbes són iguals
       For i2 = 1 To 3
           For j1 = 1 To 12
               If Abs(r_g(i2, i1).Columns(j1) - r_g(i2 + 4, i1).Columns(j1)) > 0.005 Then
                  s_r(i2 + 4, i1) = True
                  Exit For
               End If
           Next j1
       Next i2
    End If
Next i1

If gp Then    'si hi ha referència s'ha de calcular si les corbes dels tipus són iguals

   For i1 = 1 To 6
       For j1 = 1 To 12
           If Abs(r_g(1, i1 + 2).Columns(j1) - r_g(2, i1 + 2).Columns(j1)) > 0.001 Then
              s_r(i1, 3) = True
              Exit For
           End If
       Next j1
   Next i1

   m = Round(Application.max(r_g(1, 3), r_g(2, 3), r_g(1, 4), r_g(2, 4), _
                             r_g(1, 5), r_g(2, 5), r_g(1, 6), r_g(2, 6), _
                             r_g(1, 7), r_g(2, 7), r_g(1, 8), r_g(2, 8)), 2)

Else          'Quan els gràfics no inclouen la referència

   m = Round(Application.max(r_g(1, 3), r_g(1, 4), r_g(1, 5), r_g(1, 6), r_g(1, 7)), 2)

End If

Call COMUNS_41GRAFICS_CORBESLORENZ(fila, gp, "IRPF", nom, r_g, s_r)             'Lorenz
Call COMUNS_42GRAFICS_TIPUS(fila + 23, gp, "IRPF", m, r_g, s_r, sim)            'Tipus efectius

If gp Then
   For j1 = 1 To 12
       If Abs(r_gp(1, 2).Columns(j1)) > 0.001 Or Abs(r_gp(2, 2).Columns(j1)) > 0.001 Then
          avisgp = True
          Exit For
       End If
   Next j1
   If avisgp Then
      Call COMUNS_43GRAFICS_GP(fila + 92, ANOIRPF, "IRPF", "(R)", r_gp, sim)    'G-P
   Else
      gp = False
   End If
End If

For i1 = 1 To Worksheets("IRPF(R)").Shapes.Count - 1 Step 2
    Worksheets("IRPF(R)").Shapes(i1).Left = 20               'Reposicionament imatges
Next i1
For i1 = 2 To Worksheets("IRPF(R)").Shapes.Count Step 2
    Worksheets("IRPF(R)").Shapes(i1).Left = 310              'Reposicionament imatges
Next i1

ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 91, 1))
If gp Then ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 138, 1))

End Sub
Private Sub IS_10PARAMETRES(opcio As Integer)

Dim i1 As Integer

ReDim edat1(20) As Integer, percen(100) As Integer, edat2(51) As Integer, bon(100) As Integer, tram(15) As
Integer
edat2(51) = 0
For i1 = 100 To 0 Step -1
    If i1 <= 20 Then edat1(20 - i1) = i1
    percen(100 - i1) = i1
    If i1 <= 50 Then edat2(50 - i1) = i1 + 50
    If i1 <= 15 Then tram(15 - i1) = i1 + 1
    bon(100 - i1) = i1
Next i1
If ISIMULS(2) <> 0 Then
   ReDim sims(1 To ISIMULS(2))
   For i1 = ISIMULS(2) To 1 Step -1
       sims(ISIMULS(2) - i1 + 1) = CIS(i1)
   Next i1
End If
```

```
PAGINA = -1
TORNA:
PAGINA = PAGINA + 1
ERR_LEC = True

Do While ERR_LEC
   With IS1
     .MultiPage1.Value = PAGINA
     If .MultiPage1.Value = 0 Then .Caption = "SIMCAT-IS: Reduccions"
     If .MultiPage1.Value = 1 Then .Caption = "SIMCAT-IS: Coeficients multiplicadors i tarifa"
     If .MultiPage1.Value = 2 Then .Caption = "SIMCAT-IS: Bonificacions a la quota"
     .Caption = .Caption & " (Base de dades: " & ANOIS & ")"
     .ListBox111.List = edat1
     .ListBox112.List = edat1
     .ListBox131.List = edat2
     .ListBox141.List = percen
     .ListBox142.List = percen
     .ListBox143.List = percen
     .ListBox144.List = percen
     .ListBox145.List = percen
     .ListBox146.List = percen
     .ListBox22.List = tram
     .ListBox23.List = tram
     For Each CTL In .Frame3.Controls
         If TypeName(CTL) = "ListBox" Then CTL.List = bon
     Next CTL
     .Llei.Value = True
     If ISIMULS(2) <> 0 Then
        .ListBox_SimulRef.List = sims
        .SimulRef.Visible = True
     End If
     .Show
   End With
   If SORTIR Then Exit Sub
Loop
If PAGINA < 2 Then GoTo TORNA
If PAGINA = 2 Then Exit Sub

End Sub
Private Sub IS_20SIMULACIO(temps)

Dim i1 As Long, it As Integer, j1 As Integer, j2 As Integer, k1 As Integer

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul preliminar sobre trams i tipus impositius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ReDim tt12(1 To NTRAMS12 - IIf(NTRAMS12 <> 1, 1, 0)), tt34(1 To NTRAMS34 - IIf(NTRAMS34 <> 1, 1, 0)) As Double
tt12(1) = T12(1) * TIPUS12(1)
If NTRAMS12 > 2 Then
   For it = 2 To NTRAMS12 - 1
       tt12(it) = tt12(it - 1) + ((T12(it) - T12(it - 1)) * TIPUS12(it))
   Next it
End If
tt34(1) = T34(1) * TIPUS34(1)
If NTRAMS34 > 2 Then
   For it = 2 To NTRAMS34 - 1
       tt34(it) = tt34(it - 1) + ((T34(it) - T34(it - 1)) * TIPUS34(it))
   Next it
End If

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Variables d'interès                                           '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'V03=idauto                                                    '
'V05=Expedient                                                 '
'V06=Autoliquidacio                                            '
'V09=Grup PARENTIU                                             '
'V10=PARENTIU                                                  '
'V11=Grau discapacitat                                         '
'V16=Grup patrimoni                                            '
'                                                              '
'V19=C02  Participació cabal hereditari                        '
'V20=C03  Percepcions contractes d'assegurança                 '
'V21=C04  Béns addicionables                                   '
'                                                              '
'V23=C06  Valor Plé Domini                                     '
'V24=C07  Valor Nua Propietat                                  '
'V25=C08  Donació acumulada                                    '
'V26=C09  Béns i drets exempts (conv. internacionals)          '
'                                                              '
'V34=C304 Reducció imposició decennal(real)                    '
'V35=C404 Reducció imposició decennal(teòrica)                 '
```

```
'V38=C306 Reducció activitat empr. o prof. (real)    '
'V39=C406 Reducció activitat empr. o prof. (teòrica) '
'V40=C307 Reducció per participació entitats(real)   '
'V41=C407 Reducció per participació entitats(teòrica)'
'V42=C308 Reducció habitatge habitual(real)          '
'V43=C408 Reducció habitatge habitual(teòrica)       '
'V44=C309 Reducció béns d'interès cultural(real)     '
'V45=C409 Reducció béns d'interès cultural(teòrica)  '
'V46=C310 Reducció explotacions agràries(real)       '
'V47=C410 Reducció explotacions agràries(teòrica)    '
'V48=C311 Reducció finques rústiques(real)           '
'V49=C411 Reducció finques rústiques teorica         '
'V50=C312 Reducció altres(real)                      '
'V51=C412 Reducció altres(teòrica)                   '
'edat     Edat del subjecte passiu                   '
'trib     Tributació real=1 o teòrica=2              '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'X(i1, 1) Base Imposable                             '
'X(i1, 2) Base Liquidable                            '
'X(i1, 3) Reduccions parentiu i addicional           '
'X(i1, 4) Reduccions personals                       '
'X(i1, 5) Reducció habitatge                         '
'X(i1, 6) Resta Reduccions                           '
'X(i1, 7) Quota Íntegra                              '
'X(i1, 8) Quota Tributària abans bonificació         '
'X(i1, 9) Bonificació                                '
'X(i1, 10) Quota Tributària                          '
'X(i1, 11) Factor elevació                           '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables que no venen del fitxer de lectura
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Dim aux, aux52, auxred52, aux53, auxred53, bl, _
    i_pag As Integer, spes2, vgp, _
    v22, v27, v28, v29, v30, v31, v32, _
    v33, v36, v37, v52, V53, V56, V57 As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables del fitxer de lectura'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Dim V03 As String, V05 As String, V06 As String, V09 As Integer, v10 As String, v11 As Integer, v16 As Integer,
_
    v19, v20, v21, v23, v24, v25, v26, _
    v34, v35, v38, v39, v40, v41, v42, _
    v43, v44, v45, V46, V47, V48, V49, _
    v50, V51, edat As Integer, trib As Integer

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Lectura de dades'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Open NOM_IS_DADES & ANOIS & ".dat" For Input As #1
Input #1, N

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables després de conèixer N'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ReDim IND(1 To N, 1 To 2), SUMA(1 To 11), vpag(1 To 3), vy(1 To 20, 1 To 6), X(1 To N, 1 To 11)

NT = 0
j2 = 1
spes2 = 0

For i1 = 1 To N
    i_pag = 0
    Input #1, V03, V05, V06, V09, v10, v11, v16, v19, v20, v21, v23, v24, v25, v26, v34, v35, v38, v39, v40, _
              v41, v42, v43, v44, v45, V46, V47, V48, V49, v50, V51, edat, trib, X(i1, 11)

    ''''''''''''''''
    'Base imposable
    ''''''''''''''''

    v22 = v19 + v20 + v21
    If v22 < 0 Then v22 = 0
    v27 = 0
    If trib = 2 Then v27 = v22 + (v23 + v25 + v26 - v24)
    If v27 < 0 Then v27 = 0

    ''''''''''''''''''''''''''''''''''''''''
```

```
'Determinació Reducció parentiu V28,V29
''''''''''''''''''''''''''''''''''''''''

v28 = 0
If V09 = 1 Then
   v28 = R_PARENT(1, 1)
   If edat < 21 Then
      If edat >= R_PARENT(1, 3) Then
         v28 = v28 + (R_PARENT(1, 2) * (R_PARENT(1, 4) - edat + 1))
      Else
         v28 = v28 + (R_PARENT(1, 2) * (R_PARENT(1, 4) - R_PARENT(1, 3) + 1))
      End If
   End If
ElseIf V09 = 2 Then
   If v10 = "Cònjuge" Then v28 = R_PARENT(2, 1)
   If v10 = "Unió estable de parella" Then v28 = R_PARENT(2, 1)
   If v10 = "Adoptat" Then v28 = R_PARENT(3, 1)
   If v10 = "Fill o adoptat" Then v28 = R_PARENT(3, 1)
   If v10 = "Altre descendent consanguini o assimilat" Then v28 = R_PARENT(4, 1)
   If v10 = "Descendent consanguini" Then v28 = R_PARENT(4, 1)
   If v10 = "Ascendent consanguini" Then v28 = R_PARENT(5, 1)
   If v10 = "Adoptant" Then v28 = R_PARENT(5, 1)
ElseIf V09 = 3 Then
   v28 = R_PARENT(6, 1)
ElseIf V09 = 4 Then
   v28 = R_PARENT(7, 1)
End If
If trib = 2 Then v29 = v28

''''''''''''''''''''''''''''''''''''''''''''''
'Determinació Reducció discapacitat V30,V31
''''''''''''''''''''''''''''''''''''''''''''''

v30 = 0
If v11 >= 33 And v11 < 65 Then v30 = R_DISCAP(1)
If v11 >= 65 Then v30 = R_DISCAP(2)
If trib = 2 Then v31 = v30

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Determinació Reducció edat incompatible amb discapacitat V32,V33
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

v32 = 0
If v30 = 0 And edat < 999 Then
   If edat >= R_EDATGR(1) Then v32 = R_EDATGR(2)
End If
If trib = 2 Then v33 = v32

''''''''''''''''''''''''''''''''''''''''''''''
'Determinació Reducció assegurança V36,V37
''''''''''''''''''''''''''''''''''''''''''''''

v36 = 0
If v20 <> 0 And V09 <= 2 Then
   If R_ASSEGU(2) <> 0 Then v36 = Application.min(v20 * R_ASSEGU(1), R_ASSEGU(2))
End If
If trib = 2 Then v37 = v36

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Determinació reducció activitat empresarial V38,V39
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

If v38 <> 0 Then
   v38 = (v38 / 0.95) * R_EMPRES(1)
   If R_EMPRES(2) <> 0 Then v38 = Application.min(v38, R_EMPRES(2))
End If
If v39 <> 0 Then
   v39 = (v39 / 0.95) * R_EMPRES(1)
   If R_EMPRES(2) <> 0 Then v39 = Application.min(v39, R_EMPRES(2))
End If

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Determinació reducció participació entitats V40,V41
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

If v40 <> 0 Then
   v40 = (v40 / 0.95) * R_PARTIC(1)
   If R_PARTIC(2) <> 0 Then v40 = Application.min(v40, R_PARTIC(2))
End If
If v41 <> 0 Then
   v41 = (v41 / 0.95) * R_PARTIC(1)
   If R_PARTIC(2) <> 0 Then v41 = Application.min(v41, R_PARTIC(2))
End If
```

```
''''''''''''''''''''''''''''''''''''''''
'Determinació Reducció Habitatge V42,V43
''''''''''''''''''''''''''''''''''''''''

If v42 <> 0 Then
   v42 = (v42 / 0.95) * R_HABITA(1)
   If R_HABITA(2) <> 0 Then v42 = Application.min(v42, R_HABITA(2))
End If
If v43 <> 0 Then
   v43 = (v43 / 0.95) * R_HABITA(1)
   If R_HABITA(2) <> 0 Then v43 = Application.min(v43, R_HABITA(2))
End If

'''''''''''''''''''''''''''''''''''''''''''''
'Determinació Reducció Béns culturals V44,V45
'''''''''''''''''''''''''''''''''''''''''''''

If v44 <> 0 Then
   v44 = (v44 / 0.95) * R_BENSCU(1)
   If R_BENSCU(2) <> 0 Then v44 = Application.min(v44, R_BENSCU(2))
End If
If v45 <> 0 Then
   v45 = (v45 / 0.95) * R_BENSCU(1)
   If R_BENSCU(2) <> 0 Then v45 = Application.min(v45, R_BENSCU(2))
End If

''''''''''''''''''''''''''''''''''''''''''''''''
'Determinació Reducció Finques rústiques V48,V49
''''''''''''''''''''''''''''''''''''''''''''''''

If V48 <> 0 Then
   V48 = (V48 / 0.95) * R_FINQUE(1)
   If R_FINQUE(2) <> 0 Then V48 = Application.min(V48, R_FINQUE(2))
End If
If V49 <> 0 Then
   V49 = (V49 / 0.95) * R_FINQUE(1)
   If R_FINQUE(2) <> 0 Then V49 = Application.min(V49, R_FINQUE(2))
End If

''''''''''''''''''''''''''''''''''''''''''''''''''
'Determinació Reducció addicional parentiu V52,V53
''''''''''''''''''''''''''''''''''''''''''''''''''

v52 = 0
If V09 = 1 Then
   v52 = R_PARENT_AD(1)
ElseIf V09 = 2 Then
   If v10 = "Cònjuge" Then v52 = R_PARENT_AD(2)
   If v10 = "Unió estable de parella" Then v52 = R_PARENT_AD(2)
   If v10 = "Adoptat" Then v52 = R_PARENT_AD(3)
   If v10 = "Fill o adoptat" Then v52 = R_PARENT_AD(3)
   If v10 = "Altre descendent consanguini o assimilat" Then v52 = R_PARENT_AD(4)
   If v10 = "Descendent consanguini" Then v52 = R_PARENT_AD(4)
   If v10 = "Adoptant" Then v52 = R_PARENT_AD(5)
   If v10 = "Ascendent consanguini" Then v52 = R_PARENT_AD(5)
ElseIf V09 = 3 Or V09 = 4 Then
   v52 = 0
End If
If trib = 2 Then V53 = v52

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Ajustament Reducció parentiu(V28,V29) i addicional(V52,V53) quan n'hi ha d'altres
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

aux52 = 0.5
If v38 <> 0 Or v40 <> 0 Or v44 <> 0 Or V46 <> 0 Or V48 <> 0 Or v50 <> 0 Then
   aux52 = aux52 / 2
   v28 = v28 / 2
   v52 = v52 / 2
End If
If trib = 2 Then
   aux53 = 0.5
   If v39 <> 0 Or v41 <> 0 Or v45 <> 0 Or V47 <> 0 Or V49 <> 0 Or V51 <> 0 Then
      aux53 = aux53 / 2
      v29 = v29 / 2
      V53 = V53 / 2
   End If
End If

''''''''''''''''''''''''''''''''''''''''''''''
'Ajustament final Reducció addicional(V52,V53)
''''''''''''''''''''''''''''''''''''''''''''''
```

```
    auxred52 = v28 + v30 + v32 + v34 + v36 + v38 + v40 + v42 + v44 + V46 + V48 + v50
    v52 = Application.min(v52, Application.max(0, (v22 - auxred52) * aux52))
    If trib = 2 Then
       auxred53 = v29 + v31 + v33 + v35 + v37 + v39 + v41 + v43 + v45 + V47 + V49 + V51
       V53 = Application.min(V53, Application.max(0, (v27 - auxred53) * aux53))
    End If

    X(i1, 3) = Application.min(v22, v28 + v52)
    v30 = Application.min(Application.max(0, v22 - X(i1, 3)), v30)
    v32 = Application.min(Application.max(0, v22 - X(i1, 3) - v30), v32)
    X(i1, 4) = Application.min(v22 - X(i1, 3), v30 + v32)
    X(i1, 5) = Application.min(v22 - X(i1, 3) - X(i1, 4), v42)
    X(i1, 6) = Application.min(v22 - X(i1, 3) - X(i1, 4) - X(i1, 5), v34 + v36 + v38 + v40 + v44 + V46 + V48 +
v50)

    ''''''''''''''''
    'Base Liquidable
    ''''''''''''''''

    V56 = Application.max(0, v22 - X(i1, 3) - X(i1, 4) - X(i1, 5) - X(i1, 6))
    If trib = 2 Then V57 = Application.max(0, v27 - (v29 + v31 + v33 + v35 + v37 + v39 + v41 + v43 + v45 + V47 +
V49 + V51 + V53))
    X(i1, 1) = v22
    X(i1, 2) = V56

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina la Quota íntegra segons la tarifa i trams indicats'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    X(i1, 7) = 0
    X(i1, 8) = 0
    X(i1, 9) = 0
    If trib = 1 Then bl = V56 Else bl = V57

    If bl > 0 Then

       i_pag = 1           'pagadors

       If V09 <= 2 Then    'tarifa grup parentiu 1 i 2

          If NTRAMS12 = 1 Then
             X(i1, 7) = bl * TIPUS12(1)
          Else
             it = NTRAMS12
             If bl <= T12(1) Then X(i1, 8) = bl * TIPUS12(1)
             If NTRAMS12 > 2 Then
                For j1 = 2 To NTRAMS12 - 1
                    If bl > T12(j1 - 1) And bl <= T12(j1) Then X(i1, 7) = tt12(j1 - 1) + ((bl - T12(j1 - 1)) *
TIPUS12(j1))
                Next j1
             End If
             If bl > T12(it - 1) Then X(i1, 7) = tt12(it - 1) + ((bl - T12(it - 1)) * TIPUS12(it))
          End If

       ElseIf V09 >= 3 Then    'tarifa grup parentiu 3 i 4

          If NTRAMS34 = 1 Then
             X(i1, 7) = bl * TIPUS34(1)
          Else
             it = NTRAMS34
             If bl <= T34(1) Then X(i1, 8) = bl * TIPUS34(1)
             If NTRAMS34 > 2 Then
                For j1 = 2 To NTRAMS34 - 1
                    If bl > T34(j1 - 1) And bl <= T34(j1) Then X(i1, 7) = tt34(j1 - 1) + ((bl - T34(j1 - 1)) *
TIPUS34(j1))
                Next j1
             End If
             If bl > T34(it - 1) Then X(i1, 7) = tt34(it - 1) + ((bl - T34(it - 1)) * TIPUS34(it))
          End If

       End If

       ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
       'Determina la quota per a ingressar amb els coeficients correctors'
       ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

'''''''''''''''''''''
'AIXÒ S'HA D'ARREGLAR
'''''''''''''''''''''

       X(i1, 8) = X(i1, 7) * COEF(V09, v16)
```

```
End If

''''''''''''''''''''''''''''''''''''''''''''''''
'Correcció de la tarifa pel tipus efectiu mitjà
''''''''''''''''''''''''''''''''''''''''''''''''

If trib = 2 And V57 <> 0 Then
   X(i1, 8) = V56 * Application.WorksheetFunction.Floor(X(i1, 8) / V57, 0.0001)
   X(i1, 7) = X(i1, 8) / COEF(V09, v16)
End If

''''''''''''''''''''''''''''''''''''''''''''''''
'Aplicació de les bonificacions a la tarifa
''''''''''''''''''''''''''''''''''''''''''''''''

If v10 = "Fill o adoptat" Then X(i1, 9) = X(i1, 8) * BONIF(1, V09)
If v10 = "Adoptat" Then X(i1, 9) = X(i1, 8) * BONIF(2, V09)
If v10 = "Descendent consanguini" Then X(i1, 9) = X(i1, 8) * BONIF(3, V09)
If v10 = "Altre descendent consanguini o assimilat" Then X(i1, 9) = X(i1, 8) * BONIF(4, V09)
If v10 = "Cònjuge" Then X(i1, 9) = X(i1, 8) * BONIF(5, 1)
If v10 = "Unió estable de parella" Then X(i1, 9) = X(i1, 8) * BONIF(6, 1)
If v10 = "Ascendent consanguini" Then X(i1, 9) = X(i1, 8) * BONIF(7, 1)
If v10 = "Adoptant" Then X(i1, 9) = X(i1, 8) * BONIF(8, 1)
If v10 = "Situació de convivència d'ajuda mútua" Then X(i1, 9) = X(i1, 8) * BONIF(9, 1)
If v10 = "Col·lateral consanguini de 2n grau" Then X(i1, 9) = X(i1, 8) * BONIF(10, 1)
If v10 = "Col·lateral consanguini de 3r grau" Then X(i1, 9) = X(i1, 8) * BONIF(11, 1)
If v10 = "Descendent per afinitat" Then X(i1, 9) = X(i1, 8) * BONIF(12, 1)
If v10 = "Ascendent per afinitat" Then X(i1, 9) = X(i1, 8) * BONIF(13, 1)
If v10 = "Col·lateral per afinitat de 2n grau" Then X(i1, 9) = X(i1, 8) * BONIF(14, 1)
If v10 = "Col·lateral per afinitat de 3n grau" Then X(i1, 9) = X(i1, 8) * BONIF(15, 1)
If v10 = "Col·lateral de 4t grau" Then X(i1, 9) = X(i1, 8) * BONIF(16, 1)
If v10 = "Sense parentiu" Then X(i1, 9) = X(i1, 8) * BONIF(17, 1)

X(i1, 10) = X(i1, 8) - X(i1, 9)

For j1 = 1 To 10
    SUMA(j1) = SUMA(j1) + (X(i1, j1) * X(i1, 11))
Next j1
SUMA(11) = SUMA(11) + X(i1, 11)
NT = NT + X(i1, 11)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Determina les variables per al càlcul dels "no-pagadors"'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

spes2 = spes2 + (X(i1, 11) * X(i1, 11))
vpag(1) = vpag(1) + (i_pag * X(i1, 11))
vpag(2) = vpag(2) + (i_pag * X(i1, 11) * X(i1, 11))
vpag(3) = vpag(3) + (i_pag * X(i1, 11) * X(i1, 11))

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Determina les variables per al càlcul descriptiu'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

If X(i1, 1) <> 0 Then   'Base imposable
   vy(1, 1) = vy(1, 1) + (X(i1, 1) * X(i1, 11))
   vy(1, 2) = vy(1, 2) + (X(i1, 1) * X(i1, 11) * X(i1, 11))
   vy(1, 3) = vy(1, 3) + (X(i1, 1) * X(i1, 1) * X(i1, 11) * X(i1, 11))
   vy(1, 4) = vy(1, 4) + 1
   vy(1, 5) = vy(1, 5) + X(i1, 11)
   vy(1, 6) = vy(1, 6) + (X(i1, 11) * X(i1, 11))
End If
If X(i1, 2) <> 0 Then   'Base liquidable
   vy(2, 1) = vy(2, 1) + (X(i1, 2) * X(i1, 11))
   vy(2, 2) = vy(2, 2) + (X(i1, 2) * X(i1, 11) * X(i1, 11))
   vy(2, 3) = vy(2, 3) + (X(i1, 2) * X(i1, 2) * X(i1, 11) * X(i1, 11))
   vy(2, 4) = vy(2, 4) + 1
   vy(2, 5) = vy(2, 5) + X(i1, 11)
   vy(2, 6) = vy(2, 6) + (X(i1, 11) * X(i1, 11))
End If
If X(i1, 3) <> 0 Then
   If V09 = 1 Then      'Reducció parentiu i addicional grup I
      vy(3, 1) = vy(3, 1) + (X(i1, 3) * X(i1, 11))
      vy(3, 2) = vy(3, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
      vy(3, 3) = vy(3, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
      vy(3, 4) = vy(3, 4) + 1
      vy(3, 5) = vy(3, 5) + X(i1, 11)
      vy(3, 6) = vy(3, 6) + (X(i1, 11) * X(i1, 11))
   ElseIf V09 = 2 Then      'Reducció parentiu i addicional grup II
      If v10 = "Cònjuge" Or v10 = "Unió estable de parella" Then
         vy(4, 1) = vy(4, 1) + (X(i1, 3) * X(i1, 11))
         vy(4, 2) = vy(4, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
         vy(4, 3) = vy(4, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
```

