

# SPSD/M



# Variable Guide

This guide consists of an encyclopedic reference to SPSD/M A textual description level information for class variables, and a cross-reference to SPSM tax/transfer algorithms is given for each variable.

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**Statistics** Canada

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# Introduction

# **Organization and Purpose**

This document contains reference information on SPSD/M variables. A variable contains information on a particular household, individual, or family in SPSD/M. This is distinct from a parameter, which usually contains information used to specify the tax/transfer system used in a simulation.

This guide is divided into three sections.

The remainder of this introductory section briefly explains the variable aggregation identity and provides a description of the naming conventions used for SPSD/M variables.

Section 2 lists the SPSM/D variables by type of variable. This section is useful for determining which SPSD/M variables exist in particular subject areas.

Section 3 is an encyclopaedic reference of all SPSD/M variables, organized alphabetically. This section can be used to determine the detailed definition, characteristics, and use of a particular variable. Up to four kinds of information are given for each variable in this section.

- A textual description defines the variable and gives some indication of its use.
- A source section indicates which micro-data set a database variable came from or how it was constructed.
- A level section displays the numeric levels that a classification variable may take and the meaning of each level.
- A cross-reference section lists the tax/transfer functions which reference the variable, together with an indication of whether the function assigns (o) or just uses as input (i) the value of the variable. Not every variable contains all four of these sections.

Users interested in a detailed discussion of the use of variables in the model in general, as opposed to the description of individual variables, should consult the *SPSD/M User's Guide*. A detailed section describes the different classes of variables and their usage within the model.

A number of typographical conventions have been used in this manual. A special font is used to indicate 'computer' names or values. Variables and algorithms are indicated in lower case (idage) and parameters are in upper case (EARNMIN).

#### Variable Identities

The SPSD/M makes use of, and makes available to users, a series of aggregate or "memo" variables in many output and reporting facilities. The identity is shown in the following diagram. So, for example, market income (immmkt) is a summation of (1) all employment

Algorithm Guide Page 1 Version 5.0 11/19/97 income(immemp), (2) investment income (imminv), and (3) other income(immoth).

# **Variable Naming Conventions**

With only a few special exceptions, described in the section titled Unit Count Variables below, variables follow a naming convention in which the first two letters of the name (the prefix) indicate the basic family level of the variable, and whether it is read from the database or produced by the model. The remaining letters of the name (the stem) describe the variable itself. Unemployment Insurance claim variables have a numeric digit inserted between the prefix and the stem, indicating which claim the variable refers to. A table of valid prefixes and their meanings is given below.

hh	Household structure data
hd	Household characteristics
ef	Economic family characteristics
cf	Census family characteristics
nf	Nuclear family characteristics
id	Individual data, from database
im	Individual data, from model
uc	UI claim data, from database (uc1 or uc2)
ub	UI claim data, from model
fx	Expenditure pattern data, from database
ct	Commodity tax data, from model

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# 1 Variable by Program

# 1.1 Individual and Family Characteristics

## 1.1.1 Demographic

The demographic variables, which come primarily from the SCF, give age, sex and location information on each individual. There are two versions of age, one (idage) has classificatory properties while the other (idnage) has analysis properties.

idage Age

idnage Age

idsex Sex

hdprov Province

hdurb Size of urban area

idimmi Years since immigration

idmarst Marital status

idcluflg Common-Law union flag

iddisab Disability status

#### 1.1.2 Education

The education variables come directly from the Labour Force Survey of which the SCF is a subsample.

idedlev Educational level

idestat Educational status

idschtp School type

#### 1.1.3 Labour force status

Most of these labour force variables come directly from the Labour Force Survey (LFS). They contain information on the individual's labour force status in the week of the survey, as well as information on his or her labour force participation in the previous year. The raking foundation variables are adjusted to allow for incorporating recent LFS data for non-reference year weight files.

idind Industry

idocc Occupation

idlfst Labour force status

idlyww Weeks worked

idlyfp Last year full/Part time

idlyun Weeks unemployed

idlystr Last year stretches unemployed

idnonlf Major non-LF activity

idrklyun Raking foundation: weeks unemployed

idrklyww Raking foundation: weeks worked

## 1.1.4 Housing

A small number of housing characteristic variables have been taken from the Household Facilities and Equipment Survey, which is administered in conjunction with the Survey of Consumer Finance. In addition two FAMEX variables not relating to current expenditure are listed here.

hdtenur Tenure

hdroom Number of rooms

hdbdrms Number of bedrooms

fxhmkt Market value of home

fxhmort Mortgage value outstanding

#### 1.1.5 Family Structure

Family structure variables are directly derived from the Household Record Docket, which contains information on each person in a household surveyed in the Labour Force Survey. Some of these variables are used in SPSM to refer to individuals in their family context, or to implement family level of analysis facilities. Others are class variables designed to allow the user to select or report on individuals or families by various characteristics.

## 1.1.5.1 Relationship variables

idhhrh Relationship to head of household idefrh Relationship to economic family head idefrh Relationship to census family head

idspoflg Person has spouse

#### 1.1.5.2 Sequence variables

hdseqhh Household sequence number

idefseq Economic family sub-sequence number idefseq Census family sub-sequence number idinseq Individual sub-sequence number

## 1.1.6 Family Characteristics

#### 1.1.6.1 Household

Family characteristic variables are directly derived from the Household Record Docket, which contains information on each person in a household surveyed in the Labour Force Survey. Some of these variables are used in SPSM to refer to individuals in their family context, or to implement family level of analysis facilities. Others are class variables designed to allow the user to select or report on individuals or families by various characteristics. A household is all the individuals sharing the same dwelling. A household can include one or more economic families, or one or more census families.

hdtype Household type

hdspoflg Household contains married couple

hdageeld Age of eldest in household

hdsexeld Sex of eldest in household

hdnadult Number of adults in household

hdnearn Number of earners in household

hdneld Number of elderly in household

hdnkids Number of children in household

hdnpers Number of persons in household

hhncf Number of census families in household

hhnef Number of economic families in household

hhnin Number of individuals in household

hhnnf Number of nuclear families in household

hdunits Unit count

hdwgtfx Sum of household weight for FAMEX group

hdwgthh Household weight

hdwgthhs Sub-sample adjusted household weight

hdtpval Current value of adjustment (TP facility)

hdfrstfx First household in FAMEX group flag

Algorithm Guide Page 6 Version 5.0 11/19/97 hdlastfx Last household in FAMEX group flag

## 1.1.6.2 Economic Family

Family characteristic variables are directly derived from the Household Record Docket, which contains information on each person in a household surveyed in the Labour Force Survey. Some of these variables are used in SPSM to refer to individuals in their family context, or to implement family level of analysis facilities. Others are class variables designed to allow the user to select or report on individuals or families by various characteristics. An economic family is defined as a group of individuals sharing a common dwelling unit and related by blood, marriage (including common law relationships) or adoption.

efnpers Number of persons in economic family

efnadult Number of adults in economic family

efneld Number of elderly in economic family

efnkids Number of children in economic family

efnearn Number of earners in economic family

efageeld Age of eldest in economic family

efsexeld Sex of eldest in economic family

efspoflg Economic family contains married couple

eftype Economic family type

efpovthr Economic family low income threshold

#### 1.1.6.3 Census Family

Family structure variables are directly derived from the Household Record Docket, which contains information on each person in a household surveyed in the Labour Force Survey. Some of these variables are used in SPSM to refer to individuals in their family context, or to implement family level of analysis facilities. Others are class variables designed to allow the user to select or report on individuals or families by various characteristics. A census family consist of both a husband and wife, or a parent with one or more children (adopted and stepchildren under 21) who have never married, living together in the same dwelling.

efpovthr Economic family low income threshold

cfnpers Number of persons in census family

cfnadult Number of adults in census family

cfneld Number of elderly in census family

cfnkids Number of children in census family

cfnearn Number of earners in census family

Algorithm Guide Page 7 Version 5.0 11/19/97 cfageeld Age of eldest in census family

cfsexeld Sex of eldest in census family

cfspoflg Census family contains married couple

cftype Census family type

cfnchild Number of children (including 18+)

cfcat Census family category

# 1.1.6.4 Nuclear Family

Family structure variables are directly derived from the Household Record Docket, which contains information on each person in a household surveyed in the Labour Force Survey. Some of these variables are used in SPSM to refer to individuals in their family context, or to implement family level of analysis facilities. Others are class variables designed to allow the user to select or report on individuals or families by various characteristics. A nuclear family consist of both a husband and wife, or a parent with one or more children (adopted and stepchildren) under 18 who have never married, living together in the same dwelling.

nftype Nuclear family type

nfnpers Number of persons in nuclear family

nfnadult Number of adults in nuclear family

nfneld Number of elderly in nuclear family

nfnkids Number of children in nuclear family

nfnearn Number of earners in nuclear family

nfageeld Age of eldest in nuclear family

nfsexeld Sex of eldest in nuclear family

nfspoflg Nuclear family contains married couple

#### 1.2 Market Income

The following income variables with id prefixes are based on the Survey of Consumer Finance or Revenue Canada T1 Data. This group of variables does not include transfers or tax credits received from government.

