```
    TABHL  - A FUNCTION WITH VALUES SPECIFIED BY A TABLE
    FCET   - FCE TABLE
    FCFPC  - FERTILITY CONTROL FACILITIES PER CAPITA
               (DOLLARS/PERSON-YEAR)
    TIME   - CURRENT TIME IN THE SIMULATION RUN
    FCEST  - FERTILITY CONTROL EFFECTIVENESS SET TIME
               (YEAR)

FCFPC.K=DLINF3(FCAPC.K,HSID)                                  46, A
    FCFPC  - FERTILITY CONTROL FACILITIES PER CAPITA
               (DOLLARS/PERSON-YEAR)
    DLINF3 - THIRD-ORDER EXPONENTIAL INFORMATION DELAY
    FCAPC  - FERTILITY CONTROL ALLOCATIONS PER CAPITA
               (DOLLARS/PERSON-YEAR)
    HSID   - HEALTH SERVICES IMPACT DELAY (YEARS)


FCAPC.K=FSAFC.K*SOPC.K                                        47, A
    FCAPC  - FERTILITY CONTROL ALLOCATIONS PER CAPITA
               (DOLLARS/PERSON-YEAR)
    FSAFC  - FRACTION OF SERVICES ALLOCATED TO FERTILITY
               CONTROL (DIMENSIONLESS)
    SOPC   - SERVICE OUTPUT PER CAPITA (DOLLARS/PERSON-
               YEAR)

FSAFC.K=TABHL(FSAFCT,NFC.K,0,10,2)                            48, A
FSAFCT=0/.005/.015/.025/.03/.035                              48.1, T
    FSAFC  - FRACTION OF SERVICES ALLOCATED TO FERTILITY
               CONTROL (DIMENSIONLESS)
    TABHL  - A FUNCTION WITH VALUES SPECIFIED BY A TABLE
    FSAFCT - FSAFC TABLE
    NFC    - NEED FOR FERTILITY CONTROL (DIMENSIONLESS)

  CAPITAL SECTOR
  INDUSTRIAL SUBSECTOR

IOPC.K=IO.K/POP.K                                             49, A
    IOPC   - INDUSTRIAL OUTPUT PER CAPITA (DOLLARS/
               PERSON-YEAR)
    IO     - INDUSTRIAL OUTPUT (DOLLARS/YEAR)
    POP    - POPULATION (PERSONS)

IO.K=(IC.K)(1-FCAOR.K)(CUF.K)/ICOR.K                          50, A
    IO     - INDUSTRIAL OUTPUT (DOLLARS/YEAR)
    IC     - INDUSTRIAL CAPITAL (DOLLARS)
    FCAOR  - FRACTION OF CAPITAL ALLOCATED TO OBTAINING
               RESOURCES (DIMENSIONLESS)
    CUF    - CAPITAL UTILIZATION FRACTION
               (DIMENSIONLESS)
    ICOR   - INDUSTRIAL CAPITAL-OUTPUT RATIO (YEARS)

ICOR.K=CLIP(ICOR2,ICOR1,TIME.K,PYEAR)                         51, A
ICOR1=3                                                       51.1, C
ICOR2=3                                                       51.2, C
    ICOR   - INDUSTRIAL CAPITAL-OUTPUT RATIO (YEARS)
    CLIP   - A FUNCTION SWITCHED DURING THE RUN
    ICOR2  - ICOR, VALUE AFTER TIME=PYEAR (YEARS)
    ICOR1  - ICOR, VALUE BEFORE TIME=PYEAR (YEARS)
    TIME   - CURRENT TIME IN THE SIMULATION RUN
    PYEAR  - YEAR NEW POLICY IS IMPLEMENTED (YEAR)

IC.K=IC.J+(DT)(ICIR.JK-ICDR.JK)                               52, L
IC=ICI                                                        52.1, N
ICI=2.1E11                                                    52.2, C
    IC     - INDUSTRIAL CAPITAL (DOLLARS)
    DT     - TIME INTERVAL BETWEEN CONSECUTIVE
               CALCULATIONS (YEARS)
    ICIR   - INDUSTRIAL CAPITAL INVESTMENT RATE
               (DOLLARS/YEAR)
    ICDR   - INDUSTRIAL CAPITAL DEPRECIATION RATE
               (DOLLARS/YEAR)
    ICI    - INDUSTRIAL CAPITAL INITIAL (DOLLARS)


ICDR.KL=IC.K/ALIC.K                                           53, R
    ICDR   - INDUSTRIAL CAPITAL DEPRECIATION RATE
               (DOLLARS/YEAR)
    IC     - INDUSTRIAL CAPITAL (DOLLARS)
    ALIC   - AVERAGE LIFETIME OF INDUSTRIAL CAPITAL
               (YEARS)
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ALIC.K=CLIP(ALIC2,ALIC1,TIME.K,PYEAR)                         54, A
ALIC1=14                                                      54.1, C