```
            vy(4, 4) = vy(4, 4) + 1
            vy(4, 5) = vy(4, 5) + X(i1, 11)
            vy(4, 6) = vy(4, 6) + (X(i1, 11) * X(i1, 11))
         ElseIf v10 = "Adoptat" Or v10 = "Fill o adoptat" Then
            vy(5, 1) = vy(5, 1) + (X(i1, 3) * X(i1, 11))
            vy(5, 2) = vy(5, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
            vy(5, 3) = vy(5, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
            vy(5, 4) = vy(5, 4) + 1
            vy(5, 5) = vy(5, 5) + X(i1, 11)
            vy(5, 6) = vy(5, 6) + (X(i1, 11) * X(i1, 11))
         ElseIf v10 = "Altre descendent consanguini o assimilat" Or v10 = "Descendent consanguini" Then
            vy(6, 1) = vy(6, 1) + (X(i1, 3) * X(i1, 11))
            vy(6, 2) = vy(6, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
            vy(6, 3) = vy(6, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
            vy(6, 4) = vy(6, 4) + 1
            vy(6, 5) = vy(6, 5) + X(i1, 11)
            vy(6, 6) = vy(6, 6) + (X(i1, 11) * X(i1, 11))
         ElseIf v10 = "Adoptant" Or v10 = "Ascendent consanguini" Then
            vy(7, 1) = vy(7, 1) + (X(i1, 3) * X(i1, 11))
            vy(7, 2) = vy(7, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
            vy(7, 3) = vy(7, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
            vy(7, 4) = vy(7, 4) + 1
            vy(7, 5) = vy(7, 5) + X(i1, 11)
            vy(7, 6) = vy(7, 6) + (X(i1, 11) * X(i1, 11))
         End If
      ElseIf V09 = 3 Then      'Reducció parentiu i addicional grup III
         vy(8, 1) = vy(8, 1) + (X(i1, 3) * X(i1, 11))
         vy(8, 2) = vy(8, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
         vy(8, 3) = vy(8, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
         vy(8, 4) = vy(8, 4) + 1
         vy(8, 5) = vy(8, 5) + X(i1, 11)
         vy(8, 6) = vy(8, 6) + (X(i1, 11) * X(i1, 11))
      ElseIf V09 = 4 Then      'Reducció parentiu i addicional grup IV
         vy(9, 1) = vy(9, 1) + (X(i1, 3) * X(i1, 11))
         vy(9, 2) = vy(9, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
         vy(9, 3) = vy(9, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
         vy(9, 4) = vy(9, 4) + 1
         vy(9, 5) = vy(9, 5) + X(i1, 11)
         vy(9, 6) = vy(9, 6) + (X(i1, 11) * X(i1, 11))
      End If
      vy(10, 1) = vy(10, 1) + (X(i1, 3) * X(i1, 11))
      vy(10, 2) = vy(10, 2) + (X(i1, 3) * X(i1, 11) * X(i1, 11))
      vy(10, 3) = vy(10, 3) + (X(i1, 3) * X(i1, 3) * X(i1, 11) * X(i1, 11))
      vy(10, 4) = vy(10, 4) + 1
      vy(10, 5) = vy(10, 5) + X(i1, 11)
      vy(10, 6) = vy(10, 6) + (X(i1, 11) * X(i1, 11))
   End If
   If X(i1, 4) <> 0 Then   'Reduccions personals
      If v30 <> 0 Then     'Reducció discapacitat
         vy(11, 1) = vy(11, 1) + (v30 * X(i1, 11))
         vy(11, 2) = vy(11, 2) + (v30 * X(i1, 11) * X(i1, 11))
         vy(11, 3) = vy(11, 3) + (v30 * v30 * X(i1, 11) * X(i1, 11))
         vy(11, 4) = vy(11, 4) + 1
         vy(11, 5) = vy(11, 5) + X(i1, 11)
         vy(11, 6) = vy(11, 6) + (X(i1, 11) * X(i1, 11))
      End If
      If v32 <> 0 Then     'Reducció Edat
         vy(12, 1) = vy(12, 1) + (v32 * X(i1, 11))
         vy(12, 2) = vy(12, 2) + (v32 * X(i1, 11) * X(i1, 11))
         vy(12, 3) = vy(12, 3) + (v32 * v32 * X(i1, 11) * X(i1, 11))
         vy(12, 4) = vy(12, 4) + 1
         vy(12, 5) = vy(12, 5) + X(i1, 11)
         vy(12, 6) = vy(12, 6) + (X(i1, 11) * X(i1, 11))
      End If
      vy(13, 1) = vy(13, 1) + (X(i1, 4) * X(i1, 11))
      vy(13, 2) = vy(13, 2) + (X(i1, 4) * X(i1, 11) * X(i1, 11))
      vy(13, 3) = vy(13, 3) + (X(i1, 4) * X(i1, 4) * X(i1, 11) * X(i1, 11))
      vy(13, 4) = vy(13, 4) + 1
      vy(13, 5) = vy(13, 5) + X(i1, 11)
      vy(13, 6) = vy(13, 6) + (X(i1, 11) * X(i1, 11))
   End If
   If X(i1, 5) <> 0 Then   'Reducció habitatge
      vy(14, 1) = vy(14, 1) + (X(i1, 5) * X(i1, 11))
      vy(14, 2) = vy(14, 2) + (X(i1, 5) * X(i1, 11) * X(i1, 11))
      vy(14, 3) = vy(14, 3) + (X(i1, 5) * X(i1, 5) * X(i1, 11) * X(i1, 11))
      vy(14, 4) = vy(14, 4) + 1
      vy(14, 5) = vy(14, 5) + X(i1, 11)
      vy(14, 6) = vy(14, 6) + (X(i1, 11) * X(i1, 11))
   End If
   If X(i1, 6) <> 0 Then   'Resta reduccions
      vy(15, 1) = vy(15, 1) + (X(i1, 6) * X(i1, 11))
      vy(15, 2) = vy(15, 2) + (X(i1, 6) * X(i1, 11) * X(i1, 11))
      vy(15, 3) = vy(15, 3) + (X(i1, 6) * X(i1, 6) * X(i1, 11) * X(i1, 11))
```

```
       vy(15, 4) = vy(15, 4) + 1
       vy(15, 5) = vy(15, 5) + X(i1, 11)
       vy(15, 6) = vy(15, 6) + (X(i1, 11) * X(i1, 11))
    End If
    If X(i1, 3) + X(i1, 4) + X(i1, 5) + X(i1, 6) <> 0 Then 'Total reduccions
       aux = X(i1, 3) + X(i1, 4) + X(i1, 5) + X(i1, 6)
       vy(16, 1) = vy(16, 1) + (aux * X(i1, 11))
       vy(16, 2) = vy(16, 2) + (aux * X(i1, 11) * X(i1, 11))
       vy(16, 3) = vy(16, 3) + (aux * aux * X(i1, 11) * X(i1, 11))
       vy(16, 4) = vy(16, 4) + 1
       vy(16, 5) = vy(16, 5) + X(i1, 11)
       vy(16, 6) = vy(16, 6) + (X(i1, 11) * X(i1, 11))
    End If
    If X(i1, 7) <> 0 Then   'Quota íntegra
       vy(17, 1) = vy(17, 1) + (X(i1, 7) * X(i1, 11))
       vy(17, 2) = vy(17, 2) + (X(i1, 7) * X(i1, 11) * X(i1, 11))
       vy(17, 3) = vy(17, 3) + (X(i1, 7) * X(i1, 7) * X(i1, 11) * X(i1, 11))
       vy(17, 4) = vy(17, 4) + 1
       vy(17, 5) = vy(17, 5) + X(i1, 11)
       vy(17, 6) = vy(17, 6) + (X(i1, 11) * X(i1, 11))
    End If
    If X(i1, 8) <> 0 Then   'Quota tributària abans bonificació
       vy(18, 1) = vy(18, 1) + (X(i1, 8) * X(i1, 11))
       vy(18, 2) = vy(18, 2) + (X(i1, 8) * X(i1, 11) * X(i1, 11))
       vy(18, 3) = vy(18, 3) + (X(i1, 8) * X(i1, 8) * X(i1, 11) * X(i1, 11))
       vy(18, 4) = vy(18, 4) + 1
       vy(18, 5) = vy(18, 5) + X(i1, 11)
       vy(18, 6) = vy(18, 6) + (X(i1, 11) * X(i1, 11))
    End If
    If X(i1, 9) <> 0 Then   'Bonificació
       vy(19, 1) = vy(19, 1) + (X(i1, 9) * X(i1, 11))
       vy(19, 2) = vy(19, 2) + (X(i1, 9) * X(i1, 11) * X(i1, 11))
       vy(19, 3) = vy(19, 3) + (X(i1, 9) * X(i1, 9) * X(i1, 11) * X(i1, 11))
       vy(19, 4) = vy(19, 4) + 1
       vy(19, 5) = vy(19, 5) + X(i1, 11)
       vy(19, 6) = vy(19, 6) + (X(i1, 11) * X(i1, 11))
    End If
    If X(i1, 10) <> 0 Then   'Quota tributària
       vy(20, 1) = vy(20, 1) + (X(i1, 10) * X(i1, 11))
       vy(20, 2) = vy(20, 2) + (X(i1, 10) * X(i1, 11) * X(i1, 11))
       vy(20, 3) = vy(20, 3) + (X(i1, 10) * X(i1, 10) * X(i1, 11) * X(i1, 11))
       vy(20, 4) = vy(20, 4) + 1
       vy(20, 5) = vy(20, 5) + X(i1, 11)
       vy(20, 6) = vy(20, 6) + (X(i1, 11) * X(i1, 11))
    End If

    If j2 <= 10 Then
       If i1 / N >= j2 / 10 Then
          Application.ScreenUpdating = True
          Application.StatusBar = "Processat  " & (j2 * 8) & "%"
          Application.ScreenUpdating = False
          j2 = j2 + 1
       End If
    End If

Next i1
Close #1

ReDim MITJANA(1 To 11), PAG(1 To 3)

For j1 = 1 To 10
    MITJANA(j1) = SUMA(j1) / NT
Next j1
MITJANA(11) = NT / N

''''''''''''''''''''''''''
'Guarda(Descriptiu) a VT)'
''''''''''''''''''''''''''

ReDim VT(1 To 78, 12)
VT(1, 0) = "Descriptiu"
For j1 = 1 To 20
    If vy(j1, 4) <> 0 Then
       VT(j1, 1) = vy(j1, 1) / vy(j1, 5)
       VT(j1, 2) = (Sqr(vy(j1, 3) - (2 * VT(j1, 1) * vy(j1, 2)) + ((VT(j1, 1) ^ 2) * vy(j1, 6))) / vy(j1, 5))
       VT(j1, 3) = VT(j1, 1) - 1.95996 * VT(j1, 2)
       VT(j1, 4) = VT(j1, 1) + 1.95996 * VT(j1, 2)
       VT(j1, 5) = vy(j1, 1) / 1000000
       VT(j1, 6) = Sqr(vy(j1, 3) - ((vy(j1, 1) ^ 2) / vy(j1, 4))) / 1000000
       VT(j1, 7) = VT(j1, 5) - 1.95996 * VT(j1, 6)
       VT(j1, 8) = VT(j1, 5) + 1.95996 * VT(j1, 6)
    End If
Next j1
```

```
PAG(1) = vpag(1) / NT
aux = (Sqr(vpag(3) - (2 * PAG(1) * vpag(2)) + ((PAG(1) ^ 2) * spes2)) / NT)
PAG(2) = PAG(1) - 1.95996 * aux
PAG(3) = PAG(1) + 1.95996 * aux

Call IS_21ORDENA(0)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  85%"
Application.ScreenUpdating = False

Call IS_22DECILS_GP_INDEXS(11, UBound(X, 2))
Application.ScreenUpdating = True
Application.StatusBar = "Processat  95%"
Application.ScreenUpdating = False

temps = Timer - temps

End Sub
Private Sub IS_21ORDENA(opcio As Integer)

Dim i1 As Long, it As Integer
ReDim y(1 To N)

For it = 1 To 2                                'ord. 1==>BI ord. 2==>BL

    For i1 = 1 To N
        y(i1) = X(i1, it) + ((i1 / N) ^ 0.001) 'Suma quantitat per eliminar repeticions
        IND(i1, it) = i1
    Next i1

    Call COMUNS_2ORDENA_AUX(1, N, it)          'Crida a la rutina per a ordenar

Next it

End Sub
Private Sub IS_22DECILS_GP_INDEXS(pes, p2)

'pes=posicio pes (11)
'UBound(X, 2)=nombre variables

Dim axx_b, axx_p, i1 As Long, it As Integer, j1 As Integer

ReDim p(1 To 12, 2), xx_b(1 To N, 1 To 2), xx_p(1 To N) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_b(1 to N, 1 to 2) = (BI, BL * factor) acumulades / s(variables * factor)
'Calcula: xx_p(1 to N)         = població acumulada/NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For it = 1 To 2
    For j1 = 1 To 2
        If SUMA(j1) <> 0 Then
           axx_b = 0
           For i1 = 1 To N
               axx_b = axx_b + (X(IND(i1, it), j1) * X(IND(i1, it), pes))
               xx_b(i1, j1) = axx_b / SUMA(j1)  'BI, BL
           Next i1
        End If
    Next j1
    axx_p = 0
    For i1 = 1 To N
        axx_p = axx_p + X(IND(i1, it), pes)
        xx_p(i1) = axx_p / NT                   'pes
    Next i1

    If it = 1 Then Call IS_23DECILS(p, pes, xx_b, xx_p)     'DECILS
    Call IS_24INDEXS(it, pes, xx_b, xx_p)                   'INDEXS

Next it

End Sub
Private Sub IS_23DECILS(p, pes, xx_b, xx_p)

Dim axx_r, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer, l1 As Long

ReDim ds((pes - 1) * 2, 12), ts(2, 12), xx_r(1 To N, 1 To pes - 3) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_r(1 to N, 1 to pes-3)=(resta  * factor) acumulades / s(variables * factor)
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For j1 = 1 To pes - 3
```

```
    If SUMA(j1 + 2) <> 0 Then
       axx_r = 0
       For i1 = 1 To N
           axx_r = axx_r + (X(IND(i1, 1), j1 + 2) * X(IND(i1, 1), pes))
           xx_r(i1, j1) = axx_r / SUMA(j1 + 2) 'resta variables
       Next i1
    End If
Next j1

For k1 = 1 To 12
    p(k1, 1) = IIf(k1 < 10, k1 / 10, IIf(k1 = 10, 0.95, IIf(k1 = 11, 0.98, 1)))
    p(k1, 2) = IIf(k1 < 10, 0.1, IIf(k1 = 10, 0.05, IIf(k1 = 11, 0.03, 0.02)))
Next k1

i2 = 1
For k1 = 1 To 11
    For i1 = i2 To N
        If xx_p(i1) >= p(k1, 1) Then
           p(k1, 0) = i1                    'p(1 to 12, 0 = Observació on comença cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next k1
p(12, 0) = N

''''''''''''''''''''''''''''''''''''''''''''
'DECILS (1a dimensió parell decil acumulat)'
''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''''''''''''''''''''''''''''''''
'ds( 1, 1 to 12)=Base imposable            '
'ds( 3, 1 to 12)=Base liquidable           '
'...............................           '
'ds(13, 1 to 12)=Quota Íntegra             '
'ds(19, 1 to 12)=Quota tributària          '
''''''''''''''''''''''''''''''''''''''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 2
        ds(2 * j1, k1) = xx_b(l1, j1)        'BI, BL
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
    For j1 = 3 To pes - 1
        ds(2 * j1, k1) = xx_r(l1, j1 - 2)    'resta
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
Next k1

''''''''''''''''''''''''''
'tipus efectius          '
''''''''''''''''''''''''''
'ts( 1,1 to 12)= QT s/ BI'
'ts( 2,1 to 12)= QT s/ BL'
''''''''''''''''''''''''''

For k1 = 1 To 12
    If SUMA(1) <> 0 And ds(1, k1) <> 0 Then
       ts(1, k1) = (ds(((pes - 1) * 2) - 1, k1) * SUMA(pes - 1)) / (ds(1, k1) * SUMA(1))
    End If
    If SUMA(2) <> 0 And ds(3, k1) <> 0 Then
       ts(2, k1) = (ds(((pes - 1) * 2) - 1, k1) * SUMA(pes - 1)) / (ds(3, k1) * SUMA(2))
    End If
Next k1

''''''''''''''''''''''''''''''''''''''''''''''
'Guarda límits i mitjanes, decils i tipus a VT
''''''''''''''''''''''''''''''''''''''''''''''

VT(21, 0) = "Límits i mitjanes"      'Guarda(límits i mitjanes) a VT
VT(23, 0) = "Decils"                 'Guarda(Decils) a VT
VT(43, 0) = "Tipus"                  'Guarda(Tipus) a VT
For k1 = 1 To 12
    VT(21, k1) = (X(IND(p(k1, 0), 1), 1))
    VT(22, k1) = (ds(1, k1) * SUMA(1) / (NT * IIf(k1 < 10, 0.1, IIf(k1 = 10, 0.05, IIf(k1 = 11, 0.03, 0.02)))))
    For j1 = 1 To 20
        VT(22 + j1, k1) = ds(j1, k1)
    Next j1
    VT(43, k1) = ts(1, k1)
    VT(44, k1) = ts(2, k1)
Next k1
```

```
End Sub
Private Sub IS_24INDEXS(it, pes, xx_b, xx_p)

''''''''''''''''''''''''''
'INDEXS 30               '
''''''''''''''''''''''''''
'Gini:                 g 2
''''''''''''''''''''''''''
'Concentració:         c 7
'Kakwani:              k 7
'Suits:                s 7
'Efecte Redistributiu: e 7
''''''''''''''''''''''''''''''

Dim aconc, aefre, agini, asuit, daux(1 To 4), _
    i1 As Long, j1 As Integer, k1 As Integer, l1 As Integer, sxx_b As Double

Dim g As Double
ReDim c(1 To 8), k(1 To 8), s(1 To 8), e(1 To 8) As Double

agini = 0
sxx_b = 0
If SUMA(it) <> 0 Then

   For i1 = 1 To N
       daux(1) = X(IND(i1, it), it) - MITJANA(it)
       daux(2) = xx_p(i1) - MITJANA(pes)
       daux(3) = X(IND(i1, it), pes)
       agini = agini + (daux(1) * daux(2) * daux(3))
       sxx_b = sxx_b + xx_b(i1, it)                                  's.acum. BII,BIT,BLT
   Next i1

   If agini <> 0 Then g = 2 / MITJANA(it) * (agini / NT)             'gini

End If

For j1 = 1 To pes - 3

    aconc = 0
    aefre = 0
    asuit = 0
    If SUMA(j1 + 2) <> 0 Then

       For i1 = 1 To N
           daux(1) = X(IND(i1, it), j1 + 2) - MITJANA(j1 + 2)
           daux(2) = xx_p(i1) - MITJANA(pes)
           daux(3) = X(IND(i1, it), pes)
           daux(4) = xx_b(i1, it) - (sxx_b / N)
           aconc = aconc + (daux(1) * daux(2) * daux(3))
           asuit = asuit + (daux(1) * daux(4) * daux(3))
       Next i1

       If aconc <> 0 Then c(j1) = 2 / MITJANA(j1 + 2) * (aconc / NT)  'concentració
       k(j1) = c(j1) - g                                              'kakwani
       s(j1) = (2 * (asuit / NT) / MITJANA(j1 + 2)) - g               'suits

       If SUMA(it) <> 0 Then aefre = SUMA(j1 + 2) / SUMA(it)
       e(j1) = (aefre / (1 - aefre)) * k(j1)                          'ef red.

    End If
Next j1

''''''''''''''''''''''''''''''''''''
'Guarda els resultats(Índexs) a VT'
''''''''''''''''''''''''''''''''''''

If it = 1 Then VT(45, 0) = "Índexs"
VT(44 + it, it) = g
For k1 = 1 To 4
    For j1 = 1 To 8
        l1 = (8 * (k1 - 1)) + j1
        If k1 = 1 Then VT(46 + l1, it) = c(j1)
        If k1 = 2 Then VT(46 + l1, it) = k(j1)
        If k1 = 3 Then VT(46 + l1, it) = s(j1)
        If k1 = 4 Then VT(46 + l1, it) = e(j1)
    Next j1
Next k1

End Sub
Private Sub IS_25GP(p, pes)

Dim axx_gp(1 To 4), i1 As Long, j1 As Integer, k1 As Integer
```

```
ReDim gp(1 To 6, 1 To 12), xx_gp(1 To N, 1 To 4), y(4, 12) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_gp(1 to N, pes + 1 to pes + 4) = (GP * factor) acumulades
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For j1 = 1 To 4
'    If SUMA(j1) <> 0 Then
       axx_gp(j1) = 0
       For i1 = 1 To N
           axx_gp(j1) = axx_gp(j1) + (X(IND(i1, 1), j1 + pes) * X(IND(i1, 1), pes))
           xx_gp(i1, j1) = axx_gp(j1)
       Next i1
'    End If
Next j1

For k1 = 1 To 12
    i1 = p(k1, 0)
    For j1 = 1 To 4
        y(j1, k1) = xx_gp(i1, j1)
        gp(IIf(j1 <= 2, j1, j1 + 1), k1) = y(j1, k1) - y(j1, k1 - 1)
    Next j1
Next k1
For k1 = 1 To 12
    For j1 = 3 To 6 Step 3
        If gp(j1 - 2, k1) <> 0 Then gp(j1, k1) = gp(j1 - 1, k1) / gp(j1 - 2, k1) Else gp(j1, k1) = 0
    Next j1
    For j1 = 1 To 5
        If j1 <> 3 Then gp(j1, k1) = gp(j1, k1) * IIf(j1 = 1 Or j1 = 4, 1 / (p(k1, 2) * NT), 0.001)
    Next j1
Next k1
For k1 = 1 To 12
    For j1 = 1 To 4 Step 3
        If gp(j1, k1) >= 0.995 Then gp(j1, k1) = 1
        If gp(j1, k1) <= 0.005 Then gp(j1, k1) = 0
    Next j1
'    gp(4, k1) = -gp(4, k1)
Next k1

''''''''''''''''''''''''''
'Guarda(Guanyadors) a VT)
''''''''''''''''''''''''''

VT(71, 0) = "Guanyadors"
For k1 = 1 To 12
    For j1 = 1 To 6
        VT(70 + j1, k1) = IIf(j1 = 4, -1, 1) * gp(j1, k1)
    Next j1
Next k1

End Sub
Private Sub IS_30COMPARACIO(opcio As Integer)

Dim aux, i1 As Long, j1 As Integer, k1 As Integer
ReDim ds(1 To 4, 1 To 12), gp(1 To 6, 1 To 12), s(1 To 7) As Double

Open NOM_IS_SIMUL & "GP" & ANOIS & "_" & Trim(Str(COMP(1))) & ".dat" For Input As #1
Open NOM_IS_SIMUL & "GP" & ANOIS & "_" & Trim(Str(COMP(2))) & ".dat" For Input As #2

Input #1, N
Input #2, N

ReDim X(1 To N, 1 To 7), IND(1 To N)

For i1 = 1 To N
    Input #1, IND(i1), X(i1, 1), X(i1, 7)
    Input #2, aux, X(i1, 2), aux
    aux = X(i1, 1) - X(i1, 2)
    If Abs(aux) > 1 Then
       If aux > 0 Then
          X(i1, 3) = 1
          X(i1, 5) = 0
       Else
          X(i1, 3) = 0
          X(i1, 5) = 1
       End If
       X(i1, 4) = aux * X(i1, 3)
       X(i1, 6) = aux * X(i1, 5)
    End If
    For j1 = 1 To 6
        s(j1) = s(j1) + (X(i1, j1) * X(i1, 7))
    Next j1
```

```
    s(7) = s(7) + X(i1, 7)
Next i1
Close #1
Close #2

Call IS_31COMPARACIO_DECILS_GP(ds, gp, s)
Call IS_32COMPARACIO_ESCRIPTURA(ds, gp, s(1), s(2), s(7))
Call COMUNS_5IMPRESSIO("IS", "G-P")

End Sub
Private Sub IS_31COMPARACIO_DECILS_GP(ds, gp, s)

Dim aux, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer, l1 As Long
ReDim p(1 To 12, 2), xx(1 To N, 1 To 7), y(4, 12) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula xx(1 to N, 1 to 6)=(variables * factor) acumulades / s(variables * factor)
'        xx(1 to N, 7)     = població acumulada/s(7)   s(7)=NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

aux = 0
For j1 = 1 To 6
    If s(j1) <> 0 Then
       aux = 0
       For i1 = 1 To N
           aux = aux + (X(IND(i1), j1) * X(IND(i1), 7))
           xx(i1, j1) = aux / IIf(j1 <= 2, s(j1), 1)
       Next i1
    End If
Next j1

aux = 0
For i1 = 1 To N
    aux = aux + X(IND(i1), 7)
    xx(i1, 7) = aux / s(7)
Next i1

For j1 = 1 To 12
    p(j1, 1) = IIf(j1 < 10, j1 / 10, IIf(j1 = 10, 0.95, IIf(j1 = 11, 0.98, 1)))
    p(j1, 2) = IIf(j1 < 10, 0.1, IIf(j1 = 10, 0.05, IIf(j1 = 11, 0.03, 0.02)))
Next j1

i2 = 1
For j1 = 1 To 11
    For i1 = i2 To N
        If xx(i1, 7) >= p(j1, 1) Then
           p(j1, 0) = i1                  'p(1 to 12, 0 = Observació on comença cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next j1
p(12, 0) = N

''''''''
'DECILS'
''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 2
        ds(2 * j1, k1) = xx(l1, j1)
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
Next k1

''''''''''''''''''''''
'GUANYADORS-PERDEDORS'
''''''''''''''''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 4
        y(j1, k1) = xx(l1, j1 + 2)
        gp(IIf(j1 <= 2, j1, j1 + 1), k1) = y(j1, k1) - y(j1, k1 - 1)
    Next j1
Next k1
For j1 = 1 To 12
    For k1 = 3 To 6 Step 3
        If gp(k1 - 2, j1) <> 0 Then gp(k1, j1) = gp(k1 - 1, j1) / gp(k1 - 2, j1) Else gp(k1, j1) = 0
    Next k1
    For k1 = 1 To 5
```

```
        If k1 <> 3 Then gp(k1, j1) = gp(k1, j1) * IIf(k1 = 1 Or k1 = 4, 1 / (p(j1, 2) * s(7)), 0.001)
    Next k1
Next j1
For j1 = 1 To 12
    For k1 = 1 To 4 Step 3
        If gp(k1, j1) >= 0.995 Then gp(k1, j1) = 1
        If gp(k1, j1) <= 0.005 Then gp(k1, j1) = 0
    Next k1
    gp(4, j1) = -gp(4, j1)
Next j1


End Sub
Private Sub IS_32COMPARACIO_ESCRIPTURA(ds, gp, s1, s2, s7)

Dim avisgp As Boolean, nom As String, i1 As Integer, llibre As Integer, nota As String, _
    r_f(1 To 2, 1 To 3) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 2, 1)==> formats del llibre "FORMATS", full "IS"                '
'r_f(1 to 2, 2)==> formats del llibre "SIMCAT", full "(G-P)"              '
'r_f(1 to 2, 3)==> formats del llibre "SIMCAT", full "(G-P)" (només valors)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre = Workbooks.Count

Workbooks(llibre).Activate                          'llibre "FORMATS"

Sheets("IS").Activate

Set r_f(1, 1) = Range(Cells(146, 1), Cells(154, 15)) 'Decils
Set r_f(2, 1) = Range(Cells(137, 1), Cells(144, 15)) 'Guanyadors