## 1.2.1 Employment

idiemp Wages & salaries

idisenf Self-employed income - non-farming idisefm Self-employed income - farming

immemp All employment income

#### 1.2.2 Investment

idiint Interest income (121) ididiv Dividend income (actual) idicapg Capital gains (actual)

idioinv Other investment income with net rental idiroom Net income from roomers and boarders (126)

imminy Investment income

#### 1.2.3 Other

idipens Pension income (115)

iditoth Other non-government income (taxable) idinoth Other money income (non-taxable)

immoth Other income

#### 1.3 Transfer Income

A large number of variables, both database and modelled, are required in order to complete the calculations of transfers. These are listed in this section, organized by transfer program.

## 1.3.1 Unemployment Insurance

#### 1.3.1.1 Annualized model variables

imiuib Unemployment Insurance Employment Insurance

benefits

idcuib Converted UI benefit imuibr UI benefit recovery

imuidpfg UI claimants has dependents flag

## 1.3.1.2 Claim History data (Database)

ucstat Claim status flag

ucbtyp Claim type

ucern Insurable weekly earnings uceff Effective weekly rate

ucexhas Exhaustee flag

ucgotpa Received paternity benefits ucquitp Penalty for voluntary quit

ucrpeat Repeat claim flag

ucstart Week claim established

uctpcng Type change flag

uctrnbr Training benefit weekly rate uctrnwk Weeks of training benefits

ucuer Local unemplyment rate (x10)

ucuero Local unemplyment rate (x10)-original value

ucweeks Weeks of benefits ucwkhr Weekly hours of work

ucwwork Weeks of work prior to claim

ucy1Weeks on UI in first year before claimucy2Weeks on UI in second year prior to claimucy3Weeks on UI in third year prior to claimucy4Weeks on UI in fourth year prior to claimucy5Weeks on UI in fifth year prior to claim

## 1.3.1.3 Claim data (modelled)

ubcalpd Benefits paid in calendar year ubcalwk Weeks on claim in calendar year

ubcalfs Family supplement paid in calendar year

ubclmpd Benefits paid on claim

ubclmwk Weeks on claim

ubclmfs Family supplement paid on claim

ubeiwbp Weeks of past EI benefits

ubern Modelled insurable weekly earnings

ubp1 Week # of first payment

ubp1c Week # of first payment (windowed)
ubp2 Week # of start of second phase

ubp2c Week # of start of second phase (windowed)

ubp3 Week # of start of third phase

ubp3c Week # of start of third phase (windowed)

ubp4 Week # of last payment

ubp4c Week # of last payment (windowed)
ubp5 Week # of last training payment

ubp5c Week # of last training payment (windowed)

## 1.3.2 Elderly Related

#### 1.3.2.1 CPP/QPP

idccqp Converted CPP/CQP benefit idicqp CPP/QPP income (114)

#### 1.3.2.2 OAS

imioas OAS benefits

imoaspar Partial OAS residency flag imoasres Partial OAS fraction imoasr OAS recovery

#### 1.3.2.3 GIS/SPA

imigis GIS benefits

imispa Spouse's allowance

Algorithm Guide Page 10 Version 5.0 11/19/97 imigispa GIS and spouse's allowance imoldtyp Type of GIS/SPA nuclear family

imgisinc Individual's income for GIS/SPA reduction

imgistypType of GIS entitlementimgismaxMaximum amount of GISimspatypType of SPA entitlementimspamaxMaximum amount of SPA

#### 1.3.2.4 Federal Seniors Benefits

imisenb Federal Seniors Benefit imisbspa Federal Seniors Benefit SPA

imsbmax Federal Seniors Benefit maximum benefit

imsbz Is Seniors Benefit Zeroed?

imsbtyp Type of Seniors Benefit entitlement

imsbni Consum inc with Seniors Benefit not zeroed imsbinc Individual income reducing Seniors Benefit imsbzi Consum inc with Seniors benefit zeroed imsboas Federal Seniors Benefit OAS portion

# 1.3.2.5 Provincial Elderly Programs

imigist GIS provincial top-up imiasb Alberta seniors benefit

impptg Provincial property tax grant for seniors impstg Provincial sales tax grant for seniors

#### 1.3.3 Child Related

## 1.3.3.1 Federal Family Allowance

imnfach Number of family allowance children claimed

imffa Federal portion of family allowances

imfar Family allowance recovery

## 1.3.3.2 Provincial Family Allowance

impfa Provincial family allowance impfp Provincial family programs

imqtfa Quebec taxable family allowances

imqaafa Quebec Availability Allowance FA Supplement

imqnbfa Quebec newborn Allowance

#### 1.3.3.3 Federal Child Tax Credit

imete Child tax credit

imctcben Federal child tax credit and child benefits

### 1.3.3.4 Federal Child Tax Benefit

imfcben Total Federal Child Benefits imfcbenb Total Federal Child Benefits Base

Algorithm Guide Page 11 Version 5.0 11/19/97 imfcbene Total Federal Child Benefits Earning suppl imctcben Federal child tax credit and child benefits

#### 1.3.3.5 Federal Sales Tax Credit

imfstc Federal sales tax credit

#### 1.3.3.6 New Brunswick Child Tax Benefit

imnbcben Total NB child tax Benefits

imnbcbb NB child tax Benefits base amount

imnbwis NB child tax Benefits WIS

## 1.3.3.7 Ontario Refundable Chid Care Expense Tax Credit

imoccec Ont. Child Care Exp. credit allowed (child) imoccea Ont. Child Care Exp. credit allowed (Family)

## 1.3.3.8 Alberta Family Employment Tax Credit

imiafetc Alberta Family Employment Tax Credit Benefits

## 1.3.3.9 British Columbia Family Bonus

imibcfb B.C. Family Bonus

#### 1.3.4 Social Assistance

idcsa Converted social assistance idisa Social assistance income

imisa Social assistance (or replacement program)

imfsa Federal social assistance impsa Provincial social assistance

#### 1.3.5 Other

idinogv Other government income (non-taxable) iditogv Other government income (taxable)

# 1.4 Payroll Taxes

imcqppc CPP/QPP contributions imuic UIC contributions

imuicrf UI EI contribution refund

## 1.5 Federal Income Taxes and credits

A large number of variables, both database and modelled, are required in order to complete the calculations of federal taxes. These are listed in this section, roughly organized by program and level of government.