ALIC2=14                                                      54.2, C
    ALIC   - AVERAGE LIFETIME OF INDUSTRIAL CAPITAL
               (YEARS)
    CLIP   - A FUNCTION SWITCHED DURING THE RUN
    ALIC2  - ALIC, VALUE AFTER TIME=PYEAR (YEARS)
    ALIC1  - ALIC, VALUE BEFORE TIME=PYEAR (YEARS)
    TIME   - CURRENT TIME IN THE SIMULATION RUN
    PYEAR  - YEAR NEW POLICY IS IMPLEMENTED (YEAR)
ICIR.KL=(IO.K)(FIOAI.K)                                       55, R
    ICIR   - INDUSTRIAL CAPITAL INVESTMENT RATE
               (DOLLARS/YEAR)
    IO     - INDUSTRIAL OUTPUT (DOLLARS/YEAR)
    FIOAI  - FRACTION OF INDUSTRIAL OUTPUT ALLOCATED TO
               INDUSTRY (DIMENSIONLESS)

FIOAI.K=(1-FIOAA.K-FIOAS.K-FIOAC.K)                           56, A
    FIOAI  - FRACTION OF INDUSTRIAL OUTPUT ALLOCATED TO
               INDUSTRY (DIMENSIONLESS)
    FIOAA  - FRACTION OF INDUSTRIAL OUTPUT ALLOCATED TO
               AGRICULTURE (DIMENSIONLESS)
    FIOAS  - FRACTION OF INDUSTRIAL OUTPUT ALLOCATED TO
               SERVICES (DIMENSIONLESS)
    FIOAC  - FRACTION OF INDUSTRIAL OUTPUT ALLOCATED TO
               CONSUMPTION (DIMENSIONLESS)

FIOAC.K=CLIP(FIOACV.K,FIOACC.K,TIME.K,IET)                    57, A
IET=4000                                                      57.1, C
    FIOAC  - FRACTION OF INDUSTRIAL OUTPUT ALLOCATED TO
               CONSUMPTION (DIMENSIONLESS)
    CLIP   - A FUNCTION SWITCHED DURING THE RUN
    FIOACV - FIOAC VARIABLE (DIMENSIONLESS)
    FIOACC - FIOAC CONSTANT (DIMENSIONLESS)
    TIME   - CURRENT TIME IN THE SIMULATION RUN
    IET    - INDUSTRIAL EQUILIBRIUM TIME (YEAR)

FIOACC.K=CLIP(FIOAC2,FIOAC1,TIME.K,PYEAR)                     58, A
FIOAC1=.43                                                    58.1, C
FIOAC2=.43                                                    58.2, C
    FIOACC - FIOAC CONSTANT (DIMENSIONLESS)
    CLIP   - A FUNCTION SWITCHED DURING THE RUN
    FIOAC2 - FIOAC, VALUE AFTER TIME=PYEAR
               (DIMENSIONLESS)
    FIOAC1 - FIOAC, VALUE BEFORE TIME=PYEAR
               (DIMENSIONLESS)
    TIME   - CURRENT TIME IN THE SIMULATION RUN
    PYEAR  - YEAR NEW POLICY IS IMPLEMENTED (YEAR)


FIOACV.K=TABHL(FIOACVT,IOPC.K/IOPCD,0,2,.2)                   59, A
FIOACVT=.3/.32/.34/.36/.38/.43/.73/.77/.81/.82/.83            59.1, T
IOPCD=400                                                     59.2, C
    FIOACV - FIOAC VARIABLE (DIMENSIONLESS)
    TABHL  - A FUNCTION WITH VALUES SPECIFIED BY A TABLE
    FIOACVT- FIOACV TABLE
    IOPC   - INDUSTRIAL OUTPUT PER CAPITA (DOLLARS/
               PERSON-YEAR)
    IOPCD  - INDUSTRIAL OUTPUT PER CAPITA DESIRED
               (DOLLARS/PERSON-YEAR)

  SERVICE SUBSECTOR

ISOPC.K=CLIP(ISOPC2.K,ISOPC1.K,TIME.K,PYEAR)                  60, A
    ISOPC  - INDICATED SERVICE OUTPUT PER CAPITA
               (DOLLARS/PERSON-YEAR)
    CLIP   - A FUNCTION SWITCHED DURING THE RUN
    ISOPC2 - ISOPC, VALUE AFTER TIME=PYEAR (DOLLARS/
               PERSON-YEAR)
    ISOPC1 - ISOPC, VALUE BEFORE TIME=PYEAR (DOLLARS/
               PERSON-YEAR)
    TIME   - CURRENT TIME IN THE SIMULATION RUN
    PYEAR  - YEAR NEW POLICY IS IMPLEMENTED (YEAR)

ISOPC1.K=TABHL(ISOPC1T,IOPC.K,0,1600,200)                     61, A
ISOPC1T=40/300/640/1000/1220/1450/1650/1800/2000              61.1, T
    ISOPC1 - ISOPC, VALUE BEFORE TIME=PYEAR (DOLLARS/
               PERSON-YEAR)
    TABHL  - A FUNCTION WITH VALUES SPECIFIED BY A TABLE
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