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                               'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("IS(G-P)")

ActiveWorkbook.Unprotect (SECRET)

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("IS(G-P)").Activate

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Configura el rang d'escriptura'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

With Range(Cells(1, 1), Cells(66, 15))
  .ColumnWidth = 6.43
  With .Font
    .Name = "Arial"
    .Size = 7
  End With
  .HorizontalAlignment = xlCenter
  .Interior.ColorIndex = 2
  .RowHeight = 11
End With
With Range(Cells(1, 1), Cells(2, 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
End With
Cells(1, 1).Value = "IMPOST DE SUCCESSIONS"
Cells(2, 1).Value = "COMPARACIÓ SIMULACIÓ-" & COMP(1) & " vs. SIMULACIÓ-" & COMP(2) & _
                    " (Base de dades: " & ANOIS & ")"

Set r_f(1, 2) = Range(Cells(3, 1), Cells(11, 15))    'Decils     Rangs d'escriptura
Set r_f(2, 2) = Range(Cells(13, 1), Cells(20, 15))   'Guanyadors Rangs d'escriptura
Set r_f(1, 3) = Range(Cells(6, 4), Cells(9, 15))     'Decils     Rangs de valors
Set r_f(2, 3) = Range(Cells(15, 4), Cells(20, 15))   'Guanyadors Rangs de valors

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Escriu els resultats numèrics'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
```

```
r_f(1, 1).Copy Destination:=r_f(1, 2)
r_f(1, 2).Rows(4).Columns(1).Value = "Quota SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(6).Columns(1).Value = "Quota SIMULACIÓ-" & COMP(2)
r_f(1, 2).Rows(8).Columns(2).Value = "SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(8).Columns(4).Value = s1
r_f(1, 2).Rows(9).Columns(4).Value = s2
If s1 = s2 Then
   nota = "Neutral"
ElseIf s1 > s2 Then
   nota = "Pèrdua en recaptació"
Else
   nota = "Guany en recaptació"
End If
r_f(1, 2).Rows(8).Columns(6).Value = nota
If nota <> "Neutral" Then
   r_f(1, 2).Rows(8).Columns(8).Value = s2 - s1
Else
   With Range(Cells(10, 8), Cells(11, 13))
     .Interior.Pattern = xlCrissCross
     .MergeCells = True
     .Value = ""
   End With
End If
r_f(1, 2).Rows(8).Columns(14).Value = s7
r_f(1, 2).Rows(9).Columns(2).Value = "SIMULACIÓ-" & COMP(2)
r_f(2, 1).Copy Destination:=r_f(2, 2)
r_f(1, 3).Value = ds

r_f(2, 3).Value = gp
r_f(2, 3).ShrinkToFit = True

LLIBRE_FORMATS.Close

''''''''''''''
'Gràfics G-P'
''''''''''''''

For i1 = 1 To 12
    If Abs(r_f(2, 3).Rows(1).Columns(i1)) > 0.001 Or _
       Abs(r_f(2, 3).Rows(4).Columns(i1)) > 0.001 Then
       avisgp = True
       Exit For
    End If
Next i1

If avisgp Then

   Dim r_gp(1 To 2, 1 To 4) As Range

   Set r_gp(1, 1) = r_f(1, 3).Rows(1)  'Quota Simulació-1'
   Set r_gp(2, 1) = r_f(1, 3).Rows(3)  'Quota Simulació-2'
   Set r_gp(1, 2) = r_f(2, 3).Rows(1)  '% guanyadors'
   Set r_gp(2, 2) = r_f(2, 3).Rows(4)  '% perdedors'
   Set r_gp(1, 3) = r_f(2, 3).Rows(2)  'Total guanys'
   Set r_gp(2, 3) = r_f(2, 3).Rows(5)  'Total pèrdues'
   Set r_gp(1, 4) = r_f(2, 3).Rows(3)  'Mitjana guanyadors'
   Set r_gp(2, 4) = r_f(2, 3).Rows(6)  'Mitjana perdedors'
   r_gp(2, 2).NumberFormat = "0.00%;[Red]0.00%"

   Call COMUNS_43GRAFICS_GP(23, ANOIS, "IS", "(G-P)", r_gp, 1)

   For i1 = 1 To Worksheets("IS(G-P)").Shapes.Count
       Worksheets("IS(G-P)").Shapes(i1).Left = IIf(i1 = 1 Or i1 = 3, 10, 280) 'Reposicionament imatges
   Next i1

End If

ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(67, 1))

End Sub
Private Sub IS_40ESCRIPTURA(opcio As Integer)

Dim fila As Integer, i As Integer, i1 As Integer, j1 As Integer, llibre(1 To 2) As Integer, nom As String, _
    r_ref(1 To 2) As Range, r_f(1 To 4, 1 To 4) As Range, r_parms(1 To 2) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 4, 1)==> formats del llibre "FORMATS", full "IS"                     '
'r_f(1 to 4, 2)==> formats del llibre "RESULTATS" temporals                    '
'r_f(1 to 4, 3)==> formats del llibre "SIMCAT", full "IS(R)"                   '
'r_f(1 to 4, 3)==> formats del llibre "SIMCAT", full "IS(R)" (només valors)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False
```

```
nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre(1) = Workbooks.Count

Workbooks(llibre(1)).Activate                       'llibre "FORMATS"

Sheets("IS").Activate

Set r_parms(1) = Range(Cells(2, 1), Cells(39, 15))   'Paràmetres

Set r_f(1, 1) = Range(Cells(41, 1), Cells(66, 12))   'Descriptiu
Set r_f(2, 1) = Range(Cells(68, 1), Cells(71, 13))   'Límits i mitjana per decils
Set r_f(3, 1) = Range(Cells(73, 1), Cells(97, 15))   'Decils
Set r_f(4, 1) = Range(Cells(99, 1), Cells(135, 6))   'Índexs

Set r_ref(1) = Range(Cells(156, 1), Cells(171, 11))  'Referència

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                               'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("IS(R)")

ActiveWorkbook.Unprotect (SECRET)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Escriu els resultats de la referència'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

fila = 18

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("IS(R)").Activate
Set r_ref(2) = Range(Cells(1, 1), Cells(fila - 2, 11))
With r_ref(2)
  .ColumnWidth = 6.43
  .RowHeight = 11
End With
r_ref(2).Rows(2).RowHeight = 14
r_ref(1).Copy Destination:=r_ref(2)
ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila - 1, 1))

For i1 = 1 To UBound(IRESULTS)

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Lectura en els arxius temporals de resultats'
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    nom = NOM_IS_SIMUL & "S" & ANOIS & "_" & Trim(Str(IRESULTS(i1))) & ".xlsx"
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    llibre(2) = Workbooks.Count

    Workbooks(llibre(2)).Activate                   'llibre "RESULTATS"

    Sheets("PARAMETRES").Activate                   'Paràmetres
    ReDim p(47, 10)
    For i = 0 To UBound(p, 1)
        For j1 = 1 To UBound(p, 2)
            p(i, j1) = Cells(i + 1, j1)
        Next j1
    Next i

    Sheets("DESCRIPTIU").Activate                   'Descriptiu
    Set r_f(1, 2) = Range(Cells(1, 1), Cells(20, 8))

    Sheets("LIMITS-MITJANES").Activate              'Límits i mitjanes
    Set r_f(2, 2) = Range(Cells(1, 1), Cells(2, 12))

    Sheets("DECILS-TIPUS").Activate                 'Decils BI i Tipus efectius QT s/BI QT s/BL
    Set r_f(3, 2) = Range(Cells(1, 1), Cells(22, 12))

    Sheets("INDEXS").Activate                       'Indexs
    Set r_f(4, 2) = Range(Cells(1, 1), Cells(34, 2))

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Escriptura en el full definitiu de resultats'
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    ThisWorkbook.Activate                           'llibre "SIMCAT"
```

```
    With Range(Cells(fila - 1, 1), Cells(fila + 133, 15))
      .ColumnWidth = 6.43
      With .Font
        .Name = "Arial"
        .Size = 7
      End With
      .HorizontalAlignment = xlCenter
      .Interior.ColorIndex = 2
      .RowHeight = 11
    End With
    With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
      With .Font
        .Bold = True
        .Size = 10
      End With
      .HorizontalAlignment = xlLeft
      .RowHeight = 14
      .Value = "SIMULACIÓ-" & IRESULTS(i1) & " (Base de dades: " & ANOIS & ")"
    End With

    Call IS_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Rangs per a l'escriptura en el llibre SIMCAT full IS(R)'
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    Set r_f(1, 3) = Range(Cells(fila + 39, 1), Cells(fila + 64, 12))      'Descriptiu
    Set r_f(1, 4) = Range(Cells(fila + 43, 5), Cells(fila + 62, 12))
    Set r_f(2, 3) = Range(Cells(fila + 66, 1), Cells(fila + 69, 13))      'Límits i mitjanes per decils
    Set r_f(2, 4) = Range(Cells(fila + 68, 2), Cells(fila + 69, 13))
    Set r_f(3, 3) = Range(Cells(fila + 71, 1), Cells(fila + 95, 15))      'Decils
    Set r_f(3, 4) = Range(Cells(fila + 74, 4), Cells(fila + 95, 15))
    Set r_f(4, 3) = Range(Cells(fila + 97, 1), Cells(fila + 123, 6))      'Índexs
    Set r_f(4, 4) = Range(Cells(fila + 100, 5), Cells(fila + 123, 6))

    For j1 = 1 To 4
        r_f(j1, 1).Copy Destination:=r_f(j1, 3)
        r_f(j1, 2).Copy: r_f(j1, 4).PasteSpecial xlPasteValues
        If j1 = 1 Then
           r_f(j1, 3).Rows(26).Columns(7).Value = p(0, 5)
           r_f(j1, 3).Rows(26).Columns(10).Value = p(0, 7)
           r_f(j1, 3).Rows(26).Columns(11).Value = p(0, 6)
           r_f(j1, 3).Rows(26).Columns(12).Value = IIf(p(0, 8) > 1, 1, p(0, 8))
        End If
    Next j1

    LLIBRE_RESULTATS.Close

    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 70, 1))
    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 134, 1))

    ''''''''''''''''''
    'Rangs dels gràfics
    ''''''''''''''''''

    ReDim r_g(1 To 3, 1 To 4) As Range

    Set r_g(1, 1) = r_f(3, 4).Rows(2)      'BI acum. (sim)
    Set r_g(2, 1) = r_f(3, 4).Rows(20)     'QT acum. (sim)
    Set r_g(3, 1) = r_f(3, 4).Rows(20)     'QT acum. (sim)
    Set r_g(1, 2) = r_f(3, 4).Rows(4)      'BL acum. (sim)
    Set r_g(2, 2) = r_f(3, 4).Rows(20)     'QT acum. (sim)
    Set r_g(3, 2) = r_f(3, 4).Rows(20)     'QT acum. (sim)
    Set r_g(1, 3) = r_f(3, 4).Rows(21)     'QT s/BI (sim)
    Set r_g(1, 4) = r_f(3, 4).Rows(22)     'QT s/BL (sim)

    Call IS_42ESCRIPTURA_GRAFICS(fila + 135, r_g, IRESULTS(i1))
    fila = fila + 181
Next i1

SALTA:
LLIBRE_FORMATS.Close

Call COMUNS_5IMPRESSIO("IS", "R")

End Sub
Private Sub IS_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

Dim i1 As Integer, j1 As Integer

Set r_parms(2) = Range(Cells(fila, 1), Cells(fila + 19, 15))          'Paràmetres

r_parms(1).Copy Destination:=r_parms(2)
```

```
With r_parms(2)

  .Font.Size = 8

  For i1 = 1 To 7
      .Rows(3 + i1).Columns(10).Value = p(1, i1)      'parentiu
  Next i1
  For j1 = 2 To 4
      .Rows(4).Columns(j1 + 9).Value = p(1, 6 + j1)
  Next j1

  For i1 = 1 To 5
      .Rows(14 + i1).Columns(15).Value = p(2, i1)     'addicional parentiu
  Next i1

  .Rows(17).Columns(9).Value = p(3, 1)                'discapacitat
  .Rows(18).Columns(9).Value = p(3, 2)

  .Rows(19).Columns(8).Value = p(4, 1)                'edat
  .Rows(19).Columns(9).Value = p(4, 2)

  .Rows(7).Columns(14).Value = p(5, 1)                'assegurances
  .Rows(7).Columns(15).Value = p(5, 2)

  .Rows(8).Columns(14).Value = p(6, 1)                'habitatge
  .Rows(8).Columns(15).Value = p(6, 2)

  For i1 = 1 To 4                                     'patrimonials
      .Rows(8 + i1).Columns(14).Value = p(6 + i1, 1)
      .Rows(8 + i1).Columns(15).Value = p(6 + i1, 2)
  Next i1

  For i1 = 2 To 4                                     'coeficients correctors
      For j1 = 1 To 4
          .Rows(i1 + 11).Columns(j1 + 7).Value = p(i1 + 10, j1)
      Next j1
  Next i1

  For i1 = 1 To p(0, 2)                               'tarifa grup parentiu 1 i 2
      For j1 = 1 To 3
          .Rows(3 + i1).Columns(j1).Value = p(14 + i1, j1)
      Next j1
  Next i1
  If p(0, 2) <> 16 Then
     With Range(Cells(fila + p(0, 2) + 3, 1), Cells(fila + 18, 3))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = ""
     End With
     With Range(Cells(fila + p(0, 2) + 3, 1), Cells(fila + p(0, 2) + 3, 3))
       With .Borders(xlEdgeTop)
         .LineStyle = xlContinuous
         .Weight = xlMedium
       End With
     End With
  End If

  For i1 = 1 To p(0, 3)                               'tarifa grup parentiu 3 i 4
      For j1 = 1 To 3
          .Rows(3 + i1).Columns(j1 + 3).Value = p(14 + i1, j1 + 4)
      Next j1
  Next i1
  If p(0, 3) <> 16 Then
     With Range(Cells(fila + p(0, 3) + 3, 4), Cells(fila + 18, 6))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = ""
     End With
     With Range(Cells(fila + p(0, 3) + 3, 4), Cells(fila + p(0, 3) + 3, 6))
       With .Borders(xlEdgeTop)
         .LineStyle = xlContinuous
         .Weight = xlMedium
       End With
     End With
  End If

  If p(0, 2) <> 16 And p(0, 3) <> 16 Then
     With Range(Cells(fila + Application.max(p(0, 2), p(0, 3)) + 3, 3), Cells(fila + 18, 3))
       .Borders(xlEdgeRight).LineStyle = xlNone
     End With
  End If
```

```
  For i1 = 1 To 4                                    'Bonificacions Grup 1 i 2
      .Rows(i1 + 21).Columns(6).Value = p(30 + i1, 1)
      .Rows(i1 + 21).Columns(7).Value = p(30 + i1, 2)
      .Rows(i1 + 25).Columns(7).Value = p(34 + i1, 1)
  Next i1
  For i1 = 1 To 7                                    'Bonificacions Grup 3
      .Rows(i1 + 29).Columns(8).Value = p(38 + i1, 1)
  Next i1
  For i1 = 1 To 2                                    'Bonificacions Grup 4
      .Rows(i1 + 36).Columns(9).Value = p(45 + i1, 1)
  Next i1

End With

End Sub
Private Sub IS_42ESCRIPTURA_GRAFICS(fila, r_g, sim)

Dim avisgp As Boolean, i1 As Integer, i2 As Integer, j1 As Integer, m, nom() As String, s_r() As Boolean

''''''''''''''''''''''''''''''''''''''''''''''''''''
'Escriptura en el full definitiu de resultats'
''''''''''''''''''''''''''''''''''''''''''''''''''''

With Range(Cells(fila - 1, 1), Cells(fila + 44, 15))   '78
  .ColumnWidth = 6.43
  .Interior.ColorIndex = 2
  .RowHeight = 10
End With
With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
  .Value = "GRÀFICS DE LA SIMULACIÓ-" & sim & " (Base de dades: " & ANOIS & ")"
End With

ReDim nom(1 To 4, 1 To 2), s_r(1 To 5, 1 To 3)

For i1 = 1 To 2
    nom(1, i1) = "Sim-" & sim & IIf(i1 = 1, "(BI)", "(BL)")
    nom(2, i1) = "Sim-" & sim & "(QT)"
    nom(3, i1) = "Sim-" & sim & "(QT relativa)"
    nom(4, i1) = "Equitat"
Next i1

m = Round(Application.max(r_g(1, 3), r_g(1, 4)), 2) + 0.01

Call COMUNS_41GRAFICS_CORBESLORENZ(fila, False, "IS", nom, r_g, s_r)             'Lorenz
Call COMUNS_42GRAFICS_TIPUS(fila + 23, False, "IS", m, r_g, s_r, sim)            'Tipus efectius

For i1 = 1 To Worksheets("IS(R)").Shapes.Count - 1 Step 2
    Worksheets("IS(R)").Shapes(i1).Left = 20               'Reposicionament imatges
Next i1
For i1 = 2 To Worksheets("IS(R)").Shapes.Count Step 2
    Worksheets("IS(R)").Shapes(i1).Left = 310              'Reposicionament imatges
Next i1

ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 45, 1))

End Sub
Private Sub ISD_10PARAMETRES(opcio As Integer)

Dim i1 As Integer

ReDim percen(100) As Integer, edat(22) As Integer, tram(9) As Integer
For i1 = 100 To 0 Step -1
    percen(100 - i1) = i1
    If i1 <= 22 Then edat(22 - i1) = i1 + 18
    If i1 <= 9 Then tram(9 - i1) = i1 + 1
Next i1
If ISIMULS(3) <> 0 Then
   ReDim sims(1 To ISIMULS(3))
   For i1 = ISIMULS(3) To 1 Step -1
       sims(ISIMULS(3) - i1 + 1) = CID(i1)
   Next i1
End If

PAGINA = -1
TORNA:
PAGINA = PAGINA + 1
ERR_LEC = True

Do While ERR_LEC
```

```
   With IS2
     .MultiPage1.Value = PAGINA
     If .MultiPage1.Value = 0 Then .Caption = "SIMCAT-ID: Reduccions a la Base Imposable"
     If .MultiPage1.Value = 1 Then .Caption = "SIMCAT-ID: Coeficients multiplicadors, Tarifa i Bonificacions"
     .Caption = .Caption & " (Base de dades: " & ANOID & ")"
     .ListBox11.List = percen
     .ListBox12.List = percen
     .ListBox13.List = percen
     .ListBox15.List = percen
     .ListBox16.List = percen
     .ListBox161.List = edat
     .ListBox22.List = tram
     .ListBox23.List = tram
     .ListBox241.List = percen
     .ListBox243.List = percen
     .ListBox244.List = percen
     .Llei.Value = True
     If ISIMULS(3) <> 0 Then
        .ListBox_SimulRef.List = sims
        .SimulRef.Visible = True
     End If
     .Show
   End With
   If SORTIR Then Exit Sub
Loop
If PAGINA < 1 Then GoTo TORNA
If PAGINA = 1 Then Exit Sub

End Sub
Private Sub ISD_20SIMULACIO(temps)

Dim it As Integer

'''''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul preliminar sobre trams i tipus impositius'
'''''''''''''''''''''''''''''''''''''''''''''''''

ReDim tt12(1 To NTRAMS12 - IIf(NTRAMS12 <> 1, 1, 0)), tt34(1 To NTRAMS34 - IIf(NTRAMS34 <> 1, 1, 0)) As Double
tt12(1) = T12(1) * TIPUS12(1)
If NTRAMS12 > 2 Then
   For it = 2 To NTRAMS12 - 1
       tt12(it) = tt12(it - 1) + ((T12(it) - T12(it - 1)) * TIPUS12(it))
   Next it
End If
tt34(1) = T34(1) * TIPUS34(1)
If NTRAMS34 > 2 Then
   For it = 2 To NTRAMS34 - 1
       tt34(it) = tt34(it - 1) + ((T34(it) - T34(it - 1)) * TIPUS34(it))
   Next it
End If

'''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables del fitxer de lectura'
'''''''''''''''''''''''''''''''''''''''''''''''''

Dim V06 As Integer, V08 As Integer, V09 As String, _
    C01, C02, C03, C04, C06, C08, _
    C09, C10, C11, _
    C101R, C101T, C102R, C102T, C103R, C103T, _
    C104R, C104T, C105R, C105T, edat As Integer, trib As Integer

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables utilitzades en els càlculs
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Dim aux, bit, bl, blt, i1 As Long, j1 As Integer, j2 As Integer, _
    redt As Double

''''''''''''''''''
'Lectura de dades'
''''''''''''''''''

Open NOM_ID_DADES & ANOID & ".dat" For Input As #1
Input #1, N

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables després de conèixer N'
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ReDim ID_I(1 To N, 1 To 3) As String, IND(1 To N, 1 To 6), _
      i_grup(1 To N) As Integer, i_pag(1 To N, 1 To 3) As Integer, X3(1 To N, 1 To 6)

j2 = 1
```

```
NT = 0
N1 = 0
N2 = 0
NT1 = 0
NT2 = 0

For i1 = 1 To N

    Input #1, ID_I(i1, 1), ID_I(i1, 2), ID_I(i1, 3), V06, V08, V09, _
              C01, C02, C03, C04, C06, C08, C09, C10, C11, _
              C101R, C101T, C102R, C102T, C103R, C103T, C104R, C104T, C105R, C105T, _
              edat, trib, X3(i1, 6)

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Variables d'interès                                                       '
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'ID_I(, 1) = ID                                                            '
    'ID_I(, 2) = Numero expedient                                              '
    'ID_I(, 3) = Número autoliquidació                                         '
    'V06       = Grup parentiu                                                 '
    'V08       = Grau dicapacitat                                              '
    'V09       = Parentiu                                                      '
    'C01       = Béns urbans                                                   '
    'C02       = Béns rústics                                                  '
    'C03       = Valor participacions                                          '
    'C04       = Altres béns                                                   '
    'C06       = Càrregues de la donació                                       '
    'C08       = Valor Plé domini                                              '
    'C09       = Valor Nua propetat                                            '
    'C10       = Valor donació acumulada                                       '
    'C11       = Valor donació fora territori                                  '
    'C101R     = Reducció per activitats empr. o profess. real                 '
    'C102R     = Reducció per participacions real                              '
    'C103R     = Reducció per béns culturals real                              '
    'C104R     = Reducció per explotacions agràries real                       '
    'C105R     = Reducció per altres béns real                                 '
    'C101T     = Reducció per activitats empr. o profess. teòrica              '
    'C102T     = Reducció per participacions t                                 '
    'C103T     = Reducció per béns culturals teòrica                           '
    'C104T     = Reducció per explotacions agràries teòrica                    '
    'C105T     = Reducció per altres béns teòrica                              '
    'QT        = Quota tributària referència                                   '
    'EDAT      = Edat subjecte passiu                                          '
    'trib      = Tipus de tributació (real=1 o teòrica=2)                      '
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'X3(i1, 1) = Base Imposable                                                '
    'X3(i1, 2) = Base Liquidable                                               '
    'X3(i1, 3) = Reduccions                                                    '
    'X3(i1, 4) = Quota Íntegra                                                 '
    'X3(i1, 5) = Quota tributària                                              '
    'X3(i1, 6) = Factor elevació = 1 sempre                                    '
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'X(i1, 1, 1 to 3) = Base Imposable                                         '
    'X(i1, 2, 1 to 3) = Base Liquidable                                        '
    'X(i1, 3, 1 to 3) = Reduccions                                             '
    'X(i1, 4, 1 to 3) = Quota Íntegra                                          '
    'X(i1, 5, 1 to 3) = Quota tributària                                       '
    'X(i1, 6, 1 to 3) = Factor elevació                                        '
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'La 3a. dimensió 1=Parentiu 1i2, 2=Parentiu 3i4, 3=Total                   '
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    '                  0 quan X(i1, 2, 1 to 3)=0                               '
    'i_pag(i1, 1 to 3)=                                                        '
    '                  1 quan X(i1, 2, 1 to 3)>0                               '
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    'X3(i1, 6) = 1                        'quan no es volen pesos
    i_grup(i1) = IIf(V06 <= 2, 1, 2)      'Indicador grup parentiu

    ''''''''''''''''
    'Base Imposable
    ''''''''''''''''

    X3(i1, 1) = Application.max(0, C01 + C02 + C03 + C04 - C06)
    If trib = 2 Then bit = Application.max(0, X3(i1, 1) + C08 + C10 + C11 - C09) Else bit = 0

    ''''''''''''
    'Reduccions
    ''''''''''''

    C101R = (C101R / 0.95) * R_BASE(1, 1) 'Reducció per activitats empr. o profess. real
    C102R = (C102R / 0.95) * R_BASE(2, 1) 'Reducció per participacions real
    C103R = (C103R / 0.95) * R_BASE(3, 1) 'Reducció per béns culturals real
```

```
    If C105R <> 0 Then
       If C105R > 125000 Then             'Reducció Altres(1)
          C105R = Application.min(C105R * R_BASE(5, 1), IIf(V08 < 33, R_BASE(5, 2), R_BASE(5, 3)))
       Else                               'Reducció Altres(2)
          If edat <= R_BASE(6, 4) Or V08 >= 65 Then
             C105R = Application.min(C105R * R_BASE(6, 1), IIf(V08 < 65, R_BASE(6, 2), R_BASE(6, 3)))
          Else
             C105R = 0
          End If
       End If
    End If

    X3(i1, 3) = Application.min(X3(i1, 1), C101R + C102R + C103R + C104R + C105R)
    If trib = 2 Then redt = Application.min(bit, C101R + C102R + C103R + C104R + C105R) Else redt = 0

    '''''''''''''''''
    'Base Liquidable
    '''''''''''''''''

    X3(i1, 2) = X3(i1, 1) - X3(i1, 3)
    If trib = 2 Then blt = bit - redt Else blt = 0

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina la Quota íntegra segons la tarifa i trams indicats'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    X3(i1, 4) = 0
    X3(i1, 5) = 0
    If trib = 1 Then bl = X3(i1, 2) Else bl = blt

    If bl > 0 Then

       i_pag(i1, 3) = 1

       If V06 <= 2 Then
          If NTRAMS12 = 1 Then
             X3(i1, 4) = bl * TIPUS12(1)
          Else
             it = NTRAMS12
             If bl <= T12(1) Then X3(i1, 4) = bl * TIPUS12(1)
             If NTRAMS12 > 2 Then
                For j1 = 2 To NTRAMS12 - 1
                    If bl > T12(j1 - 1) And bl <= T12(j1) Then X3(i1, 4) = tt12(j1 - 1) + ((bl - T12(j1 - 1)) *
TIPUS12(j1))
                Next j1
             End If
             If bl > T12(it - 1) Then X3(i1, 4) = tt12(it - 1) + ((bl - T12(it - 1)) * TIPUS12(it))
          End If
       Else
          If NTRAMS34 = 1 Then
             X3(i1, 4) = bl * TIPUS34(1)
          Else
             it = NTRAMS34
             If bl <= T34(1) Then X3(i1, 4) = bl * TIPUS34(1)
             If NTRAMS34 > 2 Then
                For j1 = 2 To NTRAMS34 - 1
                    If bl > T34(j1 - 1) And bl <= T34(j1) Then X3(i1, 4) = tt34(j1 - 1) + ((bl - T34(j1 - 1)) *
TIPUS34(j1))
                Next j1
             End If
          End If
          If bl > T34(it - 1) Then X3(i1, 4) = tt34(it - 1) + ((bl - T34(it - 1)) * TIPUS34(it))
       End If


       ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
       'Determina la quota per a ingressar amb els coeficients correctors'
       ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

       X3(i1, 5) = X3(i1, 4) * COEF(V06)

    End If

    ''''''''''''''''''''''''''''''''''''''''''''''''
    'Correcció de la tarifa pel tipus efectiu mitjà
    ''''''''''''''''''''''''''''''''''''''''''''''''

    If trib = 2 And blt <> 0 Then
       X3(i1, 5) = X3(i1, 2) * Application.WorksheetFunction.Floor(X3(i1, 5) / blt, 0.0001)
       X3(i1, 4) = X3(i1, 5) / COEF(V06)
    End If
```

```
    '''''''''''''''''''''''''''''''''''''''''''''
    'Aplicació de les bonificacions a la tarifa
    '''''''''''''''''''''''''''''''''''''''''''''

    X3(i1, 5) = (1 - BONIF(V06)) * X3(i1, 5)

    NT = NT + X3(i1, 6)

    If i_grup(i1) = 1 Then
       N1 = N1 + 1
       NT1 = NT1 + X3(i1, 6)
    Else
       N2 = N2 + 1
       NT2 = NT2 + X3(i1, 6)
    End If

    If j2 <= 10 Then
       If i1 / N >= j2 / 10 Then
          Application.ScreenUpdating = True
          Application.StatusBar = "Processat  " & (j2 * 8) & "%"
          Application.ScreenUpdating = False
          j2 = j2 + 1
       End If
    End If
Next i1
Close #1

Dim k1 As Integer, k2 As Integer, obs As Long, p As Integer, _
    spes2(1 To 3), tobs, v As Integer, _
    vpag(1 To 3, 1 To 3), vy(1 To 5, 1 To 6, 1 To 3) As Double

ReDim MITJANA(1 To 6, 1 To 3), SUMA(1 To 6, 1 To 3), VT(1 To 102, 1 To 12), X(1 To N, 1 To 18)

'''''''''''''''''''''''''''''''''''''''''''''''''
'Discrimina les variables per grup de parentiu'
'''''''''''''''''''''''''''''''''''''''''''''''''

For i1 = 1 To N
    If i_grup(i1) = 1 Then
       i_pag(i1, 1) = i_pag(i1, 3)
       For j1 = 1 To 6
           X(i1, j1) = X3(i1, j1)
       Next j1
    Else
       i_pag(i1, 2) = i_pag(i1, 3)
       For j1 = 1 To 6
           X(i1, j1 + 6) = X3(i1, j1)
       Next j1
    End If
    For j1 = 1 To 6
        X(i1, j1 + 12) = X3(i1, j1)
    Next j1
Next i1

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Determina les variables per al càlcul descriptiu vx          '
'Determina les variables per al càlcul dels "no-pagadors" vpag'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For k1 = 1 To 3
    k2 = (k1 - 1) * 6    'nombre de variables
    p = 6 + k2           'posicio del pes
    For j1 = 1 To 5
        v = j1 + k2      'posicio de les variables
        For i1 = 1 To N
            If X(i1, v) <> 0 Then
               vy(j1, 1, k1) = vy(j1, 1, k1) + (X(i1, v) * X(i1, p))
               vy(j1, 2, k1) = vy(j1, 2, k1) + (X(i1, v) * X(i1, p) * X(i1, p))
               vy(j1, 3, k1) = vy(j1, 3, k1) + (X(i1, v) * X(i1, v) * X(i1, p) * X(i1, p))
               vy(j1, 4, k1) = vy(j1, 4, k1) + 1
               vy(j1, 5, k1) = vy(j1, 5, k1) + X(i1, p)
               vy(j1, 6, k1) = vy(j1, 6, k1) + (X(i1, p) * X(i1, p))
            End If
        Next i1
    Next j1
    For i1 = 1 To N
        spes2(k1) = spes2(k1) + (X(i1, p) * X(i1, p))
        vpag(1, k1) = vpag(1, k1) + (i_pag(i1, k1) * X(i1, p))
        vpag(2, k1) = vpag(2, k1) + (i_pag(i1, k1) * X(i1, p) * X(i1, p))
        vpag(3, k1) = vpag(3, k1) + (i_pag(i1, k1) * i_pag(i1, k1) * X(i1, p) * X(i1, p))
    Next i1
    For j1 = 1 To 6
        v = j1 + k2
```

```
        For i1 = 1 To N
            SUMA(j1, k1) = SUMA(j1, k1) + (X(i1, v) * X(i1, p))
        Next i1
    Next j1
Next k1

MITJANA(6, 1) = NT1 / N1
MITJANA(6, 2) = NT2 / N2
MITJANA(6, 3) = NT / N

For k1 = 1 To 3
    For j1 = 1 To 6
        MITJANA(j1, k1) = SUMA(j1, k1) / IIf(k1 = 1, NT1, IIf(k1 = 2, NT2, NT))
    Next j1
Next k1

''''''''''''''''''''''''''
'Guarda(Descriptiu) a VT)'
''''''''''''''''''''''''''

For k1 = 1 To 3
    For j1 = 1 To 5
        v = 3 * (j1 - 1) + k1
        If vy(j1, 4, k1) <> 0 Then
           VT(v, 1) = vy(j1, 1, k1) / vy(j1, 5, k1)
           VT(v, 2) = (Sqr(vy(j1, 3, k1) - (2 * (vy(j1, 1, k1) / vy(j1, 5, k1)) * vy(j1, 2, k1)) + _
                      (((vy(j1, 1, k1) / vy(j1, 5, k1)) ^ 2) * vy(j1, 6, k1))) / vy(j1, 5, k1))
           VT(v, 3) = VT(v, 1) - 1.95996 * VT(v, 2)
           VT(v, 4) = VT(v, 1) + 1.95996 * VT(v, 2)
           VT(v, 5) = vy(j1, 1, k1) / 1000000
           VT(v, 6) = Sqr(vy(j1, 3, k1) - (((vy(j1, 1, k1) / 1000000) ^ 2) / vy(j1, 4, k1))) / 1000000
           VT(v, 7) = VT(v, 5) - 1.95996 * VT(v, 6)
           VT(v, 8) = VT(v, 5) + 1.95996 * VT(v, 6)
        End If
    Next j1
    VT(15 + k1, 4) = VT(12 + k1, 5) / VT(k1, 5)
    VT(15 + k1, 5) = VT(12 + k1, 5) / VT(k1 + 3, 5)
Next k1

VT(16, 1) = NT1                 'Declarants 1 i 2
VT(17, 1) = NT2                 'Declarants 3 i 4
VT(18, 1) = NT                  'Declarants total

VT(16, 7) = vpag(1, 1) / NT1    'pagadors 1 i 2
aux = (Sqr(vpag(3, 1) - (2 * VT(16, 7) * vpag(2, 1)) + ((VT(16, 7) ^ 2) * spes2(1))) / NT1)
VT(16, 6) = VT(16, 7) - 1.95996 * aux
VT(16, 8) = VT(16, 7) + 1.95996 * aux
If VT(16, 8) > 1 Then VT(16, 8) = 1

VT(17, 7) = vpag(1, 2) / NT2    'pagadors 3 i 4
aux = (Sqr(vpag(3, 2) - (2 * VT(17, 7) * vpag(2, 2)) + ((VT(17, 7) ^ 2) * spes2(2))) / NT2)
VT(17, 6) = VT(17, 7) - 1.95996 * aux
VT(17, 8) = VT(17, 7) + 1.95996 * aux
If VT(17, 8) > 1 Then VT(17, 8) = 1

VT(18, 7) = vpag(1, 3) / NT     'pagadors total
aux = (Sqr(vpag(3, 3) - (2 * VT(18, 7) * vpag(2, 3)) + ((VT(18, 7) ^ 2) * spes2(3))) / NT)
VT(18, 6) = VT(18, 7) - 1.95996 * aux
VT(18, 8) = VT(18, 7) + 1.95996 * aux
If VT(18, 8) > 1 Then VT(18, 8) = 1

Call ISD_21ORDENA(0)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  85%"
Application.ScreenUpdating = False

Call ISD_22DECILS_GP_INDEXS(6, UBound(X, 2) / 3)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  95%"
Application.ScreenUpdating = False

temps = Timer - temps

End Sub
Private Sub ISD_21ORDENA(opcio As Integer)

Dim d As Integer, i1 As Long, it As Integer, it1 As Integer, k1 As Integer, v As Integer
ReDim y(1 To N)

d = (UBound(X, 2) / 3)

For it = 1 To 2                                 'ord. 1==>BI ord. 2==>BLT
```

```
    For k1 = 1 To 3

        it1 = it + 2 * (k1 - 1)
        v = it + d * (k1 - 1)

        For i1 = 1 To N
            y(i1) = X(i1, v) + ((i1 / N) ^ 0.001) 'Suma quantitat per eliminar repeticions
            IND(i1, it1) = i1
        Next i1

        Call COMUNS_2ORDENA_AUX(1, N, it1)        'Crida a la rutina per a ordenar

    Next k1

Next it

End Sub
Private Sub ISD_22DECILS_GP_INDEXS(p1, p2)

'p1=posicio pes (6)
'UBound(X, 2) / 3=nombre variables

Dim axx_b(1 To 2), axx_p, _
    i1 As Long, it As Integer, it1 As Integer, j1 As Integer, k1 As Integer, _
    nobs As Long, ntobs, p(1 To 12, 2), p3 As Integer, p4 As Integer

ReDim xx_b(1 To N, 1 To 2), xx_p(1 To N) As Double

For j1 = 1 To 12
    p(j1, 1) = IIf(j1 < 10, j1 / 10, IIf(j1 = 10, 0.95, IIf(j1 = 11, 0.98, 1)))
    p(j1, 2) = IIf(j1 < 10, 0.1, IIf(j1 = 10, 0.05, IIf(j1 = 11, 0.03, 0.02)))
Next j1

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_b(1 to N, 1 to 2) = (BI, BL * factor) acumulades / s(variables * factor)
'Calcula: xx_p(1 to N)         = població acumulada/NT1,NT2,NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For it = 1 To 2

    For k1 = 1 To 3

        p3 = p2 * (k1 - 1)                            'posició BI i BL
        it1 = it + 2 * (k1 - 1)                       'index ordenació segons BI, BL per grups
        p4 = p1 + p3                                  'posicio pes
        nobs = IIf(k1 = 1, N1, IIf(k1 = 2, N2, N))    'observacions per grups
        ntobs = IIf(k1 = 1, NT1, IIf(k1 = 2, NT2, NT))  'declarants per grups

        For j1 = 1 To 2
            axx_b(j1) = 0
            If SUMA(j1, k1) <> 0 Then
               For i1 = 1 To N
                   axx_b(j1) = axx_b(j1) + (X(IND(i1, it1), j1 + p3) * X(IND(i1, it1), p4))
                   xx_b(i1, j1) = axx_b(j1) / SUMA(j1, k1) 'BI, BL
               Next i1
            End If
        Next j1
        axx_p = 0
        For i1 = 1 To N
            axx_p = axx_p + X(IND(i1, it1), p4)
            xx_p(i1) = axx_p / ntobs         'pes
        Next i1
        If it = 1 Then Call ISD_23DECILS(it1, k1, nobs, ntobs, p, p3, p4, xx_b, xx_p) 'DECILS

        Call ISD_24INDEXS(it, it1, k1, nobs, ntobs, p3, p4, xx_b, xx_p)               'INDEXS

    Next k1

Next it

End Sub
Private Sub ISD_23DECILS(it1, k1, nobs, ntobs, p, p3, p4, xx_b, xx_p)

'it1= index ordenació segons BI, BL per grups
'p3 = posició BI i BL per grups
'p4 = posicio pes per grups

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_r(1 to N, 1 to 3)=(resta * factor) acumulades/s(variables*factor)
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Dim ats, i1 As Long, i2 As Long, j1 As Integer, j2 As Integer, l1 As Long
```

```
ReDim axx_r(1 To 3), ds(10, 12), ts(1 To 2, 12), xx_r(1 To N, 1 To 3) As Double

For j1 = 1 To 3
    axx_r(j1) = 0
    If SUMA(j1 + 2, k1) <> 0 Then
       For i1 = 1 To N
           axx_r(j1) = axx_r(j1) + (X(IND(i1, it1), j1 + 2 + p3) * X(IND(i1, it1), p4))
           xx_r(i1, j1) = axx_r(j1) / SUMA(j1 + 2, k1)                    'resta variables
       Next i1
    End If
Next j1

i2 = 1
For j2 = 1 To 11
    For i1 = i2 To N
        If xx_p(i1) >= p(j2, 1) Then
           p(j2, 0) = i1                                                  'p(1 to 12, 0=Observació on comença
cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next j2
p(12, 0) = N

''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Límits i mitjanes 6=2*k1  3 límits 3 mitjanes        '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'DECILS 30=5*k1*2 (dimensió parell decil acumulat)    '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'TIPUS  6=3*k1         (3 QT s/BI i 3 QT s/BL)        '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For j2 = 1 To 12
    l1 = p(j2, 0)
    For j1 = 1 To 5
        If j1 <= 2 Then ds(2 * j1, j2) = xx_b(l1, j1)                      'DECILS BI, BL
        If j1 >= 3 Then ds(2 * j1, j2) = xx_r(l1, j1 - 2)                  'DECILS resta
        If j2 = 1 Then ds(2 * j1 - 1, j2) = ds(2 * j1, j2)
        If j2 > 1 Then ds(2 * j1 - 1, j2) = ds(2 * j1, j2) - ds(2 * j1, j2 - 1)
    Next j1
Next j2

For j2 = 1 To 12
    If SUMA(1, k1) <> 0 And ds(1, j2) <> 0 Then
       ts(1, j2) = (ds(9, j2) * SUMA(5, k1)) / (ds(1, j2) * SUMA(1, k1))  'TIPUS QT s/BI
    End If
    If SUMA(2, k1) <> 0 And ds(3, j2) <> 0 Then
       ts(2, j2) = (ds(9, j2) * SUMA(5, k1)) / (ds(3, j2) * SUMA(2, k1))  'TIPUS QT s/BL
    End If
Next j2

''''''''''''''''''''''''''''''''''''''''''''''
'Guarda límits i mitjanes, decils i tipus a VT
''''''''''''''''''''''''''''''''''''''''''''''

Dim v As Integer

For j2 = 1 To 12
    v = 18 + (k1 - 1) + k1
    VT(v, j2) = X(IND(p(j2, 0), it1), p3 + 1)                              'límit
    VT(v + 1, j2) = ds(1, j2) * SUMA(1, k1) / (ntobs * p(j2, 2))          'mitjana
Next j2
For j1 = 1 To 9 Step 2
    v = 24 + ((2 * k1) - 1) + (3 * (j1 - 1))
    For j2 = 1 To 12
        VT(v, j2) = ds(j1, j2)                                             'Decil
    Next j2
Next j1
For j1 = 2 To 10 Step 2
    v = 25 + ((2 * k1) - 1) + (3 * (j1 - 2))
    For j2 = 1 To 12
        VT(v, j2) = ds(j1, j2)                                             'Decil acumulat
    Next j2
Next j1
For j1 = 1 To 2
    v = 54 + 3 * (j1 - 1) + k1
    For j2 = 1 To 12
        VT(v, j2) = ts(j1, j2)                                             'Tipus
    Next j2
Next j1
```

```
End Sub
Private Sub ISD_24INDEXS(it, it1, k1, nobs, ntobs, p3, p4, xx_b, xx_p)

''''''''''''''''''''''''''''''
'INDEXS 2*3 + 3*3*4          '
''''''''''''''''''''''''''''''
'Gini:                 g  (6)'
''''''''''''''''''''''''''''''
'Concentració:         c  3*3'
'Kakwani:              k  3*3'
'Suits:                s  3*3'
'Efecte Redistributiu: e  3*3'
''''''''''''''''''''''''''''''

Dim aconc, aefre, agini, asuit, daux(1 To 4), _
    i1 As Long, j1 As Integer, sxx_b As Double

Dim g As Double
ReDim c(1 To 3), k(1 To 3), s(1 To 3), e(1 To 3) As Double

agini = 0
sxx_b = 0
If SUMA(it, k1) <> 0 Then

   For i1 = 1 To N
       daux(1) = X(IND(i1, it1), it + p3) - MITJANA(it, k1)
       daux(2) = xx_p(i1) - MITJANA(6, k1)
       daux(3) = X(IND(i1, it1), p4)
       agini = agini + (daux(1) * daux(2) * daux(3))
       sxx_b = sxx_b + xx_b(i1, it)                                    's.acum. BI,BL
   Next i1

   If agini <> 0 Then g = 2 / MITJANA(it, k1) * (agini / ntobs)        'gini

End If

For j1 = 1 To 3

    aconc = 0
    aefre = 0
    asuit = 0
    If SUMA(j1 + 2, k1) <> 0 Then

       For i1 = 1 To N
           daux(1) = X(IND(i1, it1), j1 + 2) - MITJANA(j1 + 2, k1)
           daux(2) = xx_p(i1) - MITJANA(6, k1)
           daux(3) = X(IND(i1, it1), p4)
           daux(4) = xx_b(i1, it) - (sxx_b / nobs)
           aconc = aconc + (daux(1) * daux(2) * daux(3))
           asuit = asuit + (daux(1) * daux(4) * daux(3))
       Next i1

       If aconc <> 0 Then c(j1) = 2 / MITJANA(j1 + 2, k1) * (aconc / ntobs) 'concentració
       k(j1) = c(j1) - g                                               'kakwani
       s(j1) = (2 * (asuit / ntobs) / MITJANA(j1 + 2, k1)) - g         'suits

       If SUMA(it, k1) <> 0 Then aefre = SUMA(j1 + 2, k1) / SUMA(it, k1)
       e(j1) = (aefre / (1 - aefre)) * k(j1)                           'ef red.

    End If
Next j1

''''''''''''''''''''''''''''''''''''
'Guarda els resultats(Índexs) a VT'
''''''''''''''''''''''''''''''''''''

Dim v1 As Integer, v2 As Integer, v3 As Integer, j2 As Integer

v1 = 61
v2 = (k1 - 1)
If it = 1 Then VT(v1 + v2 + 3 * (it - 1), 2) = "----"
If it = 2 Then VT(v1 + v2 + 3 * (it - 1), 1) = "----"
VT(v1 + v2 + 3 * (it - 1), it) = g                      'gini
For j2 = 1 To 4
    For j1 = 1 To 3
        v3 = 3 * (j1 - 1) + 9 * (j2 - 1) + 6
        If j2 = 1 Then VT(v1 + v2 + v3, it) = c(j1)     'concentració
        If j2 = 2 Then VT(v1 + v2 + v3, it) = k(j1)     'kakwani
        If j2 = 3 Then VT(v1 + v2 + v3, it) = s(j1)     'suits
        If j2 = 4 Then VT(v1 + v2 + v3, it) = e(j1)     'efecte redistributiu
    Next j1
Next j2
```

```
End Sub
Private Sub ISD_30COMPARACIO(opcio As Integer)

Dim aux, i1 As Long, j1 As Integer, k1 As Integer, k2 As Integer, nom(1 To 2) As String

ReDim ds(1 To 12, 1 To 12), gp(1 To 18, 1 To 12), _
      nobs(1 To 3) As Long, ntobs(1 To 3), s(1 To 6, 1 To 3) As Double

nom(1) = NOM_ID_SIMUL & "GP" & ANOID & "_" & Trim(Str(COMP(1))) & ".dat"
nom(2) = NOM_ID_SIMUL & "GP" & ANOID & "_" & Trim(Str(COMP(2))) & ".dat"

Open nom(1) For Input As #1
Open nom(2) For Input As #2

Input #1, nobs(1), nobs(2), nobs(3), ntobs(1), ntobs(2), ntobs(3)
Input #2, aux, aux, aux, aux, aux, aux

N = nobs(3)
ReDim X(1 To N, 1 To 21), IND(1 To N, 1 To 3)

For i1 = 1 To N
    Input #1, IND(i1, 1), X(i1, 1), X(i1, 7), _
              IND(i1, 2), X(i1, 8), X(i1, 14), _
              IND(i1, 3), X(i1, 15), X(i1, 21)
    Input #2, aux, X(i1, 2), aux, aux, X(i1, 9), aux, aux, X(i1, 16), aux
Next i1

Close #1
Close #2

For k1 = 1 To 3
    k2 = 7 * (k1 - 1) + 1
    For i1 = 1 To N
        aux = X(i1, k2) - X(i1, k2 + 1)
        If Abs(aux) > 1 Then
           If aux > 0 Then
              X(i1, k2 + 2) = 1
              X(i1, k2 + 4) = 0
           Else
              X(i1, k2 + 2) = 0
              X(i1, k2 + 4) = 1
           End If
           X(i1, k2 + 3) = aux * X(i1, k2 + 2)
           X(i1, k2 + 5) = aux * X(i1, k2 + 4)
        End If
        For j1 = 1 To 6
            s(j1, k1) = s(j1, k1) + (X(i1, k2 + j1 - 1) * X(i1, k2 + 6))
        Next j1
    Next i1

    Call ISD_31COMPARACIO_DECILS_GP(ds, gp, k1, k2, nobs, ntobs, s)

Next k1

Call ISD_32COMPARACIO_ESCRIPTURA(ds, gp, nobs, ntobs, s)
Call COMUNS_5IMPRESSIO("ID", "G-P")

End Sub
Private Sub ISD_31COMPARACIO_DECILS_GP(ds, gp, k1, k2, nobs, ntobs, s)

Dim axx(1 To 6), axx_p, i1 As Long, i2 As Long, j1 As Integer, l1 As Long
ReDim p(1 To 12, 2), xx(1 To N, 1 To 7), y(4, 12) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula xx(1 to N, 1 to 6)=(variables * factor) acumulades / s(variables * factor)
'        xx(1 to N, 7)     = població acumulada/s(7)   s(7)=NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''


For j1 = 1 To 6
    axx(j1) = 0
    If s(j1, k1) <> 0 Then
       For i1 = 1 To N
           axx(j1) = axx(j1) + (X(IND(i1, k1), k2 + j1 - 1) * X(IND(i1, k1), k2 + 6))
           xx(i1, j1) = axx(j1) / IIf(j1 <= 2, s(j1, k1), 1)
       Next i1
    End If
Next j1

axx_p = 0
For i1 = 1 To N
    axx_p = axx_p + X(IND(i1, k1), k2 + 6)
    xx(i1, 7) = axx_p / ntobs(k1)
```

```
Next i1

For j1 = 1 To 12
    p(j1, 1) = IIf(j1 < 10, j1 / 10, IIf(j1 = 10, 0.95, IIf(j1 = 11, 0.98, 1)))
    p(j1, 2) = IIf(j1 < 10, 0.1, IIf(j1 = 10, 0.05, IIf(j1 = 11, 0.03, 0.02)))
Next j1

i2 = 1
For j1 = 1 To 11
    For i1 = i2 To N
        If xx(i1, 7) >= p(j1, 1) Then
           p(j1, 0) = i1                  'p(1 to 12, 0 = Observació on comença cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next j1
p(12, 0) = N

''''''''
'DECILS'
''''''''

Dim v As Integer, k3 As Integer
ReDim gpaux(1 To 6, 1 To 12) As Double

For k3 = 1 To 12
    l1 = p(k3, 0)
    For j1 = 2 To 8 Step 6
        v = (2 * k1) + j1 - 2
        ds(v, k3) = xx(l1, IIf(j1 = 2, 1, 2))
        If k3 = 1 Then ds(v - 1, k3) = ds(v, k3)
        If k3 > 1 Then ds(v - 1, k3) = ds(v, k3) - ds(v, k3 - 1)
    Next j1
Next k3

''''''''''''''''''''''
'GUANYADORS-PERDEDORS'
''''''''''''''''''''''

For k3 = 1 To 12
    l1 = p(k3, 0)
    For j1 = 1 To 4
        y(j1, k3) = xx(l1, j1 + 2)
        gpaux(IIf(j1 <= 2, j1, j1 + 1), k3) = y(j1, k3) - y(j1, k3 - 1)
    Next j1
Next k3
For j1 = 1 To 12
    For k3 = 3 To 6 Step 3
        If gpaux(k3 - 2, j1) <> 0 Then
           gpaux(k3, j1) = gpaux(k3 - 1, j1) / gpaux(k3 - 2, j1)
        Else
           gpaux(k3, j1) = 0
        End If
    Next k3
    For k3 = 1 To 5
        If k3 <> 3 Then
           gpaux(k3, j1) = gpaux(k3, j1) * IIf(k3 = 1 Or k3 = 4, 1 / (p(j1, 2) * ntobs(k1)), 0.001)
        End If
    Next k3
Next j1
For j1 = 1 To 12
    For k3 = 1 To 4 Step 3
        If gpaux(k3, j1) >= 0.995 Then gpaux(k3, j1) = 1
        If gpaux(k3, j1) <= 0.005 Then gpaux(k3, j1) = 0
    Next k3
    gpaux(4, j1) = -gpaux(4, j1)
Next j1
For j1 = 1 To 12
    For k3 = 1 To 6
        v = 3 * (k3 - 1) + k1
        gp(v, j1) = gpaux(k3, j1)
    Next k3
Next j1

End Sub
Private Sub ISD_32COMPARACIO_ESCRIPTURA(ds, gp, nobs, ntobs, s)

Dim avisgp(1 To 3) As Boolean, fila As Integer, ig As Integer, i1 As Integer, j1 As Integer, _
    llibre As Integer, nom As String, nota(1 To 3) As String, r_f(1 To 2, 1 To 3) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 2, 1)==> formats del llibre "FORMATS", full "ID"                '
```

```
'r_f(1 to 2, 2)==> formats del llibre "SIMCAT", full "(G-P)"               '
'r_f(1 to 2, 3)==> formats del llibre "SIMCAT", full "(G-P)" (només valors)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre = Workbooks.Count

Workbooks(llibre).Activate                              'llibre "FORMATS"

Sheets("ID").Activate

Set r_f(1, 1) = Range(Cells(160, 1), Cells(180, 15))    'Decils
Set r_f(2, 1) = Range(Cells(138, 1), Cells(158, 15))    'Guanyadors

''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                                   'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("ID(G-P)")

ActiveWorkbook.Unprotect (SECRET)