#### 1.5.1 Calculation of Total Income

Algorithm Guide Page 12 Version 5.0 11/19/97 imicapgt Capital gains (taxable) imidivt Dividend income (taxable)

imitot Total income

## 1.5.2 Deductions from Total Income, Net Income

These variables are used to calculate net income

#### 1.5.2.1 Individual Deduction Items

idrpp Registered pension plan contributions (207)

idrrsp RRSP calculated amount (208) iddues Union and professional dues (212) imccea Child care expenses allowed

iddalimo Alimony paid (220)

idiloss Business investment losses (217)

idforavg Forward averaging amount withdrawal (237)

idmovexp Imputed moving expenses (219)

idcarry Carrying charges (221)

idexplor Exploration and development expenses (224) idalexp Other allowable employment expenses (229)

imalexp Allowable employment expenses

idothded Other deductions from total income (232)

imdedea Employment allowance

## 1.5.2.2 Child Care Expense Calculation

The child care expense calculation is performed in a way that optimizes the after tax value to the taxpayer with respect to either the child tax credit or the child tax benefit. The variables listed here are either expenditure variables or variables used in the optimization process.

idccet Child care expenses associated with child

idccett Child care expenses (Limit A, Form T778)

imccez Is CCE zeroed?

imccec Child care expenses claimed on behalf of child

imcceni Consumable income with CCE not zeroed

imccezi Consumable income with CCE zeroed

#### 1.5.2.3 Total Deductions and net Income

imdedft Deductions from total income

iminet Net income

#### 1.5.3 Deductions from Net Income, Taxable Income

The following variables are deducted from net income when calculating taxable income. Note that all

Algorithm Guide Page 13 Version 5.0 11/19/97 of these deductions are not applied for any given taxation year.

imitax Taxable income

imdedfn All deductions from net income

idemplo Employee home relocation loan dedn (248)

idstkded Stock option deduction (249)

idpartlo Limited partnership losses (251)

idnclos Allowable other years non-capital loss (252)

idcloss Allowable other years capital loss (253)

idnorth Northern deductions (255)

idaddded Additional deductions from net income (256)

idcapgex Capital gains exemptions (254)

imcapgex Modelled capital gains deduction (254)

imstddn Standard or medical+charitable allowed

imintdn Interest income deduction allowed

## 1.5.4 Calculation of Personal Exemptions/Tax Credits

## 1.5.4.1 Basic, Age and Married

impex All personal exemptions and deductions

imbte Basic personal tax credit

imatxc Age tax credit

immartxc Married tax credit claimed imaxm Age personal exemption

imexm Personal exemptions (Basic+Age) immarex Married exemption claimed

imdepni Dependant's net income

idothpe Other dependant exemptions (305)

#### 1.5.4.2 Disability

imdisate Disability tax credit imdisex Disability exemption

iddisslf Disability amount for self (316)

iddisoth Disability amount for dependants (318)

## 1.5.4.3 Dependants

imcemc Child's equivalent to married credit

imcdedsDependent children deductionsimctxcsDependent children tax creditsimcchcChild's non-refundable credit

imchclm Number of dependent children claimed

## 1.5.4.4 Payroll Tax Credits

imcppctc CPP contributions tax credit imuictc UIC contributions tax credit

#### 1.5.4.5 Pension

impendn Pension income deduction allowed

impentxc Pension income tax credit

## **1.5.4.6** Education

idtuitn Tuition fees (320) imtutxc Tuition tax credit

ideducm Eligible months of education allowance

imedtxc Education allowance tax credit

imeduc Education allowance for student (322)

## 1.5.4.7 Medical Expenses

idmedgro Medical expenses, gross (330)

immeda Medical expenses allowed (computed) immedatc Medical expenses allowed tax credit

#### 1.5.4.8 Gifts and Charitable Donations

idcharit Charitable donations (340)

idgifts Gifts to Canada/provinces/culture (342) imchara Allowable charitable donations and gifts

(calculated)

imchartc Charitable donations tax credit

#### 1.5.4.9 Transferred Deductions/Credits

imdedt Deductions transfered from spouse imstxcrt Tax credits transfered from spouse

imttxcrt Total tax credits transfered

imctxcrt Tax credits transferred from children imedtrf Education and tuition transfered to others imedrev Education and tuition transfered from others

#### 1.5.5 Calculation of Refund or Balace Owing

These variables are used to calculate federal tax payable. The roughly correspond to the items on Schedule 1 and Page 4 of the federal tax return.

#### 1.5.5.1 Calculation of Federal Tax

imfedtax Federal tax before tax credits

Algorithm Guide Page 15 Version 5.0 11/19/97 imtaxcr Total tax credits

imatxcrt Total tax credits applied

imbft Basic federal tax imftr Federal tax reduction

imftrt Federal tax reduction transferred from spouse

#### 1.5.5.2 Schedule 1 Taxes

imfdtxc Federal dividend tax credit idmincar Minimum tax carryover (504)

idfortx Foreign tax paid (507) idforinc Net foreign income (508) imfortxc Federal foreign tax credit (509)

idfdsft Foreign tax credit applied to surtax (511) idfsitc Additional investment tax credit (518)

#### 1.5.5.3 Other Non-refundable Tax Credits

idpolcon Federal political contributions (409)
imfptc Federal Political Contribution Tax Credit
iditc Federal investment tax credits (412)

idlabtxc Labour funds tax credit (414)

imoftca Other federal tax credits applied (416)

## 1.5.5.4 Federal Surtax and Repayment of Social Benefits

imfsur Federal surtax

imrepay Social Benefits Repayments

#### 1.5.5.5 Other Refundable Tax Credits

imete Child tax credit

idxii2 Part XII.2 tax credit (Trusts) (456) idfdfatc Forward averaging tax credit (478) imfortc Federal other refundable tax credits

#### 1.5.5.6 Minimum Tax

imamtdf Difference due to minimum tax

imamtfg Minimum tax flag

## 1.5.5.7 Federal Tax Payable

imtxf Federal income tax payable

imfiler Taxable filer status

#### 1.6 Provincial Income Taxes and Credits

Many provincial tax measures are common to several or all provinces, although the exact specifications may vary. The variables which are common to all provinces and may be zero in provinces for which they do not apply. Province specific variables are list

### 1.6.1 Shared Variables

Algorithm Guide Page 16 Version 5.0 11/19/97 idprvftc Provincial foreign tax credit (Form T2036)

idproptx Net property taxes paid (556) improptx Imputed property tax paid

imrentpd Imputed rent paid

idprvpol Provincial political contributions (565)

idrentpd Total rental payments (555) idstkded Stock option deduction (249) idvencap Venture capital tax credit (564)

idhomstu College res/resdnt homeowner assist (558)

imbpt Basic provincial tax

imnptc Non-refundable provincial tax credits impalltc All refundable provincial tax credits importc Other refundable provincial tax credits

impsur Provincial surtax

imptrProvincial tax reductionimphoteProvincial HOSP tax creditsimpptxteProvincial Property tax tax credit

impnit Provincial net income tax

impptc Provincial Political Contrib Tax Credit

impeht Provincial elderly health tax

impetc Provincial elderly health tax credit imptc Refundable provincial tax credits imtxp Provincial income tax payable

### 1.6.2 Quebec

imqalexp Quebec allowable employment expenses

imqaxm Quebec age personal exemption imqcapgt Quebec taxable capital gains

imqccea Quebec child care expenses allowed (dedn) imqcdeds Quebec dependent children deduction

imqchara Quebec allowable charitable donations(calc)

imqdedea Quebec employment allowance

imqdedfn Quebec all deductions from net income imqdedft Quebec deductions from total income imqdedt Quebec deductions transfered from spouse

imqdepni Quebec dependant's net income imqdisex Quebec disability exemption imqdtxc Quebec dividend tax credit

imqei Quebec eligible income for tax reduction imqexm Quebec personal exemptions (Basic+Age)

imqfs Quebec family situation (1-5) imqftr Quebec family tax reduction imqidivt Quebec taxable dividends

imginet Quebec net income

imqintdn Quebec interest income deduction allowed

imqitax Quebec taxable income

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impitot Quebec total income

imqmarexQuebec married exemption claimedimqmedaQuebec medical expenses allowedimqndcQuebec number of dependent childrenimqpendnQuebec pension income deduction allowedimqpexQuebec personal exemptions and deductions

imqptr Quebec property tax refund

imqrepay Quebec repayments

imgritc Quebec retirement income tax credit

imgstddn Quebec stand. /medical+charitable allowed

imqta Quebec tax abatement (total)
imqtaa Quebec tax abatement (applied)
imqtar Quebec tax abatement (refundable)

imqtca Quebec tax credits applied imqtct Quebec tax credits transferable

imptcts Quebec tax credits transferred from spouse

imqtottc Quebec total tax credits imqrepay Quebec repayments

imtfa Taxable family allowances

imqaarc Quebec Availability Allowance Refunded Tax

Credit

imqatc Quebec age tax credit imqbtc Quebec basic tax credit imqstr Quebec sales tax refund

imacceni Quebec net income for refundable cce credit

calculation

imqccetc Quebec refundable child care expenses Tax

Credit

imqcpptc Quebec CPP/QPP contributions tax credit

imqdctc Quebec dependent child tax credits

imgdistc Quebec disability tax credit

imqhsfc Quebec Health Services Fund Contributions imqhsftc Quebec Health Services Fund Cont.tax credit

imqittr Quebec income tested tax reduction imqlatc Quebec living alone tax credit imqmtc Quebec married tax credit

imquicte Quebec UI contributions tax credit

idnorth Northern deductions (255) idcapgex Capital gains exemptions (254)