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("ID(G-P)").Activate

''''''''''''''''''''''''''''''''
'Configura el rang d'escriptura'
''''''''''''''''''''''''''''''''

With Range(Cells(1, 1), Cells(45, 15))
  .ColumnWidth = 6.43
  With .Font
    .Name = "Arial"
    .Size = 7
  End With
  .HorizontalAlignment = xlCenter
  .Interior.ColorIndex = 2
  .RowHeight = 11
End With
With Range(Cells(1, 1), Cells(2, 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
End With
Cells(1, 1).Value = "IMPOST DE DONACIONS"
Cells(2, 1).Value = "COMPARACIÓ SIMULACIÓ-" & COMP(1) & " vs. SIMULACIÓ-" & COMP(2) & _
                    " (Base de dades: " & ANOID & ")"

Set r_f(1, 2) = Range(Cells(3, 1), Cells(23, 15))    'Decils     Rangs d'escriptura
Set r_f(2, 2) = Range(Cells(25, 1), Cells(45, 15))   'Guanyadors Rangs d'escriptura
Set r_f(1, 3) = Range(Cells(6, 4), Cells(17, 15))    'Decils     Rangs de valors
Set r_f(2, 3) = Range(Cells(28, 4), Cells(45, 15))   'Guanyadors Rangs de valors

''''''''''''''''''''''''''''''''
'Escriu els resultats numèrics'
''''''''''''''''''''''''''''''''

r_f(1, 1).Copy Destination:=r_f(1, 2)
r_f(1, 2).Rows(4).Columns(1).Value = "Quota       SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(10).Columns(1).Value = "Quota       SIMULACIÓ-" & COMP(2)
r_f(1, 2).Rows(16).Columns(1).Value = "SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(19).Columns(1).Value = "SIMULACIÓ-" & COMP(2)
For i1 = 1 To 3
    r_f(1, 2).Rows(15 + i1).Columns(4).Value = s(1, i1)
    r_f(1, 2).Rows(18 + i1).Columns(4).Value = s(2, i1)
    If s(1, i1) = s(2, i1) Then
       nota(i1) = "Neutral"
    ElseIf s(1, i1) > s(2, i1) Then
       nota(i1) = "Pèrdua en recaptació"
    Else
       nota(i1) = "Guany en recaptació"
    End If
    r_f(1, 2).Rows(18).Columns(6 + 2 * (i1 - 1)).Value = nota(i1)
    If nota(i1) <> "Neutral" Then
       r_f(1, 2).Rows(19).Columns(6 + 2 * (i1 - 1)).Value = s(2, i1) - s(1, i1)
    Else
       With Range(Cells(21, 6 + 2 * (i1 - 1)), Cells(23, 6 + 2 * (i1 - 1)))
```

```
         .Interior.Pattern = xlCrissCross
         .MergeCells = True
         .Value = ""
       End With
    End If
    r_f(1, 2).Rows(18 + i1).Columns(15).Value = nobs(i1)
Next i1
r_f(1, 3).Value = ds

r_f(2, 1).Copy Destination:=r_f(2, 2)
r_f(2, 3).Value = gp
r_f(2, 3).ShrinkToFit = True

LLIBRE_FORMATS.Close

ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(46, 1))

''''''''''''
'Gràfics G-P'
''''''''''''

fila = 0
For i1 = 1 To 3

    For j1 = 1 To 12
        If Abs(r_f(2, 3).Rows(i1).Columns(j1)) > 0.001 Or _
           Abs(r_f(2, 3).Rows(9 + i1).Columns(j1)) > 0.001 Then
           avisgp(i1) = True
           Exit For
        End If
    Next j1

    If avisgp(i1) Then

       If i1 = 1 And avisgp(1) Then fila = fila + 45
       If i1 = 2 And avisgp(2) Then fila = fila + 45
       If i1 = 3 And avisgp(3) Then fila = fila + 45

       ReDim r_gp(1 To 2, 1 To 4) As Range

       Set r_gp(1, 1) = r_f(1, 3).Rows(2 * (i1 - 1) + 1) 'Quota Simulació-1'
       Set r_gp(2, 1) = r_f(1, 3).Rows(2 * (i1 - 1) + 7) 'Quota Simulació-2'
       Set r_gp(1, 2) = r_f(2, 3).Rows(i1)               '% guanyadors'
       Set r_gp(2, 2) = r_f(2, 3).Rows(9 + i1)           '% perdedors'
       Set r_gp(1, 3) = r_f(2, 3).Rows(3 + i1)           'Total guanys'
       Set r_gp(2, 3) = r_f(2, 3).Rows(12 + i1)          'Total pèrdues'
       Set r_gp(1, 4) = r_f(2, 3).Rows(6 + i1)           'Mitjana guanyadors'
       Set r_gp(2, 4) = r_f(2, 3).Rows(15 + i1)          'Mitjana perdedors'
       r_gp(2, 2).NumberFormat = "0.00%;[Red]0.00%"

       With Range(Cells(fila + 1, 1), Cells(fila + 45, 15))
         .ColumnWidth = 6.43
         With .Font
          .Name = "Arial"
          .Size = 7
         End With
         .HorizontalAlignment = xlCenter
         .Interior.ColorIndex = 2
         .RowHeight = 11
       End With
       With Cells(fila + 1, 1)
        .Font.Bold = True
        .Font.Size = 10
        .HorizontalAlignment = xlLeft
        .RowHeight = 14
        .Value = "Grups de parentiu: " & IIf(i1 = 1, "1 i 2", IIf(i1 = 2, "3 i 4", "Tots"))
       End With

       Call COMUNS_43GRAFICS_GP(fila + 2, ANOID, "ID", "(G-P)", r_gp, 1)

       ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 46, 1))
    End If

Next i1

For i1 = 1 To Worksheets("ID(G-P)").Shapes.Count - 1 Step 2
    Worksheets("ID(G-P)").Shapes(i1).Left = 10            'Reposicionament imatges
Next i1
For i1 = 2 To Worksheets("ID(G-P)").Shapes.Count Step 2
    Worksheets("ID(G-P)").Shapes(i1).Left = 280           'Reposicionament imatges
Next i1
```

```
End Sub
Private Sub ISD_40ESCRIPTURA(opcio)

Dim fila As Integer, i As Integer, i1 As Integer, j1 As Integer, k1 As Integer, llibre(1 To 2) As Integer, _
    nom As String, r_ref(1 To 2) As Range, r_f(1 To 4, 1 To 4) As Range, r_parms(1 To 2) As Range

ReDim ns(1 To 3), PAG(1 To 3, 1 To 3), ts(1 To 3, 1 To 2)

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 5, 1)==> formats del llibre "FORMATS", full "ID"                '
'r_f(1 to 5, 2)==> formats del llibre "RESULTATS" temporals               '
'r_f(1 to 5, 3)==> formats del llibre "SIMCAT", full "ID(R)"              '
'r_f(1 to 5, 4)==> formats del llibre "SIMCAT", full "ID(R)" (només valors)'
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre(1) = Workbooks.Count

Workbooks(llibre(1)).Activate                          'llibre "FORMATS"

Sheets("ID").Activate

Set r_parms(1) = Range(Cells(1, 1), Cells(16, 13))    'Paràmetres

Set r_f(1, 1) = Range(Cells(18, 1), Cells(40, 12))    'Descriptiu
Set r_f(2, 1) = Range(Cells(42, 1), Cells(50, 14))    'Límits i mitjana per decils
Set r_f(3, 1) = Range(Cells(52, 1), Cells(90, 15))    'Decils
Set r_f(4, 1) = Range(Cells(92, 1), Cells(136, 6))    'Índexs

Set r_ref(1) = Range(Cells(182, 1), Cells(205, 12))   'Referència

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                                  'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("ID(R)")

ActiveWorkbook.Unprotect (SECRET)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Escriu els resultats de la referència'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

fila = 26

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("ID(R)").Activate
Set r_ref(2) = Range(Cells(1, 1), Cells(24, 12))  'Referencia
With r_ref(2)
  .ColumnWidth = 6.43
  .RowHeight = 11
End With
r_ref(2).Rows(2).RowHeight = 14
r_ref(1).Copy Destination:=r_ref(2)
ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila - 1, 1))

For i1 = 1 To UBound(IRESULTS)

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Lectura en els arxius temporals de resultats'
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    nom = NOM_ID_SIMUL & "S" & ANOID & "_" & Trim(Str(IRESULTS(i1))) & ".xlsx"
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    llibre(2) = Workbooks.Count

    Workbooks(llibre(2)).Activate                     'llibre "RESULTATS"

    Sheets("PARAMETRES").Activate                     'Paràmetres
    ReDim p(18, 6)
    For i = 0 To 18
        For j1 = 1 To 6
            p(i, j1) = Cells(i + 1, j1)
        Next j1
    Next i

    Sheets("DESCRIPTIU").Activate                     'Descriptiu
    Set r_f(1, 2) = Range(Cells(1, 1), Cells(15, 8))
```

```
For i = 1 To 3
    ns(i) = Cells(15 + i, 1)
    ts(i, 1) = Cells(15 + i, 4)
    ts(i, 2) = Cells(15 + i, 5)
    For j1 = 1 To 3
        PAG(i, j1) = Cells(15 + i, j1 + 5)
    Next j1
Next i

Sheets("LIMITS-MITJANES").Activate              'Límits i mitjanes
Set r_f(2, 2) = Range(Cells(1, 1), Cells(6, 12))

Sheets("DECILS-TIPUS").Activate                 'Decils i Tipus
Set r_f(3, 2) = Range(Cells(1, 1), Cells(36, 12))

Sheets("INDEXS").Activate                       'Indexs
Set r_f(4, 2) = Range(Cells(1, 1), Cells(42, 2))

''''''''''''''''''''''''''''''''''''''''''''''''
'Escriptura en el full definitiu de resultats'
''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                           'llibre "SIMCAT"

With Range(Cells(fila - 1, 1), Cells(fila - 1 + 161, 15))
  .ColumnWidth = 6.43
  With .Font
    .Name = "Arial"
    .Size = 7
  End With
  .HorizontalAlignment = xlCenter
  .Interior.ColorIndex = 2
  .RowHeight = 10
End With
With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
  With .Font
    .Bold = True
    .Size = 10
  End With
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
  .Value = "SIMULACIÓ-" & IRESULTS(i1) & " (Base de dades: " & ANOID & ")"
End With

Call ISD_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Rangs per a l'escriptura en el llibre SIMCAT full ID(R)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Set r_f(1, 3) = Range(Cells(fila + 17, 1), Cells(fila + 39, 12))   'Descriptiu
Set r_f(1, 4) = Range(Cells(fila + 21, 5), Cells(fila + 35, 12))
Set r_f(2, 3) = Range(Cells(fila + 41, 1), Cells(fila + 49, 14))   'Límits i mitjanes per decils
Set r_f(2, 4) = Range(Cells(fila + 44, 3), Cells(fila + 49, 14))
Set r_f(3, 3) = Range(Cells(fila + 51, 1), Cells(fila + 89, 15))   'Decils
Set r_f(3, 4) = Range(Cells(fila + 54, 4), Cells(fila + 89, 15))
Set r_f(4, 3) = Range(Cells(fila + 91, 1), Cells(fila + 135, 6))   'Índexs
Set r_f(4, 4) = Range(Cells(fila + 94, 5), Cells(fila + 135, 6))

For j1 = 1 To 4
    r_f(j1, 1).Copy Destination:=r_f(j1, 3)
    r_f(j1, 2).Copy: r_f(j1, 4).PasteSpecial xlPasteValues
Next j1

With Range(Cells(fila + 90, 1), Cells(fila + 90, 1))
  With .Font
    .Bold = True
    .Size = 10
  End With
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
  .Value = "SIMULACIÓ-" & IRESULTS(i1) & " (Base de dades: " & ANOID & ")"
End With

For i = 1 To 3
    r_f(1, 3).Rows(20 + i).Columns(5).Value = ns(i)
    r_f(1, 3).Rows(20 + i).Columns(8).Value = ts(i, 1)
    r_f(1, 3).Rows(20 + i).Columns(9).Value = ts(i, 2)
    For j1 = 1 To 3
        r_f(1, 3).Rows(20 + i).Columns(j1 + 9).Value = PAG(i, j1)
    Next j1
Next i
```

```
    LLIBRE_RESULTATS.Close

    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 90, 1))
    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 136, 1)) '161

    ''''''''''''''''''
    'Rangs dels gràfics
    ''''''''''''''''''

    ReDim r_g(1 To 3, 1 To 4) As Range

    For k1 = 1 To 3
        j1 = 2 * (k1 - 1)
        Set r_g(1, 1) = r_f(3, 4).Rows(2 + j1)      'BI acum. (sim)
        Set r_g(2, 1) = r_f(3, 4).Rows(26 + j1)     'QT acum. (sim)
        Set r_g(3, 1) = r_f(3, 4).Rows(26 + j1)     'QT acum. (sim)
        Set r_g(1, 2) = r_f(3, 4).Rows(8 + j1)      'BL acum. (sim)
        Set r_g(2, 2) = r_f(3, 4).Rows(26 + j1)     'QT acum. (sim)
        Set r_g(3, 2) = r_f(3, 4).Rows(26 + j1)     'QT acum. (sim)

        Set r_g(1, 3) = r_f(3, 4).Rows(30 + k1)     'QT s/BI  (sim)
        Set r_g(1, 4) = r_f(3, 4).Rows(33 + k1)     'QT s/BL  (sim)

        Call ISD_42ESCRIPTURA_GRAFICS(fila + 137 + (k1 - 1) * 46, k1, r_g, IRESULTS(i1))

    Next k1

    fila = fila + 276  '441
    If i1 < UBound(IRESULTS) Then ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila - 1, 1)) '161

Next i1

LLIBRE_FORMATS.Close

Call COMUNS_5IMPRESSIO("ID", "R")

End Sub
Private Sub ISD_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

Dim i1 As Integer, j1 As Integer

Set r_parms(2) = Range(Cells(fila, 1), Cells(fila + 16, 13)) 'Paràmetres

r_parms(1).Copy Destination:=r_parms(2)

With r_parms(2)

  .Font.Size = 8

  For i1 = 1 To p(0, 2)                                    'tarifa Grups 1 i 2
      For j1 = 1 To 3
          .Rows(3 + i1).Columns(j1).Value = p(7 + i1, j1)
      Next j1
  Next i1
  If p(0, 2) <> 10 Then
     With Range(Cells(fila + p(0, 2) + 3, 1), Cells(fila + 12, 3))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = ""
     End With
     With Range(Cells(fila + p(0, 2) + 2, 1), Cells(fila + p(0, 2) + 2, 3))
       With .Borders(xlEdgeBottom)
         .LineStyle = xlContinuous
         .Weight = xlMedium
       End With
     End With
  End If

  For i1 = 1 To p(0, 3)                                    'tarifa Grups 3 i 4
      For j1 = 1 To 3
          .Rows(3 + i1).Columns(3 + j1).Value = p(7 + i1, j1 + 3)
      Next j1
  Next i1
  If p(0, 3) <> 10 Then
     With Range(Cells(fila + p(0, 3) + 3, 4), Cells(fila + 12, 6))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = ""
     End With
     With Range(Cells(fila + p(0, 3) + 2, 4), Cells(fila + p(0, 3) + 2, 6))
       With .Borders(xlEdgeBottom)
         .LineStyle = xlContinuous
         .Weight = xlMedium
```

```
      End With
    End With
  End If
  j1 = Application.max(p(0, 2), p(0, 3))
  If j1 <> 10 Then
     For i1 = j1 + 1 To 10
         Cells(fila + 2 + i1, 4).Borders(xlEdgeLeft).LineStyle = xlNone
     Next i1
  End If

  For j1 = 2 To 4                                          'coeficients correctors
      .Rows(16).Columns(j1 - 1).Value = p(7, j1)
  Next j1

  If p(18, 1) <> 0 Or p(18, 2) <> 0 Or p(18, 3) <> 0 Or p(18, 4) <> 0 Then
     For j1 = 2 To 4                                       'bonificacions quota
         .Rows(16).Columns(j1 + 2).Value = p(18, j1)
     Next j1
  Else
     With Range(Cells(fila + 13, 4), Cells(fila + 15, 6))
       .Borders(xlEdgeTop).LineStyle = xlNone
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = ""
     End With
  End If

  For i1 = 1 To 3                                          'reduccions
      .Rows(i1 + 3).Columns(10).Value = p(i1, 1)
  Next i1
  .Rows(7).Columns(10).Value = 0.95                        'explotacions agràries

  .Rows(10).Columns(10).Value = p(5, 1)                    'Alres(1)
  .Rows(10).Columns(11).Value = p(5, 2)
  .Rows(10).Columns(12).Value = p(5, 3)
  .Rows(11).Columns(10).Value = p(6, 1)                    'Altres(2)
  .Rows(11).Columns(11).Value = p(6, 2)
  .Rows(11).Columns(12).Value = p(6, 3)
  .Rows(11).Columns(13).Value = p(6, 4)

End With

End Sub
Private Sub ISD_42ESCRIPTURA_GRAFICS(fila, k1, r_g, sim)

Dim i1 As Integer, i2 As Integer, j1 As Integer, m, nom() As String, s_r() As Boolean

''''''''''''''''''''''''''''''''''''''''''''''''
'Escriptura en el full definitiu de resultats'
''''''''''''''''''''''''''''''''''''''''''''''''

With Range(Cells(fila - IIf(k1 = 1, 1, 0), 1), Cells(fila + 46 - IIf(k1 = 1, 1, 0), 15)) '46
  .ColumnWidth = 6.43
  .Interior.ColorIndex = 2
  .RowHeight = 10
End With
With Range(Cells(fila - IIf(k1 = 1, 1, 0), 1), Cells(fila - IIf(k1 = 1, 1, 0), 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
  .Value = "GRÀFICS DE LA SIMULACIÓ-" & sim & " (Base de dades: " & ANOID & _
           ", Grups de parentiu: " & IIf(k1 = 1, "1 i 2)", IIf(k1 = 2, "3 i 4)", "Tots)"))
End With

ReDim nom(1 To 4, 1 To 2), s_r(1 To 5, 1 To 3)

For i1 = 1 To 2
    nom(1, i1) = "Sim-" & sim & IIf(i1 = 1, "(BI)", "(BL)")
    nom(2, i1) = "Sim-" & sim & "(QT)"
    nom(3, i1) = "Sim-" & sim & "(QT relativa)"
    nom(4, i1) = "Equitat"
Next i1

m = Round(Application.max(r_g(1, 3), r_g(1, 4)), 2)
If m = 0 Then m = 0.001

Call COMUNS_41GRAFICS_CORBESLORENZ(fila + IIf(k1 >= 2, 1, 0), False, "ID", nom, r_g, s_r)  'Lorenz
Call COMUNS_42GRAFICS_TIPUS(fila + 23 + IIf(k1 >= 2, 1, 0), False, "ID", m, r_g, s_r, sim) 'Tipus efectius

If k1 = 2 Then ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 46, 1)) '92

If k1 = 3 Then
```

```
   For i1 = 1 To Worksheets("ID(R)").Shapes.Count - 1 Step 2
       Worksheets("ID(R)").Shapes(i1).Left = 20   'Reposicionament de les imatges'
   Next i1
   For i1 = 2 To Worksheets("ID(R)").Shapes.Count Step 2
       Worksheets("ID(R)").Shapes(i1).Left = 310  'Reposicionament de les imatges'
   Next i1
End If

End Sub
Private Sub IT_10PARAMETRES(opcio As Integer)

Dim i1 As Integer

ReDim aux(100) As Integer, aux1(1000), tram(8) As Integer

For i1 = 100 To 0 Step -1
    aux(100 - i1) = i1
    If i1 <= 8 Then tram(8 - i1) = i1 + 1
Next i1
For i1 = -500 To 500
    aux1(500 - i1) = i1 / 10
Next i1


If ISIMULS(4) <> 0 Then
   ReDim sims(1 To ISIMULS(4))
   For i1 = ISIMULS(4) To 1 Step -1
       sims(ISIMULS(4) - i1 + 1) = CIT(i1)
   Next i1
End If

ERR_LEC = True

Do While ERR_LEC
   With ITPOAJDOS
     .Caption = "SIMCAT-ITPOOSAJD: Tarifes" & " (Base de dades: " & ANOIT & ")"

     .ListBox112.List = tram
     .ListBox_TUB.List = aux
     .ListBox_TPO.List = aux1
     .ListBox_OS.List = aux1
     .ListBox_AJD.List = aux1
     .Llei.Value = True
     If ISIMULS(4) <> 0 Then
        .ListBox_SimulRef.List = sims
        .SimulRef.Visible = True
     End If
     .Show
   End With
   If SORTIR Then Exit Sub
Loop

End Sub
Private Sub IT_20SIMULACIO(temps)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Variables d'interès                                                                                      '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'v1  = Identificador                                                                                      '
'v2  = TPO: 1 si meritacio abans de 30/06/2010, 2 entre 01/07/2010 i 31/07/2013, 3 a partir de 01/08/2013'
'v2  = OS:  1 sempre                                                                                       '
'v2  = AJD: 1 si meritacio abans de 30/06/2010, 2 entre 01/07/2010 i 23/03/2012, 3 a partir de 24/03/2012'
'v67 = (1=TPO, 2=OS, 3=AJD)                                                                               '
'v8  = codi tarifa                                                                                        '
'tpo = tarifes numerades TPO                                                                              '
'os  = tarifes numerades OS                                                                               '
'ajd = tarifes numerades AJD                                                                              '
'v45 = Base imposable                                                                                     '
'v50 = percentatge reducció                                                                               '
'v64 = percentatge bonificació                                                                            '
'v66 = quota tributària                                                                                   '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

'''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables del fitxer de lectura'
'''''''''''''''''''''''''''''''''''''''''''''''''

Dim ajd As Integer, os As Integer, tpo As Integer, v1 As Long, v2 As Integer, v67 As String, v8 As String, _
    v45 As Double, v52 As Double, v64 As Double, v66 As Double

''''''''''''''''''''''''''''''''''''''
'Declaracions de variables utilitzades
''''''''''''''''''''''''''''''''''''''
```

```
Dim aux, i1 As Long, j0 As Integer, j1 As Integer, j2 As Integer, k1 As Integer, k2 As Integer, v66b As Double
ReDim l(43) As Long, SUMA(1 To 2, 1 To 3), VT(55, 10), vx(43, 1 To 6), y(1 To 3)

''''''''''''''''''''''''''
'Primera lectura de dades'
''''''''''''''''''''''''''

j0 = 1
NT1 = 0
NT2 = 0
NT3 = 0

Open NOM_IT_DADES & ANOIT & ".dat" For Input As #1

'''''''''''''''''''''''''''''''''''''''''''''
'Open "C:\SIMCAT\errors.dat" For Output As #10
'''''''''''''''''''''''''''''''''''''''''''''

Input #1, N1, N2, N3

N = N1 + N2 + N3
ReDim IND(1 To N, 1 To 1), X(1 To N, 1 To 3)

For i1 = 1 To N

    Input #1, v1, v2, v67, v8, tpo, os, ajd, v45, v52, v64, v66
    y(3) = 1                                                        'pes fictici

    If i1 <= N1 Then

       v45 = v45 * PROJ(1)

       For j1 = 1 To 17
           If tpo = j1 Then
              l(j1) = l(j1) + 1
              v66b = v52 * PROJ(1) * TIPUS_TPO(j1)                  'Tarifes TPO (Projectant BI)
           End If
       Next j1

       If v64 <> 0 Then
          If tpo = 1 Then
             v66b = v66b * (1 - IIf(v64 = 70, BON_TUB, v64 / 100))    'Rectificació bonificació tarifa TUB
          Else
             v66b = v66b * (1 - (v64 / 100))
          End If
       End If
       NT1 = NT1 + y(3)

    ElseIf i1 <= N1 + N2 Then

       v45 = v45 * PROJ(2)
       For j1 = 1 To 7
           If os = j1 Then
              l(18 + j1) = l(18 + j1) + 1
              v66b = v52 * PROJ(2) * TIPUS_OS(j1)                   'Tarifes OS (Projectant la BI)
           End If
       Next j1
       If v64 <> 0 Then v66b = v66b * (1 - (v64 / 100))
       NT2 = NT2 + y(3)

    Else

       v45 = v45 * PROJ(3)
       For j1 = 1 To 17
           If ajd = j1 Then
              l(26 + j1) = l(26 + j1) + 1
              v66b = v52 * PROJ(3) * TIPUS_AJD(j1)                  'Tarifes AJD (Projectant la BI)
           End If
       Next j1
       If v64 <> 0 Then v66b = v66b * (1 - (v64 / 100))
       NT3 = NT3 + y(3)
    End If
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'If Abs(v66 - v66b) > 1 Then Write #10, V1, v30062010, v23032012, v31072013, v67, v8, tpo, os, ajd, v45, v52,
v64, v66, v66b
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    j2 = IIf(i1 <= N1, 0, IIf(i1 <= N1 + N2, 18, 26))
    For k1 = 1 To 2
```

```
        y(k1) = IIf(k1 = 1, v45, v66b)
        k2 = 3 * (k1 - 1)
        If y(k1) <> 0 Then
           vx(j2, k2 + 1) = vx(j2, k2 + 1) + (y(k1) * y(3))
           vx(j2, k2 + 2) = vx(j2, k2 + 2) + ((y(k1) ^ 2) * (y(3) ^ 2))
           vx(j2, k2 + 3) = vx(j2, k2 + 3) + 1
           For j1 = 1 To IIf(i1 <= N1, 17, IIf(i1 <= N1 + N2, 7, 17))
               If IIf(i1 <= N1, tpo, IIf(i1 <= N1 + N2, os, ajd)) = j1 Then
                  vx(j1 + j2, k2 + 1) = vx(j1 + j2, k2 + 1) + (y(k1) * y(3))
                  vx(j1 + j2, k2 + 2) = vx(j1 + j2, k2 + 2) + ((y(k1) ^ 2) * (y(3) ^ 2))
                  vx(j1 + j2, k2 + 3) = vx(j1 + j2, k2 + 3) + 1
               End If
           Next j1
        End If
    Next k1

    If j0 <= 10 Then
       If i1 / N >= j0 / 10 Then
          Application.ScreenUpdating = True
          Application.StatusBar = "Processat  " & (j0 * 9) & "%"
          Application.ScreenUpdating = False
          j0 = j0 + 1
       End If
    End If

    X(i1, 1) = v45
    X(i1, 2) = v66b
    X(i1, 3) = 1

Next i1
Close #1

''''''''''
'Close #10
''''''''''