#### 1.6.3 Ontario

idhosslf Hosp. contributions - self (598) idhosspo Hosp. contributions - spouse (599)

imonteht Ontario Employers Heath Tax (Self-employed)

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#### 1.6.4 Manitoba

idsheltr Manitoba shelter allowance (T1C-Man)

immanltc Manitoba learning tax credit

# 1.7 Commodity Taxes

The ct variables provide the expenditure detail found in the fx variables scaled to match the household's modelled income. Through these variables users can examine the detailed household expenditure levels which conform with the correct household income.

#### 1.7.1 Federal

ctfcid Federal custom import duties

ctfexd Federal excise duties ctfext Federal excise taxes

ctfgst Federal GST

ctfmfg Federal manufacturer's sales tax
ctfoen Federal other energy taxes
cttxfc Federal commodity taxes (total)
imtxfc Federal commodity taxes

#### 1.7.2 Provincial

ctprov Province for COMTAX calculations

ctpamu Provincial amusement tax ctpgas Provincial gasoline tax

ctplgl Provincial liquor gallonage taxes

ctpplq Provincial profits on liquor commissions

ctprst Provincial retail sales tax ctptob Provincial tobacco tax

cttxpc Provincial commodity taxes (total)

imtxpc Provincial commodity taxes

#### 1.7.3 Intermediate

ctnexp Household expenditure net of taxes

ctnes Household expenditure not elsewhere specified

ctdfexp Deflated expenditure (tax exclusive)

ctsave Household savings

ctothmon Household money from other sources ctishrh Shared income concept (FAMEX)

imishri Shared income concept (FAMEX & SPSD)

ctseqhv FAMEX record sequence number

ctlprop Local property taxes on owned dwellings

## 1.7.4 Individual Tax and Expenditure Arrays

Algorithm Guide Page 19 Version 5.0 11/19/97 The calculation of commodity taxes is based on family expenditures which have been grouped into 40 categories corresponding to the system of national accounts (SNA) personal expenditure categories. The SPSM has four separate arrays of 40 variables each. The array elements in each array always correspond to the SNA personal expenditure categories. The variables then contain gross and net family expenditures, and federal and provincial commodity taxes.

## 1.7.4.1 Gross Family Expenditures

fxio	I/O expenditure categories [array]
fxio0	Food and Non-alcoholic Beverages

fxio1 Alcoholic Beverages

fxio2 Tobacco

fxio3 Men's & Boy's Clothing

fxio4 Women's, Girl's and Infant's Clothing

fxio5 Footwear and Shoe Repair

fxio6 Gross Imputed Rent fxio7 Gross Paid Rent fxio8 Other Lodging fxio9 Electricity fxio10 Natural Gas fxio11 Other Fuels

fxio12 Furniture, Carpets and Floor Covering

fxio13 Durable Household Appliances

fxio14 Semi-durables fxio15 Non-durables

fxio16 Laundry and Dry Cleaning

fxio17 Domestic Services

fxio18 Other Household Services

fxio19 Medical Care fxio20 Hospital Care fxio21 Other Medical Care fxio22 Drugs and Sundries

fxio23 New and Used Automobiles fxio24 Auto Repairs and Parts fxio25 Gasoline, Oil and Grease fxio26 Other Auto Related Services

fxio27 Local and Inter-city Transportation fxio28 Telephone & Other Communications

fxio29 Rec...

fxio30 Books, Magazines and Stationary

fxio31 Recreational Services

fxio32 Education and Cultural Services fxio33 Jewellery, Watches and Repairs fxio34 Toilet Articles, Cosmetics, Etc.

fxio35 Personal Care fxio36 Expend.

C: 27 D 1D

fxio37 Personal Business

fxio38 Contributions to Non-profit Orgs.

Algorithm Guide Version 5.0 fxio39 Unused

## 1.7.4.2 Net Family Expenditures

ctnexp\_ Household expenditure net of taxes [array]

ctnexp0 Food and Non-alcoholic Beverages

ctnexp1 Alcoholic Beverages

ctnexp2 Tobacco

ctnexp3 Men's & Boy's Clothing

ctnexp4 Women's, Girl's and Infant's Clothing

ctnexp5 Footwear and Shoe Repair
ctnexp6 Gross Imputed Rent
ctnexp7 Gross Paid Rent
ctnexp8 Other Lodging
ctnexp9 Electricity
ctnexp10 Natural Gas
ctnexp11 Other Fuels

ctnexp12 Furniture, Carpets and Floor Covering

ctnexp13 Durable Household Appliances

ctnexp14 Semi-durables ctnexp15 Non-durables

ctnexp16 Laundry and Dry Cleaning

ctnexp17 Domestic Services

ctnexp18 Other Household Services

ctnexp19 Medical Care
ctnexp20 Hospital Care
ctnexp21 Other Medical Care
ctnexp22 Drugs and Sundries

ctnexp23 New and Used Automobiles ctnexp24 Auto Repairs and Parts ctnexp25 Gasoline, Oil and Grease ctnexp26 Other Auto Related Services

ctnexp27 Local and Inter-city Transportation ctnexp28 Telephone & Other Communications

ctnexp29 Rec.,

ctnexp30 Books, Magazines and Stationary

ctnexp31 Recreational Services

ctnexp32 Education and Cultural Services ctnexp33 Jewellery, Watches and Repairs ctnexp34 Toilet Articles, Cosmetics, Etc.

ctnexp35 Personal Care

ctnexp36 Expend.

ctnexp37 Personal Business

ctnexp38 Contributions to Non-profit Orgs.

ctnexp39 Unused

# 1.7.4.3 Federal Commodity Taxes

cttxfc\_ Federal commodity taxes [array]

cttxfc0 Food and Non-alcoholic Beverages

cttxfc1 Alcoholic Beverages

cttxfc2 Tobacco

cttxfc3 Men's & Boy's Clothing

cttxfc4 Women's, Girl's and Infant's Clothing

cttxfc5 Footwear and Shoe Repair cttxfc6 Gross Imputed Rent cttxfc7 Gross Paid Rent

cttxfc8 Other Lodging
cttxfc9 Electricity
cttxfc10 Natural Gas
cttxfc11 Other Fuels

cttxfc12 Furniture, Carpets and Floor Covering

cttxfc13 Durable Household Appliances

cttxfc14 Semi-durables cttxfc15 Non-durables

cttxfc16 Laundry and Dry Cleaning

cttxfc17 Domestic Services

cttxfc18 Other Household Services

cttxfc19 Medical Care
cttxfc20 Hospital Care
cttxfc21 Other Medical Care
cttxfc22 Drugs and Sundries

cttxfc23 New and Used Automobiles
cttxfc24 Auto Repairs and Parts
cttxfc25 Gasoline, Oil and Grease
cttxfc26 Other Auto Related Services

cttxfc27 Local and Inter-city Transportation cttxfc28 Telephone & Other Communications

cttxfc29 Rec.,

cttxfc30 Books, Magazines and Stationary

cttxfc31 Recreational Services

cttxfc32 Education and Cultural Services cttxfc33 Jewellery, Watches and Repairs cttxfc34 Toilet Articles, Cosmetics, Etc.

cttxfc35 Personal Care

cttxfc36 Expend.