''''''''''''''''''''''''''''
'Guarda(Descriptiu) a VT)'
''''''''''''''''''''''''''''

l(0) = N1
l(18) = N2
l(26) = N3
For j1 = 0 To 17
    VT(j1, 1) = IT_TARIFA_TPO(j1)
    VT(j1, 2) = l(j1)
Next j1
For j1 = 0 To 7
    VT(18 + j1, 1) = IT_TARIFA_OS(j1)
    VT(18 + j1, 2) = l(18 + j1)
Next j1
For j1 = 0 To 17
    VT(26 + j1, 1) = IT_TARIFA_AJD(j1)
    VT(26 + j1, 2) = l(26 + j1)
Next j1

For k1 = 1 To 2
    k2 = 3 * (k1 - 1)
    For j1 = 0 To 43
        VT(j1, IIf(k1 = 1, 3, 7)) = vx(j1, k2 + 1)
        If VT(j1, 2) > 300 Then
           If vx(j1, k2 + 2) - ((vx(j1, k2 + 1) ^ 2) / vx(j1, k2 + 3)) > 0 Then
              VT(j1, IIf(k1 = 1, 4, 8)) = Sqr(vx(j1, k2 + 2) - ((vx(j1, k2 + 1) ^ 2) / vx(j1, k2 + 3)))
              VT(j1, IIf(k1 = 1, 5, 9)) = VT(j1, IIf(k1 = 1, 3, 7)) - 1.96 * VT(j1, IIf(k1 = 1, 4, 8))
              VT(j1, IIf(k1 = 1, 6, 10)) = VT(j1, IIf(k1 = 1, 3, 7)) + 1.96 * VT(j1, IIf(k1 = 1, 4, 8))
           End If
        End If
    Next j1
Next k1

For j1 = 1 To 44
    If VT(j1, 2) = 0 Then
       For k1 = 3 To 10
           VT(j1, k1) = "----"
       Next k1
    End If
    If VT(j1, 4) = 0 Or VT(j1, 5) < 0 Then
       VT(j1, 4) = "----"
       VT(j1, 5) = "----"
       VT(j1, 6) = "----"
    End If
    If VT(j1, 8) = 0 Or VT(j1, 9) < 0 Then
       VT(j1, 8) = "----"
```

```
       VT(j1, 9) = "----"
       VT(j1, 10) = "----"
    End If
Next j1

SUMA(1, 1) = VT(0, 3)
SUMA(2, 1) = VT(0, 7)
SUMA(1, 2) = VT(18, 3)
SUMA(2, 2) = VT(18, 7)
SUMA(1, 3) = VT(26, 3)
SUMA(2, 3) = VT(26, 7)

Call IT_21ORDENA(0)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  95%"
Application.ScreenUpdating = False

Call IT_22INDEXS(3)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  98%"
Application.ScreenUpdating = False

temps = Timer - temps

End Sub
Private Sub IT_20SIMULACIO_antic(temps)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Variables d'interès                                                                                       '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'v1  = Identificador                                                                                       '
'v2  = TPO: 1 si meritacio abans de 30/06/2010, 2 entre 01/07/2010 i 31/07/2013, 3 a partir de 01/08/2013'
'v2  = OS:  1 sempre                                                                                        '
'v2  = AJD: 1 si meritacio abans de 30/06/2010, 2 entre 01/07/2010 i 23/03/2012, 3 a partir de 24/03/2012'
'v67 = (1=TPO, 2=OS, 3=AJD)                                                                                '
'v8  = codi tarifa                                                                                         '
'tpo = tarifes numerades TPO                                                                               '
'os  = tarifes numerades OS                                                                                '
'ajd = tarifes numerades AJD                                                                               '
'v45 = Base imposable                                                                                      '
'v50 = percentatge reducció                                                                                '
'v64 = percentatge bonificació                                                                             '
'v66 = quota tributària                                                                                    '
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables del fitxer de lectura'
''''''''''''''''''''''''''''''''''''''''''''''''''

Dim ajd As Integer, os As Integer, tpo As Integer, v1 As Long, v2 As Integer, v67 As String, v8 As String, _
    v45 As Double, v52 As Double, v64 As Double, v66 As Double

''''''''''''''''''''''''''''''''''''''
'Declaracions de variables utilitzades
''''''''''''''''''''''''''''''''''''''

Dim aux, auxt, i1 As Long, j0 As Integer, j1 As Integer, j2 As Integer, k1 As Integer, k2 As Integer, v66b As
Double
ReDim l(43) As Long, SUMA(1 To 2, 1 To 3), VT(55, 10), vx(43, 1 To 6), y(1 To 3)

''''''''''''''''''''''''''
'Primera lectura de dades'
''''''''''''''''''''''''''

j0 = 1
NT1 = 0
NT2 = 0
NT3 = 0

Open NOM_IT_DADES & ANOIT & ".dat" For Input As #1

''''''''''''''''''''''''''''''''''''''''''''
'Open "C:\SIMCAT\errors.dat" For Output As #10
''''''''''''''''''''''''''''''''''''''''''''

Input #1, N1, N2, N3

N = N1 + N2 + N3
ReDim IND(1 To N, 1 To 1), X(1 To N, 1 To 3)

For i1 = 1 To N
```

```
    auxt = 0                                                          'Per a calcular la tarifa segons la data
de meritació

    Input #1, v1, v2, v67, v8, tpo, os, ajd, v45, v52, v64, v66
    y(3) = 1                                                          'pes fictici

    If i1 <= N1 Then

       v45 = v45 * PROJ(1)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'      Per a calcular la tarifa segons la data de meritació
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'       If v8 = "TUB" Or v8 = "TRT" Or v8 = "TV0" Or v8 = "TAM" Then
'          If v2 = 1 Then auxt = 0.01
'       End If
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

       For j1 = 1 To 17
           If tpo = j1 Then
              l(j1) = l(j1) + 1
              If j1 <> 13 Then
                 v66b = v52 * PROJ(1) * (TIPUS_TPO(j1) - auxt)        'Tarifes TPO (Projectant BI)
              End If
           End If
       Next j1

       If tpo = 13 Then                                               'Tarifa AUR-TPO
          v52 = v52 * PROJ(1)
          For j1 = 1 To NTRAMS_AUR
              If j1 = 1 Then
                 If v52 <= TRAMS_AUR(j1) Then
                    v66b = IMPORT_AUR(j1)
                    GoTo FORATRAMS
                 End If
              ElseIf j1 > 1 And j1 <= NTRAMS_AUR Then
                 If v52 > TRAMS_AUR(j1 - 1) And v52 <= TRAMS_AUR(j1) Then
                    v66b = IMPORT_AUR(j1)
                    GoTo FORATRAMS
                 End If
              End If
          Next j1
FORATRAMS:
          If v52 > TRAMS_AUR(NTRAMS_AUR) Then
             aux = (v52 - TRAMS_AUR(NTRAMS_AUR)) / TRAMS_AUR(NTRAMS_AUR + 1)
             v66b = IMPORT_AUR(NTRAMS_AUR) + IMPORT_AUR(NTRAMS_AUR + 1) * aux
          End If
       End If

       If v64 <> 0 Then
          If tpo = 1 Then
             v66b = v66b * (1 - IIf(v64 = 70, BON_TUB, v64 / 100))    'Rectificació bonificació tarifa TUB
          Else
             v66b = v66b * (1 - (v64 / 100))
          End If
       End If
       NT1 = NT1 + y(3)

    ElseIf i1 <= N1 + N2 Then

       v45 = v45 * PROJ(2)
       For j1 = 1 To 7
           If os = j1 Then
              l(18 + j1) = l(18 + j1) + 1
              v66b = v52 * PROJ(2) * TIPUS_OS(j1)                     'Tarifes OS (Projectant la BI)
           End If
       Next j1
       If v64 <> 0 Then v66b = v66b * (1 - (v64 / 100))
       NT2 = NT2 + y(3)

    Else

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'      Per a calcular la tarifa segons la data de meritació
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'       If v8 = "AJ0" Or v8 = "AJ1" Or v8 = "AJ2" Or v8 = "AJ3" Or v8 = "AJ4" Or _
'          v8 = "AJ6" Or v8 = "AJ7" Or v8 = "AJ8" Or v8 = "AIC" Or v8 = "AIM" Then
'          If v2 = 1 Then auxt = 0.005
'          If v2 = 2 Then auxt = 0.003
'       End If
'       If v8 = "AJ5" And v2 <> 3 Then auxt = 0.003
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
```

```
        v45 = v45 * PROJ(3)
        For j1 = 1 To 17
            If ajd = j1 Then
               l(26 + j1) = l(26 + j1) + 1
               v66b = v52 * PROJ(3) * (TIPUS_AJD(j1) - auxt)           'Tarifes AJD (Projectant la BI)
            End If
        Next j1
        If v64 <> 0 Then v66b = v66b * (1 - (v64 / 100))
        NT3 = NT3 + y(3)
    End If

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''
'If Abs(v66 - v66b) > 1 Then Write #10, V1, v30062010, v23032012, v31072013, v67, v8, tpo, os, ajd, v45, v52,
v64, v66, v66b
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
''''''''''''''

    j2 = IIf(i1 <= N1, 0, IIf(i1 <= N1 + N2, 18, 26))
    For k1 = 1 To 2
        y(k1) = IIf(k1 = 1, v45, v66b)
        k2 = 3 * (k1 - 1)
        If y(k1) <> 0 Then
           vx(j2, k2 + 1) = vx(j2, k2 + 1) + (y(k1) * y(3))
           vx(j2, k2 + 2) = vx(j2, k2 + 2) + ((y(k1) ^ 2) * (y(3) ^ 2))
           vx(j2, k2 + 3) = vx(j2, k2 + 3) + 1
           For j1 = 1 To IIf(i1 <= N1, 17, IIf(i1 <= N1 + N2, 7, 17))
               If IIf(i1 <= N1, tpo, IIf(i1 <= N1 + N2, os, ajd)) = j1 Then
                  vx(j1 + j2, k2 + 1) = vx(j1 + j2, k2 + 1) + (y(k1) * y(3))
                  vx(j1 + j2, k2 + 2) = vx(j1 + j2, k2 + 2) + ((y(k1) ^ 2) * (y(3) ^ 2))
                  vx(j1 + j2, k2 + 3) = vx(j1 + j2, k2 + 3) + 1
               End If
           Next j1
        End If
    Next k1

    If j0 <= 10 Then
       If i1 / N >= j0 / 10 Then
          Application.ScreenUpdating = True
          Application.StatusBar = "Processat  " & (j0 * 9) & "%"
          Application.ScreenUpdating = False
          j0 = j0 + 1
       End If
    End If

    X(i1, 1) = v45
    X(i1, 2) = v66b
    X(i1, 3) = 1

Next i1
Close #1

'''''''''
'Close #10
'''''''''

''''''''''''''''''''''''''
'Guarda(Descriptiu) a VT)'
''''''''''''''''''''''''''

l(0) = N1
l(18) = N2
l(26) = N3
For j1 = 0 To 17
    VT(j1, 1) = IT_TARIFA_TPO(j1)
    VT(j1, 2) = l(j1)
Next j1
For j1 = 0 To 7
    VT(18 + j1, 1) = IT_TARIFA_OS(j1)
    VT(18 + j1, 2) = l(18 + j1)
Next j1
For j1 = 0 To 17
    VT(26 + j1, 1) = IT_TARIFA_AJD(j1)
    VT(26 + j1, 2) = l(26 + j1)
Next j1

For k1 = 1 To 2
    k2 = 3 * (k1 - 1)
    For j1 = 0 To 43
        VT(j1, IIf(k1 = 1, 3, 7)) = vx(j1, k2 + 1)
        If VT(j1, 2) > 300 Then
           If vx(j1, k2 + 2) - ((vx(j1, k2 + 1) ^ 2) / vx(j1, k2 + 3)) > 0 Then
              VT(j1, IIf(k1 = 1, 4, 8)) = Sqr(vx(j1, k2 + 2) - ((vx(j1, k2 + 1) ^ 2) / vx(j1, k2 + 3)))
```

```
              VT(j1, IIf(k1 = 1, 5, 9)) = VT(j1, IIf(k1 = 1, 3, 7)) - 1.96 * VT(j1, IIf(k1 = 1, 4, 8))
              VT(j1, IIf(k1 = 1, 6, 10)) = VT(j1, IIf(k1 = 1, 3, 7)) + 1.96 * VT(j1, IIf(k1 = 1, 4, 8))
           End If
        End If
    Next j1
Next k1

For j1 = 1 To 44
    If VT(j1, 2) = 0 Then
       For k1 = 3 To 10
           VT(j1, k1) = "----"
       Next k1
    End If
    If VT(j1, 4) = 0 Or VT(j1, 5) < 0 Then
       VT(j1, 4) = "----"
       VT(j1, 5) = "----"
       VT(j1, 6) = "----"
    End If
    If VT(j1, 8) = 0 Or VT(j1, 9) < 0 Then
       VT(j1, 8) = "----"
       VT(j1, 9) = "----"
       VT(j1, 10) = "----"
    End If
Next j1

SUMA(1, 1) = VT(0, 3)
SUMA(2, 1) = VT(0, 7)
SUMA(1, 2) = VT(18, 3)
SUMA(2, 2) = VT(18, 7)
SUMA(1, 3) = VT(26, 3)
SUMA(2, 3) = VT(26, 7)

Call IT_21ORDENA(0)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  95%"
Application.ScreenUpdating = False

Call IT_22INDEXS(3)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  98%"
Application.ScreenUpdating = False

temps = Timer - temps

End Sub
Private Sub IT_21ORDENA(opcio As Integer)

Dim i1 As Long, i2 As Long, i3 As Long, k1 As Integer
ReDim y(1 To N)

For k1 = 1 To 3                              'k1=1 ==>TPO k1=2 ==>OS k1=3 ==>AJD

    i2 = IIf(k1 = 1, 1, IIf(k1 = 2, N1 + 1, N1 + N2 + 1))
    i3 = IIf(k1 = 1, N1, IIf(k1 = 2, N1 + N2, N1 + N2 + N3))

    For i1 = i2 To i3

        y(i1) = X(i1, 1) + ((i1 / N) ^ 0.001) 'Suma quantitat per eliminar repeticions
        IND(i1, 1) = i1

    Next i1

    Call COMUNS_2ORDENA_AUX(i2, i3, 1)        'Crida a la rutina per a ordenar

Next k1

End Sub
Private Sub IT_22INDEXS(pes)

'pes=posicio pes (3)

Dim aconc, agini, asuit, auxm1, auxm2, auxmp, auxn As Long, _
    auxnt, axx_b, axx_p, c, daux(1 To 4), g, i1 As Long, _
    i2 As Long, i3 As Long, j1 As Integer, k, s, sxx_b As Double
ReDim xx_b(1 To N), xx_p(1 To N) As Double

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_b(1 to N) = (BI * factor) acumulades / s(variables * factor)
'Calcula: xx_p(1 to N) = població acumulada/NT
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For j1 = 1 To 3
```

```
    i2 = IIf(j1 = 1, 1, IIf(j1 = 2, N1 + 1, N1 + N2 + 1))
    i3 = IIf(j1 = 1, N1, IIf(j1 = 2, N1 + N2, N1 + N2 + N3))
    auxn = IIf(j1 = 1, N1, IIf(j1 = 2, N2, N3))
    auxnt = IIf(j1 = 1, NT1, IIf(j1 = 2, NT2, NT3))

    axx_b = 0
    If SUMA(1, j1) <> 0 Then
       For i1 = i2 To i3
           axx_b = axx_b + (X(IND(i1, 1), 1) * X(IND(i1, 1), pes))
           xx_b(i1) = axx_b / SUMA(1, j1)                              'BI
       Next i1
    End If

    axx_p = 0
    For i1 = i2 To i3
        axx_p = axx_p + X(IND(i1, 1), pes)
        xx_p(i1) = axx_p / auxnt                                       'pes
    Next i1

    auxm1 = SUMA(1, j1) / auxnt
    auxm2 = SUMA(2, j1) / auxnt
    auxmp = auxnt / auxn

    agini = 0
    sxx_b = 0

    If SUMA(1, j1) <> 0 Then

       For i1 = i2 To i3
           daux(1) = X(IND(i1, 1), 1) - auxm1
           daux(2) = xx_p(i1) - auxmp
           daux(3) = X(IND(i1, 1), pes)
           agini = agini + (daux(1) * daux(2) * daux(3))
           sxx_b = sxx_b + xx_b(i1)                                    's.acum. BI
       Next i1

       If agini <> 0 Then g = 2 / auxm1 * (agini / auxnt)              'gini

    End If

    aconc = 0
    asuit = 0
    If SUMA(2, j1) <> 0 Then

       For i1 = i2 To i3
           daux(1) = X(IND(i1, 1), 2) - auxm2
           daux(2) = xx_p(i1) - auxmp
           daux(3) = X(IND(i1, 1), pes)
           daux(4) = xx_b(i1) - (sxx_b / auxn)
           aconc = aconc + (daux(1) * daux(2) * daux(3))
           asuit = asuit + (daux(1) * daux(4) * daux(3))
       Next i1

       If aconc <> 0 Then c = 2 / auxm2 * (aconc / auxnt)              'concentració
       k = c - g                                                       'kakwani
       s = (2 * (asuit / auxnt) / auxm2) - g                           'suits

    End If

    ''''''''''''''''''''''''''''''''''
    'Guarda els resultats(Índexs) a VT'
    ''''''''''''''''''''''''''''''''''

    VT(44, 0) = "Índexs"   '42
    VT(43 + j1, 1) = g     '41
    VT(46 + j1, 1) = c     '44
    VT(49 + j1, 1) = k     '47
    VT(52 + j1, 1) = s     '50

Next j1

End Sub
Private Sub IT_30COMPARACIO(opcio As Integer)

Dim nom As String, llibre(1 To 3) As Integer, llibre_r(1 To 3) As Workbook, r_f(7) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(0) ==> formats del llibre QUOTA Simulació-COMP(1) Tarifes                 '
'r_f(1) ==> formats del llibre QUOTA Simulació-COMP(1)                         '
'r_f(2) ==> formats del llibre QUOTA Simulació-COMP(2)                         '
'r_f(1) ==> formats del llibre "FORMATS", full "ITPOOSAJD"                     '
'r_f(4) ==> formats del llibre "SIMCAT",  full "ITPOOSAJD(G-P)"                '
'r_f(5) ==> formats del llibre "SIMCAT",  full "ITPOOSAJD(G-P)" (només valors)'
```

```
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = NOM_IT_SIMUL & "S" & ANOIT & "_" & Trim(Str(COMP(1))) & ".xlsx"
Set llibre_r(1) = Workbooks.Open(nom)
llibre(1) = Workbooks.Count

Workbooks(llibre(1)).Activate                    'llibre Simulació COMP(1)
Sheets("DESCRIPTIU").Activate
Set r_f(0) = Range(Cells(1, 1), Cells(44, 1))    'Tarifes
Set r_f(1) = Range(Cells(1, 7), Cells(44, 7))    'Quota COMP(1)

N = Cells(Range(Cells(1, 2), Cells(1, 2)).End(xlDown).Row, 2)  'Recupera el nombre de liquidacions total

nom = NOM_IT_SIMUL & "S" & ANOIT & "_" & Trim(Str(COMP(2))) & ".xlsx"
Set llibre_r(2) = Workbooks.Open(nom)
llibre(2) = Workbooks.Count

Workbooks(llibre(2)).Activate                    'llibre Simulació COMP(2)
Sheets("DESCRIPTIU").Activate
Set r_f(2) = Range(Cells(1, 7), Cells(44, 7))    'Quota COMP(2)

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set llibre_r(3) = Workbooks.Open(nom)
llibre(3) = Workbooks.Count

Workbooks(llibre(3)).Activate                    'llibre "FORMATS"
Sheets("ITPOOSAJD").Activate
Set r_f(3) = Range(Cells(89, 1), Cells(136, 6))  'Comparació

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                            'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("ITPOOSAJD(G-P)")

ActiveWorkbook.Unprotect (SECRET)

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("ITPOOSAJD(G-P)").Activate

'''''''''''''''''''''''''''''''
'Configura el rang d'escriptura'
'''''''''''''''''''''''''''''''

With Range(Cells(1, 1), Cells(48, 6))
  .Font.Bold = True
  .Font.Name = "Arial"
  .Font.Size = 8
  .RowHeight = 10
End With
Cells(1, 1).RowHeight = 12
Set r_f(4) = Range(Cells(2, 1), Cells(49, 6))
Set r_f(5) = Range(Cells(5, 2), Cells(48, 2))
Set r_f(6) = Range(Cells(5, 3), Cells(48, 3))
Set r_f(7) = Range(Cells(5, 4), Cells(48, 4))

Cells(1, 1).Value = "COMPARACIÓ SIMULACIÓ-" & COMP(1) & " vs. SIMULACIÓ-" & COMP(2) & " (Base de dades: " &
ANOIT & ")"
r_f(3).Copy Destination:=r_f(4)                  'Format COMPARACIÓ
r_f(0).Copy: r_f(5).PasteSpecial xlPasteValues   'Tarifes
r_f(1).Copy: r_f(6).PasteSpecial xlPasteValues   'Quota COMP(1)
r_f(2).Copy: r_f(7).PasteSpecial xlPasteValues   'Quota COMP(2)
Cells(4, 3).Value = "Simulació-" & COMP(1)
Cells(4, 4).Value = "Simulació-" & COMP(2)

llibre_r(1).Close
llibre_r(2).Close
llibre_r(3).Close

Call COMUNS_5IMPRESSIO("ITPOOSAJD", "G-P")

End Sub
Private Sub IT_40ESCRIPTURA(opcio)

Dim fila As Integer, i As Integer, i1 As Integer, j1 As Integer, _
    llibre(1 To 2) As Integer, nom As String, _
    r_ref(1 To 3) As Range, r_f(1 To 2, 1 To 4) As Range, r_parms(1 To 2) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
```

```
'r_f(1 to 2, 1) ==> formats del llibre "FORMATS", full "ITPOOSAJD"                '
'r_f(1 to 2, 2) ==> formats del llibre "RESULTATS" temporals                      '
'r_f(1 to 2, 3) ==> formats del llibre "SIMCAT", full "ITPOOSAJD(R)"              '
'r_f(1 to 2, 4) ==> formats del llibre "SIMCAT", full "ITPOOSAJD(R)" (només valors)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre(1) = Workbooks.Count

Workbooks(llibre(1)).Activate                       'llibre "FORMATS"

Sheets("ITPOOSAJD").Activate

Set r_parms(1) = Range(Cells(1, 1), Cells(22, 9))    'Paràmetres

Set r_f(1, 1) = Range(Cells(24, 1), Cells(72, 11))   'Descriptiu
Set r_f(2, 1) = Range(Cells(74, 1), Cells(87, 5))    'Indexs

Set r_ref(1) = Range(Cells(138, 1), Cells(210, 11))  'Referència

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                               'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("ITPOOSAJD(R)")

ActiveWorkbook.Unprotect (SECRET)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Escriu els resultats de la referència
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("ITPOOSAJD(R)").Activate
Set r_ref(2) = Range(Cells(1, 1), Cells(73, 11))
With r_ref(2)
  .ColumnWidth = 11
  .RowHeight = 10
End With
r_ref(1).Copy Destination:=r_ref(2)
ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(74, 1))

fila = 75

For i1 = 1 To UBound(IRESULTS)

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Lectura en els arxius temporals de resultats'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    nom = NOM_IT_SIMUL & "S" & ANOIT & "_" & Trim(Str(IRESULTS(i1))) & ".xlsx"
    Set LLIBRE_RESULTATS = Workbooks.Open(nom)
    llibre(2) = Workbooks.Count

    Workbooks(llibre(2)).Activate                   'llibre "RESULTATS"

    Sheets("PARAMETRES").Activate                   'Paràmetres
    ReDim p(19, 9)
    For i = 0 To UBound(p, 1)
        For j1 = 1 To UBound(p, 2)
            p(i, j1) = Cells(i + 1, j1)
        Next j1
    Next i

    Sheets("DESCRIPTIU").Activate                   'Descriptiu
    Set r_f(1, 2) = Range(Cells(1, 1), Cells(44, 10))

    Sheets("INDEXS").Activate                       'Indexs
    Set r_f(2, 2) = Range(Cells(1, 1), Cells(12, 1))

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Escriptura en el full definitiu de resultats'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    ThisWorkbook.Activate                           'llibre "SIMCAT"

    With Range(Cells(fila - 1, 1), Cells(fila + 86, 11))
      .ColumnWidth = 11
```

```
      With .Font
        .Bold = True
        .Name = "Arial"
        .Size = 8
      End With
      .HorizontalAlignment = xlCenter
      .Interior.ColorIndex = 2
      .RowHeight = 10
    End With
    With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
      .HorizontalAlignment = xlLeft
      .Value = "SIMULACIÓ-" & IRESULTS(i1) & " (Base de dades: " & ANOIT & ")"
    End With

    Call IT_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Rangs per a l'escriptura en el llibre SIMCAT full IT(R)'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    Set r_f(1, 3) = Range(Cells(fila + 23, 1), Cells(fila + 71, 11))   'Descriptiu
    Set r_f(1, 4) = Range(Cells(fila + 27, 2), Cells(fila + 70, 11))
    Set r_f(2, 3) = Range(Cells(fila + 73, 1), Cells(fila + 86, 5))    'Índexs
    Set r_f(2, 4) = Range(Cells(fila + 75, 5), Cells(fila + 86, 5))

    For j1 = 1 To 2
        r_f(j1, 1).Copy Destination:=r_f(j1, 3)
        r_f(j1, 2).Copy: r_f(j1, 4).PasteSpecial xlPasteValues
    Next j1

    LLIBRE_RESULTATS.Close

    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 87, 1))
    fila = fila + 88

Next i1

LLIBRE_FORMATS.Close

Call COMUNS_5IMPRESSIO("ITPOOSAJD", "R")

End Sub
Private Sub IT_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

Dim i1 As Integer, j1 As Integer

Set r_parms(2) = Range(Cells(fila, 1), Cells(fila + 21, 9))          'Paràmetres

r_parms(1).Copy Destination:=r_parms(2)

With r_parms(2)

  For i1 = 1 To 16                                                   'TPO tarifes tipus únic
      For j1 = 2 To 2
          .Rows(i1 + 3).Columns(j1).Value = IIf(i1 < 13, p(i1, j1), p(i1 + 1, j1))
      Next j1
  Next i1

  .Rows(22).Columns(1).Value = p(18, 2)                              'Bonificació Tarifa TUB

  For i1 = 1 To p(0, 2)                                              'TPO Tarifa AUR
      For j1 = 1 To 3
          .Rows(i1 + 4).Columns(2 + j1).Value = p(i1, 2 + j1)
      Next j1
  Next i1
  .Rows(14).Columns(4).Value = p(p(0, 2) + 1, 3)
  .Rows(14).Columns(5).Value = p(p(0, 2) + 1, 4)
  .Rows(15).Columns(4).Value = p(p(0, 2) + 1, 5)
  If p(0, 2) <> 9 Then
     With Range(Cells(fila + p(0, 2) + 5, 3), Cells(fila + 13, 5))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       With .Borders(xlEdgeTop)
        .LineStyle = xlContinuous
        .Weight = xlMedium
       End With
     End With
  End If