cttxfc37 Personal Business

cttxfc38 Contributions to Non-profit Orgs.

cttxfc39 Unused

# 1.7.4.4 Provincial Commodity Taxes

cttxpc\_ Provincial commodity taxes [array] cttxpc0 Food and Non-alcoholic Beverages

cttxpc1 Alcoholic Beverages

cttxpc2 Tobacco

cttxpc3 Men's & Boy's Clothing

cttxpc4 Women's, Girl's and Infant's Clothing

cttxpc5 Footwear and Shoe Repair
cttxpc6 Gross Imputed Rent
cttxpc7 Gross Paid Rent
cttxpc8 Other Lodging
cttxpc9 Electricity
cttxpc10 Natural Gas
cttxpc11 Other Fuels

cttxpc12 Furniture, Carpets and Floor Covering

cttxpc13 Durable Household Appliances

cttxpc14 Semi-durables cttxpc15 Non-durables

cttxpc16 Laundry and Dry Cleaning

cttxpc17 Domestic Services

cttxpc18 Other Household Services

cttxpc19 Medical Care
cttxpc20 Hospital Care
cttxpc21 Other Medical Care
cttxpc22 Drugs and Sundries

cttxpc23 New and Used Automobiles cttxpc24 Auto Repairs and Parts cttxpc25 Gasoline, Oil and Grease cttxpc26 Other Auto Related Services

cttxpc27 Local and Inter-city Transportation cttxpc28 Telephone & Other Communications

cttxpc29 Rec.,

cttxpc30 Books, Magazines and Stationary

cttxpc31 Recreational Services

cttxpc32 Education and Cultural Services cttxpc33 Jewellery, Watches and Repairs cttxpc34 Toilet Articles, Cosmetics, Etc.

cttxpc35 Personal Care

cttxpc36 Expend.

cttxpc37 Personal Business

cttxpc38 Contributions to Non-profit Orgs.

cttxpc39 Unused

# 1.8 Family Expenditures

#### 1.8.1 Other FAMEX Variables

fxseqhv FAMEX record sequence number

fxclohhvFAMEX cloning factorfxrecomreal estate commissionsfxintplInterest on personal loans

Algorithm Guide Page 23 Version 5.0 11/19/97 fxipac life ins prems and annuity contributions

fxgvpen gvt pension plan contributions fxpvpen private pension plan contributions

fxcqp cpp - qpp contributions

fxuic UI contributions fxintax Income taxes fxprtax Property tax

fxtptax Transfer of Property taxes fxrfees Registration and license fees

fxrrspt Total RRSP contributions (FAMEX)

fxnes Not elsewhere stated

fxncal Net change in assets and liabilities fxfabd Account balancing difference

fxfomr Other money receipts fxmorti Mortgage interest paid fxhmkt Market value of home

fxhmort Mortgage value outstanding

fxpsave Positive savings fxnsave Negative savings fxsaldur Sale of durables

## 1.9 Summary (Memo) Variables

Memo items are variables that are calculated directly as sums and differences of other variables. They could just as easily be calculated by the user through the user-defined variable facility (see SPSD/M User's Guide). The user should check the definition of a memo item before using it, to ensure that it agrees with his or her own definition. This applies particularly to concepts such as total income or total taxes. Some people prefer to consider refundable tax credits as negative taxes, rather than as positive transfers, as SPSD/M does.

#### 1.9.1 Household Balance

Household balance variables summarize the cash flow relationship of individuals and families to government, from the individual's perspective. Disposable income represents money available to be spent, whereas consumable income is disposable income less commodity taxes embodied in consumption.

immemp All employment income

imdepni Dependant's net income

imminv Investment income

immmkt Market income

immoth Other income

immtran All transfer income

Algorithm Guide Page 24 Version 5.0 11/19/97 immtot Total income

immdisp Disposable income

immicons Consumable income

immtax All taxes

imnettr Net transfers to person

imfoth Federal other government income

imfothtr Federal other trans income and ref. credits

#### 1.9.2 Federal Balance

Federal Balance variables summarize the cash flow relationship of individuals and families to the federal government, from the federal government's perspective.

imftax Federal taxes

imftran Federal transfer income

imfedbal Federal taxes less transfers

#### 1.9.3 Provincial Balance

These variables summarize the cash flow relationship of individuals and families to the provincial government, from the provincial government's perspective.

impoth Provincial other government income

imptax Provincial taxes

imptran Provincial transfer income

imprvbal Provincial taxes less transfers

## 1.9.4 Other Reporting Variables

imiemp Wages and salaries

imiself Total self-employment income

imicqp CPP/QPP payable imfnewpg Federal new programs

imninc No income flag

imothrep Other federal repayments

#### 1.10 Miscellaneous Variables

Algorithm Guide Page 25 Version 5.0 11/19/97 These variables don't fit naturally into any of the preceding sections. They include a group of variables associated with the marginal tax rate facility (see SPSD/M User's Guide) and some flag variables which can be used to identify individual records which have been processed in certain ways in the course of database creation.

#### 1.10.1 Glass Box Variables

The structures and pointers described in this section will be of interest to Glass Box users and black Box users wishing to understand SPSM variable naming conventions or interested in reading the C Language source code. The variables in this section will be of interest only to Glass Box users.

#### 1.10.1.1 Structures

The SPSD/M uses a hierarchical household data structure to store information on all variables. Variable names allways begin with the name of the structure to which they belong. The data structure information is relevant to the glass box user because an appreciation of the nested structures is necessary in order to refer to the values of individual variables; such reference is, of course, an integral part of writing the code for new or modified tax/transfer programs. For a full description of SPSM structures see the Programmers Guide.

hd Housing characteristics data [struct]

hh Household structure

fx FAMEX data [struct]

ct Commodity tax variables [struct]

ctbase Base commodity tax variables [struct]

ef Economic family data [array]

cf Census family data [array]

nf Nuclear family data [array]

in Individual data [array]

id Individual SPSD variables [struct]

im Individual variant result variables [struct]

imbase Individual base result variables [struct]

ub UI benefit structure

ub1 UI claim #1 results [struct]

ub2 UI claim #2 results [struct]

uc UI claim structure

uc1 UI claim #1 data [struct]

Algorithm Guide Page 26 Version 5.0 11/19/97 uc2 UI claim #2 data [struct]

ic Individual model control variables [struct]

uv user variables [struct]

#### 1.10.1.2 **Pointers**

Pointer variables point to a particular area of memory, and especially to a specific data structure. The glass box user will usually have to use pointers to reference variable values and setting up loops. The SPSM provides several pointers to assist in code development. These are listed below. For a fuller description of SPSM pointers refer to the Programmer's Guide.

nfin First person in nuclear family [pointer]

nfinch First child in nuclear family [pointer]

nfineld Eldest person in nuclear family [pointer]

nfinspo Spouse of eldest [pointer]

cfin First person in census family [pointer]

cfinch First child in census family [pointer]

cfineld Eldest person in census family [pointer]

cfinspo Spouse of eldest [pointer]

efin First person in economic family [pointer]

idhh Person's household [pointer]

idef Person's economic family [pointer]

idcf Person's census family [pointer]

idnf Person's nuclear family [pointer]

idinspo Person's spouse [pointer]

#### 1.10.1.3 Variables

imiosa Other SA or guarantees imiotg Other taxable demogrants

idninco No income flag (SPSD variables)
icmaramt Amount of SPSD income adjustment

icmarine Income after adjustment

icmarold Saved old SPSD income before adjustment icninco Saved no income flag before adjustment

icrolled Individual already rolled up flag

icselect Individual selected flag

ictpflg Person will be changed (TP facility)

Algorithm Guide Page 27 Version 5.0 11/19/97 uvdummy dummy variable

#### 1.10.1.4 Other

imfill filler array for im [array]

#### 1.10.2 Database

#### 1.10.2.1 User Database Variables

The SPSD has room for additional variables to be written by the user in either Glass Box mode or by rebuilding a database using the build utility (See Tools Users Guide). In black box mode these variables are referenced by their sequence. For example the third extra variable would be called idext2.

idext Extra numbers [array]