  For i1 = 1 To 7                                                    'OS tarifes tipus únic
      For j1 = 2 To 2
      .Rows(i1 + 3).Columns(5 + j1).Value = p(i1, 5 + j1)
      Next j1
```

```
  Next i1

  For i1 = 1 To 17                                                    'AJD tarifes tipus únic
      For j1 = 2 To 2
      .Rows(i1 + 3).Columns(7 + j1).Value = p(i1, 7 + j1)
      Next j1
  Next i1

  If p(19, 1) <> 1 Or p(19, 2) <> 1 Or p(19, 3) <> 1 Then             'Projeccions
     .Rows(19).Columns(5) = IIf(p(19, 1) <> 1, p(19, 1) - 1, "'----")
     .Rows(20).Columns(5) = IIf(p(19, 2) <> 1, p(19, 2) - 1, "'----")
     .Rows(21).Columns(5) = IIf(p(19, 3) <> 1, p(19, 3) - 1, "'----")
  Else
     With Range(Cells(fila + 17, 4), Cells(fila + 20, 5))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = "SENSE PROJECCIONS"
       With .Borders(xlEdgeTop)
        .LineStyle = xlContinuous
        .Weight = xlMedium
       End With
     End With
  End If

End With

End Sub
Private Sub IPPF_10PARAMETRES(opcio As Integer)

Dim i1 As Integer

ReDim lim(8) As Integer, aproj(300), tram(11) As Integer
For i1 = -150 To 150
    If i1 >= 0 And i1 <= 8 Then lim(8 - i1) = 10 * (i1 + 1)
    If i1 >= 0 And i1 <= 11 Then tram(11 - i1) = i1 + 1
    aproj(150 - i1) = i1 / 10
Next i1

If ISIMULS(5) <> 0 Then
   ReDim sims(1 To ISIMULS(5))
   For i1 = ISIMULS(5) To 1 Step -1
       sims(ISIMULS(5) - i1 + 1) = CIPPF(i1)
   Next i1
End If

PAGINA = -1
TORNA:
PAGINA = PAGINA + 1
ERR_LEC = True

Do While ERR_LEC
   With IPPF
     .MultiPage1.Value = PAGINA
     If .MultiPage1.Value = 0 Then .Caption = "SIMCAT-IPPF: Determinació dels béns i drets exempts i dels mínims
exempts"
     If .MultiPage1.Value = 1 Then .Caption = "SIMCAT-IPPF: Trams i tipus impositius. Reducció personal.
Connexió IRPF. Projeccions"
     .Caption = .Caption & " (Base de dades: " & ANOIPPF & ")"
     If ISIMULS(5) <> 0 Then
        .ListBox_SimulRef.List = sims
        .SimulRef.Visible = True
     End If
     .ListBox22.List = tram
     .ListBox231.List = lim
     .ListBox232.List = lim
     .ListBox241.List = aproj
     .ListBox242.List = aproj
     .ListBox243.List = aproj
     .Llei.Value = True
     .Show
   End With
   If SORTIR Then Exit Sub
Loop
If PAGINA < 1 Then GoTo TORNA
If PAGINA = 1 Then Exit Sub

End Sub
Private Sub IPPF_20SIMULACIO(temps)

Dim i1 As Long, it As Integer, j1 As Integer, j2 As Integer, aux As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul preliminar sobre trams i tipus impositius'
```

```
''''''''''''''''''''''''''''''''''''''''''''''''''

ReDim tt(1 To NTRAMS - IIf(NTRAMS <> 1, 1, 0)) As Double
tt(1) = T(1) * TIPUS(1)
If NTRAMS > 2 Then
   For it = 2 To NTRAMS - 1
       tt(it) = tt(it - 1) + ((T(it) - T(it - 1)) * TIPUS(it))
   Next it
End If

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'per a fer comprovacions
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Open "C:\SIMCAT\Errors.txt" For Output As #100
'Write #100, "nif", "X(i1,3)", "v(42)", "v(43)", "v(44)", "v(55)"
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaració de les variables del fitxer de lectura de les utilitzades a la simulació'
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Dim nif As Long, minus As Integer, p29s As Double, EPN As Double

''''''''''''''''''
'Lectura de dades'
''''''''''''''''''

Open NOM_IPPF_DADES & ANOIPPF & ".dat" For Input As #1
Input #1, N

''''''''''''''''''''''''''''''''''''''''''''''''''
'Declaracions de variables després de conèixer N'
''''''''''''''''''''''''''''''''''''''''''''''''''

Dim spes2, vgp, i_pag As Integer
ReDim IND(1 To N, 2), MITJANA(1 To 5), PAG(1 To 3), SUMA(1 To 9), vpag(1 To 4), VT(1 To 28, 12), _
      vx(1 To 4, 1 To 6), X(1 To N, 9)
NT = 0
spes2 = 0
j2 = 1
For i1 = 1 To N
    ReDim v(1 To 63) As Double
    i_pag = 0
    Input #1, nif, minus, v(2), v(3), v(4), v(5), v(6), v(7), v(8), v(9), v(10), v(11), v(12), v(13), v(14), _
              v(15), v(16), v(17), v(18), v(19), v(20), v(21), v(22), v(24), v(28), v(30), v(31), v(32), v(34),
_
              v(35), v(41), v(42), v(50), v(55), v(60), v(61), v(63), p29s, EPN

    X(i1, 5) = 1   'Factor elevació

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Actualitza béns i drets amb els coeficients de projecció'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    For j1 = 2 To 63
        If j1 = 2 Or j1 = 60 Or j1 = 62 Or j1 = 63 Then v(j1) = v(j1) * PROJ(1)
        If j1 >= 8 And j1 <= 13 Then v(j1) = v(j1) * PROJ(2)
        If j1 >= 3 And j1 <= 7 Or j1 >= 14 And j1 <= 22 Then v(j1) = v(j1) * PROJ(3)
    Next j1

    ''''''''''''''''''''''''''''''''''''''''
    'Variables d'interès                   '
    ''''''''''''''''''''''''''''''''''''''''
    'X(i1,0) = Patrimoni exempt + no exempt'
    'X(i1,1) = Base Imposable              '
    'X(i1,2) = Base Liquidable             '
    'X(i1,3) = Quota per a ingressar       '
    'X(i1,4) = Patrimoni exempt            '
    'X(i1,5) = Factor elevació             '
    ''''''''''''''''''''''''''''''''''''''''
    'X(i1,6) = 1 (guanyadors)              '
    'X(i1,7) = X(i1,6)*guany               '
    'X(i1,8) = 1 (perdedors)               '
    'X(i1,9) = X(i1,8)*pèrdua              '
    ''''''''''''''''''''''''''''''''''''''''

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina la BI descomptant els mímims exempts (cas particular per a v(1))
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    X(i1, 1) = IIf(BENS_E(1) = 1, 0, Application.max(0, v(60) - MINIMS_E(1)) + v(63))
    For j1 = 2 To 22
        X(i1, 1) = X(i1, 1) + IIf(BENS_E(j1) = 1, 0, Application.max(0, v(j1) - MINIMS_E(j1)))
```

```
    Next j1
    X(i1, 1) = Application.max(0, X(i1, 1) - v(24))   'Descompta deutes deduïbles

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina el Patrimoni exempt (sumant bens exempts i minims exempts, cas particular per a v(1))
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    X(i1, 4) = IIf(BENS_E(1) = 1, v(60) + v(63), Application.min(v(60), MINIMS_E(1)))
    For j1 = 2 To 22
        X(i1, 4) = X(i1, 4) + IIf(BENS_E(j1) = 1, v(j1), Application.min(v(j1), MINIMS_E(j1)))
    Next j1

    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina la BL descomptant la reducció per obligació personal
    '''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    X(i1, 2) = Application.max(0, X(i1, 1) - IIf(minus < 65, REDUCCIO(1), REDUCCIO(2)))
    If v(28) <> 0 Then X(i1, 2) = X(i1, 2) + v(28)  'Recalcula BL pels especials (exempts)

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina la Quota íntegra segons la tarifa i trams indicats'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    X(i1, 3) = 0
    If X(i1, 2) > 0 Then
       If NTRAMS = 1 Then
          X(i1, 3) = X(i1, 2) * TIPUS(1)
       Else
          it = NTRAMS
          If X(i1, 2) <= T(1) Then X(i1, 3) = X(i1, 2) * TIPUS(1)
          If NTRAMS > 2 Then
             For j1 = 2 To NTRAMS - 1
                 If X(i1, 2) > T(j1 - 1) And X(i1, 2) <= T(j1) Then X(i1, 3) = tt(j1 - 1) + ((X(i1, 2) - T(j1 -
1)) * TIPUS(j1))
             Next j1
          End If
          If X(i1, 2) > T(it - 1) Then X(i1, 3) = tt(it - 1) + ((X(i1, 2) - T(it - 1)) * TIPUS(it))
       End If
    End If

    ''''''''''''''''''''''''''''''''''''''''''''
    'Recalcula la quota pels especials "exempts"
    ''''''''''''''''''''''''''''''''''''''''''''

    If v(28) <> 0 Then
       X(i1, 3) = (X(i1, 2) - v(28)) * Round(X(i1, 3) / X(i1, 2), 4)
       X(i1, 2) = X(i1, 2) - v(28)                  'Recalcula BL pels especials (exempts)
    End If

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Connexió amb l'IRPF: determina els límits per obligació personal'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    If X(i1, 3) <> 0 Then
       v(33) = LIMITS(1) * Application.max(0, v(30) + v(31) - v(32))
       If X(i1, 1) <> 0 Then v(36) = EPN * X(i1, 3) / X(i1, 1)
       v(37) = v(34) - v(35) + v(36)
       If v(33) < v(37) Then
          v(38) = (v(37) - v(33)) * p29s
          v(39) = LIMITS(2) * X(i1, 3)
          X(i1, 3) = X(i1, 3) - Application.min(v(38), v(39))
       End If
    End If

    ''''''''''''''''''''''''''''''''''''''''''''''''''
    'Descompta de la Quota:
    '   - deducció per impostos a l'estranger    v(41)
    '   - bonificació per béns a Ceuta i Melilla v(44)
    '   - bonificació autonòmica                 v(50)
    ''''''''''''''''''''''''''''''''''''''''''''''''''

    If v(42) <> 0 Then
       v(43) = v(42) / X(i1, 1) * X(i1, 3)
       v(44) = 0.75 * Application.min(v(43), X(i1, 3))
    End If

    X(i1, 3) = Application.max(0, X(i1, 3) - v(41) - v(44))
    X(i1, 3) = Application.max(0, X(i1, 3) - v(50))

    ''''''''''''''''
    'Càlcul pagadors'
    ''''''''''''''''
```

```
    If X(i1, 3) > 0 Then i_pag = 1

    ''''''''''''''''''''''''''''''''
    'Càlcul de guanyadors-perdedors'
    ''''''''''''''''''''''''''''''''

    If ANOIPPF = IPPF_ANYREF Then
       vgp = v(55) - X(i1, 3)
       If Abs(vgp) > 1 Then
''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Write #100, nif, X(i1, 3), v(42), v(43), v(44), v(55)
''''''''''''''''''''''''''''''''''''''''''''''''''''''
          If vgp > 0 Then
             X(i1, 6) = 1
             X(i1, 8) = 0
          Else
             X(i1, 6) = 0
             X(i1, 8) = 1
          End If
          X(i1, 7) = vgp * X(i1, 6)
          X(i1, 9) = vgp * X(i1, 8)
       End If
    End If

    ''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina les variables per al càlcul descriptiu'
    ''''''''''''''''''''''''''''''''''''''''''''''''''

    For j1 = 1 To 4
        If X(i1, j1) <> 0 Then
           vx(j1, 1) = vx(j1, 1) + (X(i1, j1) * X(i1, 5))
           vx(j1, 2) = vx(j1, 2) + (X(i1, j1) * X(i1, 5) * X(i1, 5))
           vx(j1, 3) = vx(j1, 3) + (X(i1, j1) * X(i1, j1) * X(i1, 5) * X(i1, 5))
           vx(j1, 4) = vx(j1, 4) + 1
           vx(j1, 5) = vx(j1, 5) + X(i1, 5)
           vx(j1, 6) = vx(j1, 6) + (X(i1, 5) * X(i1, 5))
        End If
    Next j1

    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
    'Determina les variables per al càlcul dels "no-pagadors"'
    ''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

    spes2 = spes2 + (X(i1, 5) * X(i1, 5))
    vpag(1) = vpag(1) + (i_pag * X(i1, 5))
    vpag(2) = vpag(2) + (i_pag * X(i1, 5) * X(i1, 5))
    vpag(3) = vpag(3) + (i_pag * X(i1, 5) * X(i1, 5))

    NT = NT + X(i1, 5)

    If j2 <= 10 Then
       If i1 / N >= j2 / 10 Then
          Application.ScreenUpdating = True
          Application.StatusBar = "Processat " & (j2 * 8) & "%"
          Application.ScreenUpdating = False
          j2 = j2 + 1
       End If
    End If
Next i1
Close #1
'''''''''''
'Close #100
'''''''''''

For j1 = 1 To 4
    SUMA(j1) = vx(j1, 1)
    MITJANA(j1) = SUMA(j1) / NT
Next j1
MITJANA(5) = NT / N

''''''''''''''''''''''''''
'Guarda(Descriptiu) a VT)'
''''''''''''''''''''''''''

VT(1, 0) = "Descriptiu"
For j1 = 1 To 4
    If vx(j1, 4) <> 0 Then
       VT(j1, 1) = (vx(j1, 1) / vx(j1, 5)) / 1000
       VT(j1, 2) = (Sqr(vx(j1, 3) - (2 * VT(j1, 1) * vx(j1, 2)) + ((VT(j1, 1) ^ 2) * vx(j1, 6))) / vx(j1, 5)) /
1000
       VT(j1, 3) = VT(j1, 1) - 1.96 * VT(j1, 2)
       VT(j1, 4) = VT(j1, 1) + 1.96 * VT(j1, 2)
       VT(j1, 5) = vx(j1, 1) / 1000000
```

```
       VT(j1, 6) = Sqr(vx(j1, 3) - ((vx(j1, 1) ^ 2) / vx(j1, 4))) / 1000000
       VT(j1, 7) = VT(j1, 5) - 1.96 * VT(j1, 6)
       VT(j1, 8) = VT(j1, 5) + 1.96 * VT(j1, 6)
    End If
Next j1

PAG(1) = vpag(1) / NT
vpag(4) = (Sqr(vpag(3) - (2 * PAG(1) * vpag(2)) + ((PAG(1) ^ 2) * spes2)) / NT)
PAG(2) = PAG(1) - 1.95996 * vpag(4)
PAG(3) = PAG(1) + 1.95996 * vpag(4)

Call IPPF_21ORDENA(0)
Application.ScreenUpdating = True
Application.StatusBar = "Processat  85%"
Application.ScreenUpdating = False

Call IPPF_22DECILS_INDEXS_GP(5, UBound(X, 2))
Application.ScreenUpdating = True
Application.StatusBar = "Processat 95%"
Application.ScreenUpdating = False

temps = Timer - temps

End Sub
Private Sub IPPF_21ORDENA(opcio As Integer)

Dim i1 As Long, it As Integer, no0 As Long, si0 As Long
ReDim ord(1 To N) As Long, y(1 To N)

For i1 = 1 To N
    IND(i1, 0) = i1                            'ordenació 0 és la del fitxer de dades llegit
Next i1

For it = 1 To 2                                'ord. 1==>BIT ord. 2==>BLT
    no0 = 0
    For i1 = 1 To N
        If X(i1, it) <> 0 Then
           no0 = no0 + 1
           y(no0) = X(i1, it)
           IND(no0, it) = i1
        End If
    Next i1

    Call COMUNS_2ORDENA_AUX(1, no0, it)        'Crida a la rutina per a ordenar

    For i1 = 1 To no0
        ord(N - no0 + i1) = IND(i1, it)
    Next i1

    si0 = 0
    For i1 = 1 To N
        If X(i1, it) = 0 Then
           si0 = si0 + 1
           ord(si0) = i1
        End If
    Next i1

    For i1 = 1 To N
        IND(i1, it) = ord(i1)
    Next i1

Next it

End Sub
Private Sub IPPF_22DECILS_INDEXS_GP(pes, p2)

'pes=posicio pes (9)
'UBound(X, 2)=nombre variables

Dim axx_b, axx_p, i1 As Long, it As Integer, j1 As Integer

ReDim p(1 To 12, 2), xx_b(1 To N, 1 To 2), xx_p(1 To N) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_b(1 to N, 1 to 2)=(BI,BL*factor) acumulades / s(variables*factor)
'Calcula: xx_p(1 to N)        =població acumulada/NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For it = 1 To 2
    For j1 = 1 To 2
        If SUMA(j1) <> 0 Then
           axx_b = 0
           For i1 = 1 To N
```

```
            axx_b = axx_b + (X(IND(i1, it), j1) * X(IND(i1, it), pes))
            xx_b(i1, j1) = axx_b / SUMA(j1)              'BIT,BLT
          Next i1
       End If
    Next j1
    axx_p = 0
    For i1 = 1 To N
       axx_p = axx_p + X(IND(i1, it), pes)
       xx_p(i1) = axx_p / NT                  'pes
    Next i1

    If it = 1 Then Call IPPF_23DECILS(p, pes, xx_b, xx_p) 'DECILS
    Call IPPF_24INDEXS(it, pes, xx_b, xx_p)               'INDEXS

Next it

If ANOIPPF = IPPF_ANYREF Then Call IPPF_25GP(p, pes)       'G-P

End Sub
Private Sub IPPF_23DECILS(p, pes, xx_b, xx_p)

Dim axx_r, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer, l1 As Long

ReDim ds(8, 12), ts(2, 12), xx_r(1 To N, 1 To pes - 3) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_r(1 to N, 1 to pes-3)=(resta * factor) acumulades / s(variables * factor)
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For j1 = 1 To pes - 3
    If SUMA(j1 + 2) <> 0 Then
       axx_r = 0
       For i1 = 1 To N
           axx_r = axx_r + (X(IND(i1, 1), j1 + 2) * X(IND(i1, 1), pes))
           xx_r(i1, j1) = axx_r / SUMA(j1 + 2) 'resta variables
       Next i1
    End If
Next j1

For k1 = 1 To 12
    p(k1, 1) = IIf(k1 < 10, k1 / 10, IIf(k1 = 10, 0.95, IIf(k1 = 11, 0.98, 1)))
    p(k1, 2) = IIf(k1 < 10, 0.1, IIf(k1 = 10, 0.05, IIf(k1 = 11, 0.03, 0.02)))
Next k1

i2 = 1
For k1 = 1 To 11
    For i1 = i2 To N
        If xx_p(i1) >= p(k1, 1) Then
           p(k1, 0) = i1                     'p(1 to 12, 0 = Observació on comença cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next k1
p(12, 0) = N

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul DECILS (1a dimensió parell decil acumulat)            '
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'VT(7 ,1 to 12)=Base imposable              (1)=ds(1, 1 to 12)'
'VT(9 ,1 to 12)=Base liquidable             (2)=ds(3, 1 to 12)'
'VT(11,1 to 12)=Quota                       (3)=ds(5, 1 to 12)'
'VT(13,1 to 12)=Patrimoni exempt            (4)=ds(7, 1 to 12)'
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 2
        ds(2 * j1, k1) = xx_b(l1, j1)        'BIT, BLT
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
    For j1 = 3 To pes - 1
        ds(2 * j1, k1) = xx_r(l1, j1 - 2)    'resta
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
Next k1

'''''''''''''''''''''''''''''''''''''''''''''''
'Càlcul tipus efectius                        '
'''''''''''''''''''''''''''''''''''''''''''''''
'VT(15,1 to 12)= QPI s/BI  (3/1)=ts( 1, 1 to 12)'
```

```
'VT(16,1 to 12)= QPI s/BL  (3/2)=ts( 2, 1 to 12)'
''''''''''''''''''''''''''''''''''''''''''''''''''

For k1 = 1 To 12
    If SUMA(1) <> 0 And ds(1, k1) <> 0 Then
       ts(1, k1) = (ds(5, k1) * SUMA(3)) / (ds(1, k1) * SUMA(1))
    End If
    If SUMA(2) <> 0 And ds(3, k1) <> 0 Then
       ts(2, k1) = (ds(5, k1) * SUMA(3)) / (ds(3, k1) * SUMA(2))
    End If
Next k1

''''''''''''''''''''''''''''''''''''''''''''''''
'Guarda límits i mitjanes, decils i tipus a VT
''''''''''''''''''''''''''''''''''''''''''''''''

VT(5, 0) = "Límits i mitjanes "
VT(7, 0) = "Decils"
VT(15, 0) = "Tipus"
For k1 = 1 To 12
    VT(5, k1) = (X(IND(p(k1, 0), 1), 1)) / 1000
    VT(6, k1) = (ds(1, k1) * SUMA(1) / (NT * IIf(k1 < 10, 0.1, IIf(k1 = 10, 0.05, IIf(k1 = 11, 0.03, 0.02))))) /
1000
    For j1 = 1 To 8
        VT(6 + j1, k1) = ds(j1, k1)
    Next j1
    For j1 = 1 To 2
        VT(14 + j1, k1) = ts(j1, k1)
    Next j1
Next k1

End Sub
Private Sub IPPF_24INDEXS(it, pes, xx_b, xx_p)

''''''''''''''''''''''''''
'INDEXS 55               '
''''''''''''''''''''''''''
'Gini:                 g  2
''''''''''''''''''''''''''
'Concentració:         c  2
'Kakwani:              k  2
'Suits:                s  2
'Efecte Redistributiu: e  2
''''''''''''''''''''''''''

Dim aconc, aefre, agini, asuit, daux(1 To 4), _
    i1 As Long, j1 As Integer, k1 As Integer, l1 As Integer, sxx_b As Double
Dim g, c, k, s, e As Double

agini = 0
sxx_b = 0
If SUMA(it) <> 0 Then

   For i1 = 1 To N
       daux(1) = X(IND(i1, it), it) - MITJANA(it)
       daux(2) = xx_p(i1) - MITJANA(pes)
       daux(3) = X(IND(i1, it), pes)
       agini = agini + (daux(1) * daux(2) * daux(3))
       sxx_b = sxx_b + xx_b(i1, it)                                  's.acum. BII,BIT,BLT
   Next i1

   If agini <> 0 Then g = 2 / MITJANA(it) * (agini / NT)             'gini

End If

aconc = 0
aefre = 0
asuit = 0
If SUMA(j1 + 2) <> 0 Then

For i1 = 1 To N
    daux(1) = X(IND(i1, it), 3) - MITJANA(3)
    daux(2) = xx_p(i1) - MITJANA(pes)
    daux(3) = X(IND(i1, it), pes)
    daux(4) = xx_b(i1, it) - (sxx_b / N)
    aconc = aconc + (daux(1) * daux(2) * daux(3))
    asuit = asuit + (daux(1) * daux(4) * daux(3))
Next i1

If aconc <> 0 Then c = 2 / MITJANA(3) * (aconc / NT) 'concentració
k = c - g                                            'kakwani
s = (2 * (asuit / NT) / MITJANA(3)) - g              'suits
```

```
If SUMA(it) <> 0 Then aefre = SUMA(3) / SUMA(it)
   e = (aefre / (1 - aefre)) * k                    'ef red.
End If

''''''''''''''''''''''''''''''''''
'Guarda els resultats(Índexs) a VT'
''''''''''''''''''''''''''''''''''

If it = 1 Then VT(17, 0) = "Índexs"
VT(16 + it, it) = g
VT(19, it) = c
VT(20, it) = k
VT(21, it) = s
VT(22, it) = e

End Sub
Private Sub IPPF_25GP(p, pes)

Dim axx_gp(1 To 4), i1 As Long, j1 As Integer, k1 As Integer

ReDim gp(1 To 6, 1 To 12), xx_gp(1 To N, 1 To 4), y(4, 12) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula: xx_gp(1 to N, pes + 1 to pes + 4) = (GP * factor) acumulades
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

For j1 = 1 To 4
'    If SUMA(j1) <> 0 Then
       axx_gp(j1) = 0
       For i1 = 1 To N
           axx_gp(j1) = axx_gp(j1) + (X(IND(i1, 0), j1 + pes) * X(IND(i1, 0), pes))
           xx_gp(i1, j1) = axx_gp(j1)
       Next i1
'    End If
Next j1

For k1 = 1 To 12
    i1 = p(k1, 0)
    For j1 = 1 To 4
        y(j1, k1) = xx_gp(i1, j1)
        gp(IIf(j1 <= 2, j1, j1 + 1), k1) = y(j1, k1) - y(j1, k1 - 1)
    Next j1
Next k1
For k1 = 1 To 12
    For j1 = 3 To 6 Step 3
        If gp(j1 - 2, k1) <> 0 Then gp(j1, k1) = gp(j1 - 1, k1) / gp(j1 - 2, k1) Else gp(j1, k1) = 0
    Next j1
    For j1 = 1 To 5
        If j1 <> 3 Then gp(j1, k1) = gp(j1, k1) * IIf(j1 = 1 Or j1 = 4, 1 / (p(k1, 2) * NT), 0.001)
    Next j1
Next k1
For k1 = 1 To 12
    For j1 = 1 To 4 Step 3
        If gp(j1, k1) >= 0.995 Then gp(j1, k1) = 1
        If gp(j1, k1) <= 0.005 Then gp(j1, k1) = 0
    Next j1
    If gp(1, k1) < 0.001 Then
       gp(2, k1) = 0
       gp(3, k1) = 0
    End If
    If gp(4, k1) < 0.001 Then
       gp(5, k1) = 0
       gp(6, k1) = 0
    End If
Next k1

''''''''''''''''''''''''''
'Guarda(Guanyadors) a VT)
''''''''''''''''''''''''''

VT(23, 0) = "Guanyadors"
For k1 = 1 To 12
    For j1 = 1 To 6
        VT(22 + j1, k1) = IIf(j1 = 4, -1, 1) * gp(j1, k1)
    Next j1
Next k1

End Sub
Private Sub IPPF_30COMPARACIO(opcio As Integer)

Dim aux, i1 As Long, j1 As Integer, k1 As Integer
ReDim ds(1 To 4, 1 To 12), gp(1 To 6, 1 To 12), s(1 To 7) As Double
```

```
Open NOM_IPPF_SIMUL & "GP" & ANOIPPF & "_" & Trim(Str(COMP(1))) & ".dat" For Input As #1
Open NOM_IPPF_SIMUL & "GP" & ANOIPPF & "_" & Trim(Str(COMP(2))) & ".dat" For Input As #2