## 1.10.2.2 Creation Flags

These flag variables indicate when an individual record has had its original SCF database value modified during the database creation process. Converted variables are so named because an individual is converted from a non-respondent to a respondant.

idieflag Cloned institutionalized elderly person

idsynthi Synthetic high income person

idcintim Converted interest income (imputed)

idccqp Converted CPP/CQP benefit

idcsa Converted social assistance

idcuib Converted UI benefit

#### 1.10.3 Random Numbers

idrand Random numbers [array]

#### 1.10.4 Sample and Unit Count

idcount Person count

persons

units

fxvrecsFAMEX recordsscfrecsSCF recordsspsdrecsSPSD recordshdnspsdSPSD records

hdclohh Number of SCF clones

hdnfxv FAMEX records hdnscf SCF records

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# 1.10.5 Marginal Tax Rate

immaramt Adjustment to income source

immartax Change in consumable income after adjustment

## 1.10.6 Low Income Analysis

efpovthr Economic family low income threshold impovinc Income for low income measurement

#### 1.10.7 SCF Publication Variables

A number of variables that are modeled in the SPSM are also reported in the SCF questionnaire. To allow users to re-construct the SCF publication totals, copies of these variables are provided. These variables are not used in any of the SPSM algorithms.

idscfctc Child tax credit

idscffa Family allowances

idscfftc Federal tax credit

idscfoas Old age security

idscfuib Unemployment insurance benefits

idcfpub SCF CF publication flag

idefpub SCF EF publication flag

idscfflg SCF high-income preservation flag

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## **DESCRIPTION**

This is an array each element of which is a structure holding information on each census family in the household. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix of are members of an element of this array. The number of elements containing valid data within this array is given by the variable hhncf, which is the number of census families contained in the current household.

**cfageeld** Age of eldest in census family

## **DESCRIPTION**

This class variable contains the age of the eldest person in the current census family. The maximum age is 99.

## **CROSS REFERENCE**

Function		Description
txnfld txfstc	(i) (i)	Compute provincial taxes for Newfoundland Compute federal sales tax credit
cfcat		Census family category

## **DESCRIPTION**

This census family variable is an alternative to the cftype variable for categorizing census families. Note that old children means children aged 18 or over. The presence of young children takes precedence over the presence of elderly in this classification.

**cfin** First person in census family [pointer]

## **DESCRIPTION**

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the first person in the current census family. Since persons in a census family are arranged sequentially in memory, cfin is commonly used to initialize a working pointer used to process each person of a census family in turn.

## **CROSS REFERENCE**

Function		Description
txqcalc ui txcalc sa cceopt	(i) (i) (i)	Calculate income tax (Quebec) Compute UI benefits Calculate federal income tax Compute social assistance or guarantees zero CCE for young kids if optimal
cfinch		First child in census family [pointer]

### DESCRIPTION

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the first child in the current census family. Since the children in a census family are arranged sequentially in memory, cfin is commonly used to initialize a working pointer used to process each child of a census family in turn. Note that children in census families need not be young. A census family child can be any age so long as he/she has never been married.

#### **CROSS REFERENCE**

Function		Description
txqcalc txccea txhstr txnfld	(i) (i) (i)	Calculate income tax (Quebec) Compute child care expense allowance Compute family-related deductions or credits Compute provincial taxes for Newfoundland

txqccea	(i)	Compute child care expense allowance (Quebec)
txqhstr	(i)	Compute family-related deductions or credits (Quebec)
txont	(i)	Compute provincial taxes for Ontario
txctc	(i)	Compute child tax credit
txfstc	(i)	Compute federal sales tax credit

**cfineld** Eldest person in census family [pointer]

## **DESCRIPTION**

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the eldest person in the current census family. The eldest person is used as a reference person for the census family.

## **CROSS REFERENCE**

Function	Description	
txqcalc txccea txhstr txcalc txnfld txqccea txqhstr txont txctc txfstc	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute family-related deductions or credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute family-related deductions or credits (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute child tax credit</li> <li>(i) Compute federal sales tax credit</li> </ul>	
cfinspo	Spouse of eldest [pointer]	

# **DESCRIPTION**

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the spouse of the eldest person in the current census family. If the eldest person has no spouse, this variable is NULL and should not be used. The variable cfspoflg can be used to determine if there is a spouse in the census family.

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## **CROSS REFERENCE**

Function	Description
txqcalc txccea txhstr txcalc txnfld txqccea txqhstr txont txctc txfstc	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute family-related deductions or credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute family-related deductions or credits (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute child tax credit</li> <li>(i) Compute federal sales tax credit</li> </ul>
cfnadult	Number of adults in census family

# **DESCRIPTION**

This class variable counts the number of persons aged 18 or over in the census family. Note that this can include census family 'children'.

**cfnchild** Number of children (including 18+)

# **DESCRIPTION**

This class variable counts the number of 'children' in the current census family. Note that it can include persons aged 18 or over so long as such a person has never married. Since census family children are arranged consecutively in memory, this variable is often used in conjunction with cfinch to process all 'children' in a census family.

## **CROSS REFERENCE**

Function	Description
txhstr	(i) Compute family-related deductions or credits
txnfld	(i) Compute provincial taxes for Newfoundland
txqhstr	(i) Compute family-related deductions or credits (Quebec)
txctc	(i) Compute child tax credit

txfstc (i) Compute federal sales tax credit

**cfnearn** Number of earners in census family

## **DESCRIPTION**

This class variable counts the number of earners in the census family. A person is considered an earner if he/she has employment or self-employment earnings equal or greater to the value specified in the EARNMIN parameter.

**cfneld** Number of elderly in census family

## **DESCRIPTION**

This class variable counts the number of persons aged 65 or over in the census family. Note that this can include census family 'children'.

**cfnkids** Number of children in census family

## **DESCRIPTION**

This class variable counts the number of persons aged under 18 in the current census family. Note that this number can include young unattached individuals or spouses.

## **CROSS REFERENCE**

Function	Description
txqcalc txccea txqccea txont txbc	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for British Columbia</li> </ul>
cfnpers	Number of persons in census family

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This class variable counts the total number of persons in the census family. It is often used in conjunction with the cfin pointer variable to process each person in the census family in turn.

## **CROSS REFERENCE**

Function	Description
txqcalc ui txcalc txbc sa cceopt	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(i) Compute UI benefits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute social assistance or guarantees</li> <li>(i) zero CCE for young kids if optimal</li> </ul>
cfsexeld	Sex of eldest in census family

## **DESCRIPTION**

This class variable gives the sex of the eldest person in the census family. The eldest person is used as a reference person in the census family.

**cfspoflg** Census family contains married couple

## **DESCRIPTION**

This class variable indicates whether the census family contains a married couple. If true, the pointer variable cfinspo will point to the in structure containing data on the spouse of the eldest person (the reference person) in the census family.

## **CROSS REFERENCE**

Function		Description
txqcalc	(i)	Calculate income tax (Quebec)

txccea	(i)	Compute child care expense allowance
txhstr	(i)	Compute family-related deductions or credits
txcalc	(i)	Calculate federal income tax
txnfld	(i)	Compute provincial taxes for Newfoundland
txns	(i)	Compute provincial taxes for Nova Scotia
txqccea	(i)	Compute child care expense allowance (Quebec)
txqhstr	(i)	Compute family-related deductions or credits (Quebec)
txont	(i)	Compute provincial taxes for Ontario
txctc	(i)	Compute child tax credit
txfstc	(i)	Compute federal sales tax credit
cceopt	(i)	zero CCE for young kids if optimal

**cftype** Census family type

#### DESCRIPTION

This class variable gives a general purpose way of classifying family units based on the number of adults, kids and elderly in the unit. Note that in the scheme given below, the presence of kids takes precedence over the presence of elderly for families with both kids and elderly. Kids are persons aged under 18, Adults are persons aged 18 or over (including elderly), and elderly are persons aged 65 or over.

**ct** Commodity tax variables [struct]

#### DESCRIPTION

This structure holds information on commodity taxes associated with the household. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix ct are members of this structure.

**ctbase** Base commodity tax variables [struct]

#### DESCRIPTION

This structure holds base result values for the ct variables. Its members correspond exactly to those of the ct structure. Internal facilities of SPSM copy information from the ct to the ctbase structure to implement a base/variant capability. Base results are referenced in the SPSM 'black box' facilities by prefacing the variable name with an underscore. Please see the SPSM User's Guide for more information on using the base/variant facility.

**ctdfexp** Deflated expenditure (tax exclusive)

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This variable has no current function and is reserved for future use.

ctfcid

Federal custom import duties

## **DESCRIPTION**

This analysis variable contains the value of federal custom import duties associated with the household's disposable income and consumption pattern. Custom import duties are levied on imported goods used for both manufacture and final consumption. They are ad-valorem based. This variable is only computed if the CTDFLAG parameter is set to 1.

## **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctfexd	Federal excise duties

### **DESCRIPTION**

This analysis variable contains the value of federal excise duties associated with the household's disposable income and consumption pattern. Under the Excise Act duties are levied on tobacco products and alcoholic beverages (other than wines) made in Canada. These commodities are under the control of the crown until these duties are paid. They typically take the form of specific quantity rates; they are not ad-valorem taxes. This variable is only computed if the CTDFLAG parameter is set to 1.

#### **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households

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This analysis variable contains the value of federal excise duties associated with the household's disposable income and consumption pattern. Some commodities are additionally taxed through provisions of the Excise Tax Act. Taxes under this heading include: Gasoline, Diesel, and Aviation fuel excise taxes; Tobacco and Alcohol Excise taxes; Air Transportation tax; Telecommunications tax; other excise taxes levied on heavy cars, air conditioners, jewelry, clocks, watches, lighters, playing cards etc. This variable is only computed if the CTDFLAG parameter is set to 1.

### **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctfgst	Federal GST

#### **DESCRIPTION**

This analysis variable contains the value of federal retail sales tax associated with the household's disposable income and consumption pattern. This variable (and its associated parameter CTFGST) have been provided to allow the simulation of a national sales tax. This variable is only computed if the CTDFLAG parameter is set to 1.

#### **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctfmfg	Federal manufacturer's sales tax

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This analysis variable contains the value of federal manufacturer's sales tax associated with the household's disposable income and consumption pattern. This ad-valorem tax is levied on all finished manufactured goods at the producer's sale price irrespective of whether wholesalers, retailers, or individual consumers are the purchasers. This variable is only computed if the CTDFLAG parameter is set to 1.

## **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctfoen	Federal other energy taxes

## **DESCRIPTION**

This analysis variable contains the value of federal other energy taxes associated with the household's disposable income and consumption pattern. These taxes which were brought in under the 1981 National Energy Program. They had significant revenues through the early 80's but by 1986 they have been phased out. They are: Natural Gas & Gas Liquids Excise Tax; Oil Export Charge; Canadian Ownership Special Charge; Petroleum Compensation Levy. This variable is only computed if the CTDFLAG parameter is set to 1.

## **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctishrh	Shared income concept (FAMEX)

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This analysis variable contains a value for income used to adjust ct variables associated with the FAMEX expenditure vector to the disposable income calculated by SPSM. Because the two income concepts are somewhat different, a common shared income concept is defined and calculated for both SPSM results and the FAMEX expenditure data associated with the household.

All of the ct variables (originally calculated based on the FAMEX data) are then scaled proportionately by the ratio of SPSM shared income to FAMEX shared income. Conceptually, shared income is equal to disposable income plus other money receipts plus dissavings plus proceeds from the sale of assets. Equivalently, shared income is total expenditures on goods and services (including commodity taxes) plus positive savings. The shared income concept corresponding to SPSM income is found at the individual level in the variable imishri.

#### **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctlprop	Local property taxes on owned dwellings

#### **DESCRIPTION**

This analysis variable contains the value of all property taxes paid by households on their principal residences, vacation homes, and secondary living quarters.

#### **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctnes	Household expenditure not elsewhere specified

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This household level variable contains the value of household expenditures necessary to complete the income-expenditure identity.

## **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctnexp	Household expenditure net of taxes

## **DESCRIPTION**

This household level variable contains all expenditure components net of their original commodity taxes after applying the tax removal parameter CTTXRM.

## **CROSS REFERENCE**

Function		Description
ctmod	(i)	Compute commodity taxes for individuals and households
ctnexp_		Household expenditure net of taxes [array]

## **DESCRIPTION**

This household level variable contains all expenditure components net of their original commodity taxes in each of the 40 household expenditure categories after applying the tax removal parameter CTTXRM.

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Function Description

ctmod (o) Compute commodity taxes for individuals and households

**ctothmon** Household money from other sources

#### **DESCRIPTION**

This household level variable contains the liquidation of assets the household has made in the year including the sales of durable goods. It also includes any lottery winnings or other financial windfall gains the household has made.

#### **CROSS REFERENCE**

Function Description

ctmod (i) Compute commodity taxes for individuals and households

ctpamu Provincial amusement tax

#### DESCRIPTION

This analysis variable contains the value of provincial amusement taxes associated with the household's disposable income and consumption pattern. This tax pertains to admissions to theatres, travelling amusements (i.e. circuses) and the like. It is not responsible for revenues collected on pari-mutuel betting activities. This variable is only computed if the CTDFLAG parameter is set to 1.

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Function Description

ctmod (io) Compute commodity taxes for individuals and households

**ctpgas** Provincial gasoline tax

#### **DESCRIPTION**

This analysis variable contains the value of provincial gasoline tax associated with the household's disposable income and consumption pattern. This tax is applied to gasoline and diesel fuel users independent of whether the use occurs in goods producing or final demand consumption. It is a specific rate tax. This variable is only computed if the CTDFLAG parameter is set to 1.

## **CROSS REFERENCE**

**Function** Description

ctmod (io) Compute commodity taxes for individuals and households

**ctplgl** Provincial liquor gallonage taxes

#### **DESCRIPTION**

This analysis variable contains the value of provincial liquor gallonage taxes associated with the household's disposable income and consumption pattern. The fee applies to domestic beer producers in only four of the provinces: British Columbia; Ontario; Quebec; and Newfoundland. This variable is only computed if the CTDFLAG parameter is set to 1.

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Function Description

ctmod (io) Compute commodity taxes for individuals and households

**ctpplq** Provincial profits on liquor commissions

#### DESCRIPTION

This analysis variable contains the value of provincial profits on liquor commissions associated with the household's disposable income and consumption pattern. These profits are defined as the value of gross sales less administrative and general expenses. The value of gross is, in part, a function of the markups over costs the provincial government applies. This variable is only computed if the CTDFLAG parameter is set to 1.

## **CROSS REFERENCE**

Function Description

ctmod (io) Compute commodity taxes for individuals and households

**ctprov** Province for COMTAX calculations

#### **DESCRIPTION**

In the course of creation of the SPSD, a single FAMEX record is associated with a number of SPSD household records through a categorical match process (see the *SPSD Database Creation Guide* for more information). Since the commodity tax calculations are performed in the first instance on the FAMEX expenditure data, significant efficiencies can be gained by re-using this information for each of the associated SPSD households. In some cases, however, due to limited sample size, the SPSD households associated with a single FAMEX record occur in different provinces, necessitating recalculation of the commodity tax result variables.

The ctprov variable records the province associated with the current calculated commodity tax variables, and only if this value differs from the province of the current SPSD household

Algorithm Guide Page 44 Version 5.0 11/19/97 is recalculation performed. As the discussion above makes clear, ctprov is an internal working variable, and should not be used for output or analysis purposes. Use the hdprov variable to perform tabulations or produce other output by province.

#### **CROSS REFERENCE**

Function	Description	
ctmod	(io) Compute commodity taxes for individuals and households	
ctprst	Provincial retail sales tax	

## **DESCRIPTION**

This analysis variable contains the value of provincial retail sales tax associated with the household's disposable income and consumption pattern. It is ad-valorem based. This variable is only computed if the CTDFLAG parameter is set to 1.