Input #1, N
Input #2, N

ReDim X(1 To N, 1 To 7), IND(1 To N)

For i1 = 1 To N
    Input #1, IND(i1), X(i1, 1), X(i1, 7)
    Input #2, aux, X(i1, 2), aux
    aux = X(i1, 1) - X(i1, 2)
    If Abs(aux) > 1 Then
       If aux > 0 Then
          X(i1, 3) = 1
          X(i1, 5) = 0
       Else
          X(i1, 3) = 0
          X(i1, 5) = 1
       End If
       X(i1, 4) = aux * X(i1, 3)
       X(i1, 6) = aux * X(i1, 5)
    End If
    For j1 = 1 To 6
        s(j1) = s(j1) + (X(i1, j1) * X(i1, 7))
    Next j1
    s(7) = s(7) + X(i1, 7)
Next i1
Close #1
Close #2

Call IPPF_31COMPARACIO_DECILS_GP(ds, gp, s)
Call IPPF_32COMPARACIO_ESCRIPTURA(ds, gp, s(1), s(2), s(7))
Call COMUNS_5IMPRESSIO("IPPF", "G-P")

End Sub
Private Sub IPPF_31COMPARACIO_DECILS_GP(ds, gp, s)

Dim aux, i1 As Long, i2 As Long, j1 As Integer, k1 As Integer, l1 As Long
ReDim p(1 To 12, 2), xx(1 To N, 1 To 7), y(4, 12) As Double

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Calcula xx(1 to N, 1 to 6)=(variables * factor) acumulades / s(variables * factor)
'        xx(1 to N, 7)     = població acumulada/s(7)   s(7)=NT
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

aux = 0
For j1 = 1 To 6
    If s(j1) <> 0 Then
       aux = 0
       For i1 = 1 To N
           aux = aux + (X(IND(i1), j1) * X(IND(i1), 7))
           xx(i1, j1) = aux / IIf(j1 <= 2, s(j1), 1)
       Next i1
    End If
Next j1

aux = 0
For i1 = 1 To N
    aux = aux + X(IND(i1), 7)
    xx(i1, 7) = aux / s(7)
Next i1

For j1 = 1 To 12
    p(j1, 1) = IIf(j1 < 10, j1 / 10, IIf(j1 = 10, 0.95, IIf(j1 = 11, 0.98, 1)))
    p(j1, 2) = IIf(j1 < 10, 0.1, IIf(j1 = 10, 0.05, IIf(j1 = 11, 0.03, 0.02)))
Next j1

i2 = 1
For j1 = 1 To 11
    For i1 = i2 To N
        If xx(i1, 7) >= p(j1, 1) Then
           p(j1, 0) = i1                  'p(1 to 12, 0 = Observació on comença cada decil
           i2 = i1
           Exit For
        End If
    Next i1
Next j1
p(12, 0) = N

''''''''
'DECILS'
''''''''
```

```
For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 2
        ds(2 * j1, k1) = xx(l1, j1)
        If k1 = 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1)
        If k1 > 1 Then ds(2 * j1 - 1, k1) = ds(2 * j1, k1) - ds(2 * j1, k1 - 1)
    Next j1
Next k1

''''''''''''''''''''''
'GUANYADORS-PERDEDORS'
''''''''''''''''''''''

For k1 = 1 To 12
    l1 = p(k1, 0)
    For j1 = 1 To 4
        y(j1, k1) = xx(l1, j1 + 2)
        gp(IIf(j1 <= 2, j1, j1 + 1), k1) = y(j1, k1) - y(j1, k1 - 1)
    Next j1
Next k1
For j1 = 1 To 12
    For k1 = 3 To 6 Step 3
        If gp(k1 - 2, j1) <> 0 Then gp(k1, j1) = gp(k1 - 1, j1) / gp(k1 - 2, j1) Else gp(k1, j1) = 0
    Next k1
    For k1 = 1 To 5
        If k1 <> 3 Then gp(k1, j1) = gp(k1, j1) * IIf(k1 = 1 Or k1 = 4, 1 / (p(j1, 2) * s(7)), 0.001)
    Next k1
Next j1
For j1 = 1 To 12
    For k1 = 1 To 4 Step 3
        If gp(k1, j1) >= 0.995 Then gp(k1, j1) = 1
        If gp(k1, j1) <= 0.005 Then gp(k1, j1) = 0
    Next k1
    gp(4, j1) = -gp(4, j1)
Next j1

End Sub
Private Sub IPPF_32COMPARACIO_ESCRIPTURA(ds, gp, s1, s2, s7)

Dim avisgp As Boolean, nom As String, i1 As Integer, llibre As Integer, nota As String, _
    r_f(1 To 2, 1 To 3) As Range

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 2, 1)==> formats del llibre "FORMATS", full "IPPF"                '
'r_f(1 to 2, 2)==> formats del llibre "SIMCAT", full "(G-P)"               '
'r_f(1 to 2, 3)==> formats del llibre "SIMCAT", full "(G-P)" (només valors)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre = Workbooks.Count

Workbooks(llibre).Activate                          'llibre "FORMATS"

Sheets("IPPF").Activate

Set r_f(1, 1) = Range(Cells(78, 1), Cells(86, 15)) 'Decils
Set r_f(2, 1) = Range(Cells(69, 1), Cells(76, 15)) 'Guanyadors

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                               'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("IPPF(G-P)")

ActiveWorkbook.Unprotect (SECRET)

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("IPPF(G-P)").Activate

''''''''''''''''''''''''''''''''''''''
'Configura el rang d'escriptura'
''''''''''''''''''''''''''''''''''''''

With Range(Cells(1, 1), Cells(66, 15))
  .ColumnWidth = 6.43
  With .Font
    .Name = "Arial"
```

```
    .Size = 7
  End With
  .HorizontalAlignment = xlCenter
  .Interior.ColorIndex = 2
  .RowHeight = 11
End With
With Range(Cells(1, 1), Cells(2, 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
End With
Cells(1, 1).Value = "IMPOST DEL PATRIMONI DE LES PERSONES FÍSIQUES"
Cells(2, 1).Value = "COMPARACIÓ SIMULACIÓ-" & COMP(1) & " vs. SIMULACIÓ-" & COMP(2) & _
                    " (Base de dades: " & ANOIPPF & ")"

Set r_f(1, 2) = Range(Cells(3, 1), Cells(11, 15))    'Decils     Rangs d'escriptura
Set r_f(2, 2) = Range(Cells(13, 1), Cells(20, 15))   'Guanyadors Rangs d'escriptura
Set r_f(1, 3) = Range(Cells(6, 4), Cells(9, 15))     'Decils     Rangs de valors
Set r_f(2, 3) = Range(Cells(15, 4), Cells(20, 15))   'Guanyadors Rangs de valors

''''''''''''''''''''''''''''''
'Escriu els resultats numèrics'
''''''''''''''''''''''''''''''

r_f(1, 1).Copy Destination:=r_f(1, 2)
r_f(1, 2).Rows(4).Columns(1).Value = "Quota SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(6).Columns(1).Value = "Quota SIMULACIÓ-" & COMP(2)
r_f(1, 2).Rows(8).Columns(2).Value = "SIMULACIÓ-" & COMP(1)
r_f(1, 2).Rows(8).Columns(4).Value = s1
r_f(1, 2).Rows(9).Columns(4).Value = s2
If s1 = s2 Then
   nota = "Neutral"
ElseIf s1 > s2 Then
   nota = "Pèrdua en recaptació"
Else
   nota = "Guany en recaptació"
End If
r_f(1, 2).Rows(8).Columns(6).Value = nota
If nota <> "Neutral" Then
   r_f(1, 2).Rows(8).Columns(8).Value = s2 - s1
Else
   With Range(Cells(10, 8), Cells(11, 13))
     .Interior.Pattern = xlCrissCross
     .MergeCells = True
     .Value = ""
   End With
End If
r_f(1, 2).Rows(8).Columns(14).Value = s7
r_f(1, 2).Rows(9).Columns(2).Value = "SIMULACIÓ-" & COMP(2)
r_f(2, 1).Copy Destination:=r_f(2, 2)
r_f(1, 3).Value = ds

r_f(2, 3).Value = gp
r_f(2, 3).ShrinkToFit = True

LLIBRE_FORMATS.Close

''''''''''''
'Gràfics G-P'
''''''''''''

For i1 = 1 To 12
    If Abs(r_f(2, 3).Rows(1).Columns(i1)) > 0.001 Or _
       Abs(r_f(2, 3).Rows(4).Columns(i1)) > 0.001 Then
       avisgp = True
       Exit For
    End If
Next i1

If avisgp Then

   Dim r_gp(1 To 2, 1 To 4) As Range

   Set r_gp(1, 1) = r_f(1, 3).Rows(1)  'Quota Simulació-1'
   Set r_gp(2, 1) = r_f(1, 3).Rows(3)  'Quota Simulació-2'
   Set r_gp(1, 2) = r_f(2, 3).Rows(1)  '% guanyadors'
   Set r_gp(2, 2) = r_f(2, 3).Rows(4)  '% perdedors'
   Set r_gp(1, 3) = r_f(2, 3).Rows(2)  'Total guanys'
   Set r_gp(2, 3) = r_f(2, 3).Rows(5)  'Total pèrdues'
   Set r_gp(1, 4) = r_f(2, 3).Rows(3)  'Mitjana guanyadors'
   Set r_gp(2, 4) = r_f(2, 3).Rows(6)  'Mitjana perdedors'
   r_gp(2, 2).NumberFormat = "0.00%;[Red]0.00%"
```

```
   Call COMUNS_43GRAFICS_GP(23, ANOIPPF, "IPPF", "(G-P)", r_gp, 1)

   For i1 = 1 To Worksheets("IPPF(G-P)").Shapes.Count
       Worksheets("IPPF(G-P)").Shapes(i1).Left = IIf(i1 = 1 Or i1 = 3, 10, 280) 'Reposicionament imatges
   Next i1

End If

ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(67, 1))

End Sub
Private Sub IPPF_40ESCRIPTURA(opcio As Integer)

Dim fila As Integer, gp As Boolean, i As Integer, i1 As Integer, j1 As Integer, _
    llibre(1 To 2) As Integer, nom As String, _
    r_ref(1 To 3) As Range, r_f(1 To 5, 1 To 4) As Range, r_parms(1 To 2) As Range, _
    r_gp(1 To 2, 1 To 4) As Range

'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'r_f(1 to 6, 1)==> formats del llibre "FORMATS", full "IPPF"                  '
'r_f(1 to 6, 2)==> formats del llibre "RESULTATS" temporals                   '
'r_f(1 to 6, 3)==> formats del llibre "SIMCAT", full "IPPF(R)"                '
'r_f(1 to 6, 3)==> formats del llibre "SIMCAT", full "IPPF(R)" (només valors)'
'''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Application.ScreenUpdating = False

nom = ThisWorkbook.Path & "\DADES\Formats.XLSX"
Set LLIBRE_FORMATS = Workbooks.Open(nom)
llibre(1) = Workbooks.Count

Workbooks(llibre(1)).Activate                       'llibre "FORMATS"

Sheets("IPPF").Activate

Set r_parms(1) = Range(Cells(2, 1), Cells(27, 9))    'Paràmetres

Set r_f(1, 1) = Range(Cells(29, 1), Cells(38, 11))   'Descriptiu
Set r_f(2, 1) = Range(Cells(40, 1), Cells(43, 13))   'Límits i mitjana per decils
Set r_f(3, 1) = Range(Cells(45, 1), Cells(57, 15))   'Decils
Set r_f(4, 1) = Range(Cells(59, 1), Cells(67, 6))    'Índexs
Set r_f(5, 1) = Range(Cells(69, 1), Cells(76, 15))   'Guanyadors

Set r_ref(1) = Range(Cells(88, 1), Cells(144, 15))   'Referència

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Crea el full de càlcul on escriu els resultats definitius
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                               'llibre "SIMCAT"

Call COMUNS_0NOMSFULLS("IPPF(R)")

ActiveWorkbook.Unprotect (SECRET)

''''''''''''''''''''''''''''''''''''''''
'Escriu els resultats de la referència'
''''''''''''''''''''''''''''''''''''''''

fila = 59

Sheets("SIMULADOR REFORMES IMPOSITIVES").Activate
Sheets("IPPF(R)").Activate
Set r_ref(2) = Range(Cells(1, 1), Cells(fila - 2, 15))
With r_ref(2)
  .ColumnWidth = 6.43
  .RowHeight = 11
End With
r_ref(2).Rows(2).RowHeight = 14
r_ref(2).Rows(29).RowHeight = 12
r_ref(2).Rows(43).RowHeight = 12
r_ref(2).Rows(48).RowHeight = 12
r_ref(1).Copy Destination:=r_ref(2)
ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila - 1, 1))

For i1 = 1 To UBound(IRESULTS)

    ''''''''''''''''''''''''''''''''''''''''''''''
    'Lectura en els arxius temporals de resultats'
    ''''''''''''''''''''''''''''''''''''''''''''''

    nom = NOM_IPPF_SIMUL & "S" & ANOIPPF & "_" & Trim(Str(IRESULTS(i1))) & ".xlsx"
```

```
Set LLIBRE_RESULTATS = Workbooks.Open(nom)
llibre(2) = Workbooks.Count

Workbooks(llibre(2)).Activate                    'llibre "RESULTATS"

Sheets("PARAMETRES").Activate                    'Paràmetres
ReDim p(37, 8)
For i = 0 To 37
    For j1 = 1 To 7
        p(i, j1) = Cells(i + 1, j1)
    Next j1
Next i

Sheets("DESCRIPTIU").Activate                    'Descriptiu
Set r_f(1, 2) = Range(Cells(1, 1), Cells(4, 8))

Sheets("LIMITS-MITJANES").Activate               'Límits i mitjanes
Set r_f(2, 2) = Range(Cells(1, 1), Cells(2, 12))

Sheets("DECILS-TIPUS").Activate                  'Decils BI i Tipus efectius QT s/BI QT s/BL
Set r_f(3, 2) = Range(Cells(1, 1), Cells(10, 12))

Sheets("INDEXS").Activate                        'Indexs
Set r_f(4, 2) = Range(Cells(1, 1), Cells(6, 2))

Sheets("G-P").Activate                           'Guanyadors-Perdedors
Set r_f(5, 2) = Range(Cells(1, 1), Cells(6, 12))

Close

''''''''''''''''''''''''''''''''''''''''''''''''
'Escriptura en el full definitiu de resultats'
''''''''''''''''''''''''''''''''''''''''''''''''

ThisWorkbook.Activate                            'llibre "SIMCAT"

With Range(Cells(fila - 1, 1), Cells(fila + 74, 15))
  .ColumnWidth = 6.43
  With .Font
    .Name = "Arial"
    .Size = 7
  End With
  .HorizontalAlignment = xlCenter
  .Interior.ColorIndex = 2
  .RowHeight = 11
End With
With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
  With .Font
    .Bold = True
    .Size = 10
  End With
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
  .Value = "SIMULACIÓ-" & IRESULTS(i1) & " (Base de dades: " & ANOIPPF & ")"
End With

Call IPPF_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''
'Rangs per a l'escriptura en el llibre SIMCAT full IPPF(R)'
''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''

Set r_f(1, 3) = Range(Cells(fila + 27, 1), Cells(fila + 36, 11))      'Descriptiu
Set r_f(1, 4) = Range(Cells(fila + 31, 4), Cells(fila + 34, 11))
Set r_f(2, 3) = Range(Cells(fila + 38, 1), Cells(fila + 41, 13))      'Límits i mitjanes per decils
Set r_f(2, 4) = Range(Cells(fila + 40, 2), Cells(fila + 41, 13))
Set r_f(3, 3) = Range(Cells(fila + 43, 1), Cells(fila + 55, 15))      'Decils
Set r_f(3, 4) = Range(Cells(fila + 46, 4), Cells(fila + 55, 15))
Set r_f(4, 3) = Range(Cells(fila + 57, 1), Cells(fila + 66, 6))       'Índexs
Set r_f(4, 4) = Range(Cells(fila + 60, 5), Cells(fila + 66, 6))
Set r_f(5, 3) = Range(Cells(fila + 67, 1), Cells(fila + 75, 15))      'Guanyadors
Set r_f(5, 4) = Range(Cells(fila + 69, 4), Cells(fila + 75, 15))

For j1 = 1 To 4
    r_f(j1, 1).Copy Destination:=r_f(j1, 3)
    r_f(j1, 2).Copy: r_f(j1, 4).PasteSpecial xlPasteValues
    If j1 = 1 Then
       r_f(j1, 3).Rows(10).Columns(6).Value = p(0, 5)
       r_f(j1, 3).Rows(10).Columns(7).Value = p(0, 6)
       r_f(j1, 3).Rows(10).Columns(8).Value = p(0, 7)
       r_f(j1, 3).Rows(10).Columns(10).Value = p(0, 4)
    End If
Next j1
```

```
    If p(0, 1) = ANOIPPF Then gp = True Else gp = False
    If gp Then
       r_f(5, 1).Copy Destination:=r_f(5, 3)
       r_f(5, 2).Copy: r_f(5, 4).PasteSpecial xlPasteValues
       r_f(5, 4).ShrinkToFit = True
    End If

    LLIBRE_RESULTATS.Close

    ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 75, 1))

    ''''''''''''''''''
    'Rangs dels gràfics
    ''''''''''''''''''

    Set r_ref(3) = Range(Cells(48, 4), Cells(fila - 2, 15))

    ReDim r_g(1 To IIf(gp, 7, 3), 1 To 4) As Range

    Set r_g(1, 1) = r_f(3, 4).Rows(2)      'BI acum. (sim)
    Set r_g(2, 1) = r_f(3, 4).Rows(6)      'QPI acum. (sim)
    Set r_g(3, 1) = r_f(3, 4).Rows(6)      'QPI acum. (sim)
    Set r_g(1, 2) = r_f(3, 4).Rows(4)      'BL acum. (sim)
    Set r_g(2, 2) = r_f(3, 4).Rows(6)      'QPI acum. (sim)
    Set r_g(3, 2) = r_f(3, 4).Rows(6)      'QPI acum. (sim)
    If gp Then
       Set r_g(5, 1) = r_ref(3).Rows(2)    'BI acum. (ref)
       Set r_g(6, 1) = r_ref(3).Rows(6)    'QPI acum. (ref)
       Set r_g(7, 1) = r_ref(3).Rows(6)    'QPI acum. (ref)
       Set r_g(5, 2) = r_ref(3).Rows(4)    'BL acum. (ref)
       Set r_g(6, 2) = r_ref(3).Rows(6)    'QPI acum. (ref)
       Set r_g(7, 2) = r_ref(3).Rows(6)    'QPI acum. (ref)
    End If

    Set r_g(1, 3) = r_f(3, 4).Rows(9)      'QPI s/BI (sim)
    Set r_g(1, 4) = r_f(3, 4).Rows(10)     'QPI s/BL (sim)
    If gp Then
       Set r_g(2, 3) = r_ref(3).Rows(9)    'QPI s/BI (ref)
       Set r_g(2, 4) = r_ref(3).Rows(10)   'QPI s/BL (ref)
    End If

    If gp Then
       Set r_gp(1, 1) = r_f(3, 4).Rows(5)  'QPI (sim)
       Set r_gp(2, 1) = r_ref(3).Rows(5)   'QPI (ref)         'ull
       Set r_gp(1, 2) = r_f(5, 4).Rows(1)  '% guanyadors'
       Set r_gp(2, 2) = r_f(5, 4).Rows(4)  '% perdedors'
       Set r_gp(1, 3) = r_f(5, 4).Rows(2)  'Total guanys'
       Set r_gp(2, 3) = r_f(5, 4).Rows(5)  'Total pèrdues'
       Set r_gp(1, 4) = r_f(5, 4).Rows(3)  'Mitjana guanyadors'
       Set r_gp(2, 4) = r_f(5, 4).Rows(6)  'Mitjana perdedors'
       r_gp(2, 2).NumberFormat = "0.00%;[Red]0.00%"
    End If

    Call IPPF_42ESCRIPTURA_GRAFICS(fila + 76, gp, r_g, r_gp, IRESULTS(i1))
    fila = fila + 168

Next i1

LLIBRE_FORMATS.Close

Call COMUNS_5IMPRESSIO("IPPF", "R")

End Sub
Private Sub IPPF_41ESCRIPTURA_PARAMETRES(fila, p, r_parms)

Dim i1 As Integer, j1 As Integer

Set r_parms(2) = Range(Cells(fila, 1), Cells(fila + 25, 9))  'Paràmetres

r_parms(1).Copy Destination:=r_parms(2)

With r_parms(2)

  .Font.Size = 8

  For i1 = 1 To 22                                  'bens exempts i mínims exempts
      .Rows(4 + i1).Columns(2).Value = IIf(p(i1, 1) = "x", "EXEMPT", "")
      .Rows(4 + i1).Columns(3).Value = IIf(p(i1, 2) <> 0, p(i1, 2), "")
  Next i1

  For i1 = 1 To p(0, 2)                             'tarifa
      .Rows(4 + i1).Columns(4).Value = p(23 + i1, 1)
```

```
      .Rows(4 + i1).Columns(6).Value = p(23 + i1, 2)
      .Rows(4 + i1).Columns(8).Value = p(23 + i1, 3)
  Next i1
  If p(0, 2) <> 12 Then
     With Range(Cells(fila + p(0, 2) + 4, 4), Cells(fila + 15, 8))
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = ""
     End With
     With Range(Cells(fila + p(0, 2) + 4, 4), Cells(fila + p(0, 2) + 4, 8))
       With .Borders(xlEdgeTop)
         .LineStyle = xlContinuous
         .Weight = xlMedium
       End With
     End With
  End If
  If p(0, 2) <> 12 Then
     For i1 = p(0, 2) To 12
         Cells(fila + 4 + i1, 8).Borders(xlEdgeRight).LineStyle = xlNone
     Next i1
  End If

  .Rows(18).Columns(7) = p(23, 1)                    'reducció general
  .Rows(19).Columns(7) = p(23, 2)                    'reducció discapacitats

  If p(0, 3) Then
     .Rows(21).Columns(8).Value = p(36, 1)           'BI IRPF
     .Rows(22).Columns(8).Value = p(36, 2)           'QI IPPF
  Else
     With Range(Cells(fila + 19, 4), Cells(fila + 21, 8))
       .Font.Bold = True
       .HorizontalAlignment = xlCenter
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = "SENSE CONNEXIÓ IRPF"
     End With
  End If

  If p(37, 1) <> 1 Or p(37, 2) <> 1 Or p(37, 3) <> 1 Then
     .Rows(24).Columns(8).Value = p(37, 1)           'Projecció immobles
     .Rows(25).Columns(8).Value = p(37, 2)           'Projecció cotitzacions
     .Rows(26).Columns(8).Value = p(37, 3)           'Projecció resta de béns
  Else
     With Range(Cells(fila + 22, 4), Cells(fila + 25, 8))
       .Font.Bold = True
       .HorizontalAlignment = xlCenter
       .Interior.Pattern = xlCrissCross
       .MergeCells = True
       .Value = "SENSE PROJECCIONS"
     End With
  End If

End With

End Sub
Private Sub IPPF_42ESCRIPTURA_GRAFICS(fila, gp, r_g, r_gp, sim)

Dim avisgp As Boolean, i1 As Integer, i2 As Integer, j1 As Integer, m, nom() As String, s_r() As Boolean

''''''''''''''''''''''''''''''''''''''''''''''''
'Escriptura en el full definitiu de resultats'
''''''''''''''''''''''''''''''''''''''''''''''''

With Range(Cells(fila - 1, 1), Cells(fila + 90, 15))   '78
  .ColumnWidth = 6.43
  .Interior.ColorIndex = 2
  .RowHeight = 10
End With
With Range(Cells(fila - 1, 1), Cells(fila - 1, 1))
  .Font.Bold = True
  .Font.Size = 10
  .HorizontalAlignment = xlLeft
  .RowHeight = 14
  .Value = "GRÀFICS DE LA SIMULACIÓ-" & sim & " (Base de dades: " & ANOIPPF & ")"
End With

ReDim nom(1 To 7, 1 To 2), s_r(1 To 7, 1 To 3)

For i1 = 1 To 2
    nom(1, i1) = "Sim-" & sim & IIf(i1 = 1, "(BI)", "(BL)")
    nom(2, i1) = "Sim-" & sim & "(QPI)"
    nom(3, i1) = "Sim-" & sim & "(QPI relativa)"
    nom(4, i1) = "Equitat"
```

```
    nom(5, i1) = "Ref." & IIf(i1 = 1, "(BI)", "(BL)")
    nom(6, i1) = "Ref.(QPI)"
    nom(7, i1) = "Ref.(QPI relativa)"

    If gp Then  'si hi ha referència s'ha de calcular si les corbes són iguals
       For i2 = 1 To 3
           For j1 = 1 To 12
               If Abs(r_g(i2, i1).Columns(j1) - r_g(i2 + 4, i1).Columns(j1)) > 0.005 Then
                  s_r(i2 + 4, i1) = True
                  Exit For
               End If
           Next j1
       Next i2

       For j1 = 1 To 12
           If Abs(r_g(1, i1 + 2).Columns(j1) - r_g(2, i1 + 2).Columns(j1)) > 0.001 Then
              s_r(i1, 3) = True
              Exit For
           End If
       Next j1
   End If

Next i1

If gp Then      'si hi ha referència s'ha de calcular si les corbes són iguals
   m = Round(Application.max(r_g(1, 3), r_g(2, 3), r_g(1, 4), r_g(2, 4)), 2)
Else
   m = Round(Application.max(r_g(1, 3), r_g(1, 4)), 2)
End If

Call COMUNS_41GRAFICS_CORBESLORENZ(fila, gp, "IPPF", nom, r_g, s_r)             'Lorenz
Call COMUNS_42GRAFICS_TIPUS(fila + 23, gp, "IPPF", m, r_g, s_r, sim)            'Tipus efectius

If gp Then
   For j1 = 1 To 12
       If Abs(r_gp(1, 2).Columns(j1)) > 0.001 Or Abs(r_gp(2, 2).Columns(j1)) > 0.001 Then
          avisgp = True
          Exit For
       End If
   Next j1
   If avisgp Then
      Call COMUNS_43GRAFICS_GP(fila + 46, ANOIPPF, "IPPF", "(R)", r_gp, sim)     'G-P
   Else
      gp = False
   End If
End If

For i1 = 1 To Worksheets("IPPF(R)").Shapes.Count - 1 Step 2
    Worksheets("IPPF(R)").Shapes(i1).Left = 20               'Reposicionament imatges
Next i1
For i1 = 2 To Worksheets("IPPF(R)").Shapes.Count Step 2
    Worksheets("IPPF(R)").Shapes(i1).Left = 310              'Reposicionament imatges
Next i1

ActiveWindow.SelectedSheets.HPageBreaks.Add (Cells(fila + 91, 1))

End Sub
```