## **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctptob	Provincial tobacco tax

#### **DESCRIPTION**

This analysis variable contains the value of provincial tobacco tax associated with the household's disposable income and consumption pattern. It is a specific rate tax either by cigarette or gram of cut tobacco. This variable is only computed if the CTDFLAG parameter is set to 1.

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Function Description

ctmod (io) Compute commodity taxes for individuals and households

**ctsave** Household savings

#### **DESCRIPTION**

This household level variable includes the voluntary savings accrued over the year in addition to the annual contributions to government and trusteed pension plans. It also includes contributions to life insurance annuities and life insurance premiums.

## **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
ctseqhv	FAMEX record sequence number

#### DESCRIPTION

This analysis variable records the FAMEX record sequence number associated with the current calculated ct result variables. It is copied from fxseqhv when the ct result variables are computed, in order to minimize recalculation of commodity taxes for households having identical FAMEX expenditure vectors. See the discussion under ctprov for an expanded discussion.

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Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
cttxfc	Federal commodity taxes (total)

## **DESCRIPTION**

This analysis variable contains the total federal commodity taxes associated with the household's expenditure.

## **CROSS REFERENCE**

Function	Description
ctmod	(i) Compute commodity taxes for individuals and households
cttxfc_	Federal commodity taxes [array]

# **DESCRIPTION**

This array of analysis variables contains all federal commodity taxes associated with the consumption pattern in each of the 40 household expenditure categories.

## **CROSS REFERENCE**

Function	Description
ctmod	(o) Compute commodity taxes for individuals and households
cttxpc	Provincial commodity taxes (total)

This analysis variable contains the total federal provincial taxes associated with the household's expenditure.

## **CROSS REFERENCE**

Function	Description
ctmod	(i) Compute commodity taxes for individuals and households
cttxpc_	Provincial commodity taxes [array]

#### **DESCRIPTION**

This array of analysis variables contains all provincial commodity taxes associated with the consumption pattern in each of the 40 household expenditure categories.

#### **CROSS REFERENCE**

Function	Description
ctmod	(o) Compute commodity taxes for individuals and households
ef	Economic family data [array]

## **DESCRIPTION**

This is an array each element of which is a structure holding information on each economic family in the household. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix ef are members of an element of this array. The number of elements containing valid data within this array is given by the variable hhnef, which is the number of economic families contained in the current household.

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This class variable contains the age of the eldest person in the current economic family. The maximum age is 99.

efin

First person in economic family [pointer]

## **DESCRIPTION**

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the first person in the current economic family. Since persons in an economic family are arranged sequentially in memory, efin can be used to initialize a working pointer used to process each person of an economic family in turn.

#### CROSS REFERENCE

Function Description

memo2 (o) Compute consumable income, etc.

**efnadult** Number of adults in economic family

#### **DESCRIPTION**

This class variable counts the number of persons aged 18 or over in the economic family.

**efnearn** Number of earners in economic family

#### DESCRIPTION

This class variable counts the number of earners in the economic family. A person is considered an earner if he/she has employment or self-employment earnings equal or greater to the value specified in the EARNMIN parameter.

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This class variable counts the number of persons aged 65 or over in the economic family.

efnkids

Number of children in economic family

#### DESCRIPTION

This class variable counts the number of persons aged under 18 in the current economic family. Note that this number can include young unattached individuals or spouses.

efnpers

Number of persons in economic family

## **DESCRIPTION**

This class variable counts the total number of persons in the economic family. It can be used in conjunction with the efin pointer variable to process each person in the economic family in turn.

efpovthr

Economic family low income threshold

#### DESCRIPTION

efpovthr contains the appropriate value (i.e. corresponding to the number of persons and degree of urbanization) for the current economic family, as given by the PTF array parameter.

efsexeld

Sex of eldest in economic family

#### DESCRIPTION

This class variable gives the sex of the eldest person in the economic family. The eldest person is used as reference person in the economic family.

efspoflg

Economic family contains married couple

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This class variable indicates whether the economic family contains a married couple.

eftype

Economic family type

## **DESCRIPTION**

This class variable gives a general purpose way of classifying family units based on the number of adults, kids and elderly in the unit. Note that in the scheme given below, the presence of kids takes precedence over the presence of elderly for families with both kids and elderly. Kids are persons aged under 18, Adults are persons aged 18 or over (including elderly), and elderly are persons aged 65 or over.

fx

FAMEX data [struct]

#### DESCRIPTION

This structure holds information on expenditure patterns associated with the household. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix fx are members of this structure. Note that all of the fx variables are base year survey values, inclusive of commodity taxes.

fxclohhv

FAMEX cloning factor

## **DESCRIPTION**

This variable represents the total number of households that have identical values for all expenditure vector variables which were matched from a single FAMEX donor record during the expenditure vector stochastic match.

Source:

Derived during the Expenditure Vector Stochastic Match process.

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Function Description

fmfxopen (io) Routines for reading FAMEX (.fxv) file

**fxcqp** cpp - qpp contributions

## **DESCRIPTION**

CPP/QPP contributions made by households during the survey calendar year. In previous SPSD/M releases, this variable was incorporated in fxretpen: retirement pension contributions.

Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

## **CROSS REFERENCE**

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**fxfabd** Account balancing difference

## **DESCRIPTION**

This analysis variable contains FAMEX total receipts minus total disbursements. It represents the degree to which a household can reconcile its income with its expenditures and saving.

Source:

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**fxfomr** Other money receipts

## **DESCRIPTION**

This analysis variable is composed of money gifts from persons outside the household, inheritances, lump sum insurance settlements, and windfall gains.

#### Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

#### **CROSS REFERENCE**

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxgvpen	gvt pension plan contributions

#### DESCRIPTION

Government pension plan contributions made by households during the survey calendar year. In previous SPSD/M releases, this variable was incorporated in fxretpen: retirement pension contributions.

#### Source:

**Function** Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

ctmod (i) Compute commodity taxes for individuals and households

**fxhmkt** Market value of home

#### DESCRIPTION

This variable contains the market value of the family home.

## **CROSS REFERENCE**

**Function** Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**fxhmort** Mortgage value outstanding

## **DESCRIPTION**

This variable contains the amount outstanding on the first and second mortgages on the principal family residence.

## **CROSS REFERENCE**

**Function** Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**fxintax** Income taxes

Income taxes paid on income received during or prior to the survey calendar year, as well as gift and foreign taxes. This variable was previously named fxtaxf: income taxes paid.

#### Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

## **CROSS REFERENCE**

Function	Description	
fmfxopen	(o) Routines for reading FAMEX (.fxv) file	
fxintpl	Interest on personal loans	

#### **DESCRIPTION**

This analysis variable consists of interest paid on all personal loans.

Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

## CROSS REFERENCE

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxio	I/O expenditure categories [array]

## **DESCRIPTION**

This array of analysis variables contains, for each consumption category, household expenses on that category, inclusive of commodity taxes, in the base survey year. Note that no adjustment to the SPSM computed income occurs, as in the case for the \*ct\* variables. The

Algorithm Guide Page 55 Version 5.0 11/19/97 detailed constitution of each of the 40 catagories follows in the description of the individual components \*fxio0\* through \*fxio39\*. These categories, defined as aggregates of more detailed FAMEX variables, have designed to agree as closely as possible with the 40 Consumer Expenditure categories used in the System of National Accounts and the Input-Output tables.

## **CROSS REFERENCE**

Function	Description	
fmfxopen ctmod	<ul><li>(io) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>	
fxipac	life ins prems and annuity contributions	

## **DESCRIPTION**

This variable includes life insurance premiums and annuity contributions made by households during the survey calendar year.

## **CROSS REFERENCE**

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxmorti	Mortgage interest paid

## **DESCRIPTION**

This variable contains the amount of interest paid on all mortgages on the principle family residence in the survey calendar year.

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**fxncal** Net change in assets and liabilities

## **DESCRIPTION**

This analysis variable consists of total net change in assets less total net change in debts exclusive of RRSPs.

#### Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

#### **CROSS REFERENCE**

Function Description

fmfxopen (io) Routines for reading FAMEX (.fxv) file

**fxnes** Not elsewhere stated

## **DESCRIPTION**

This analysis variable includes expenditures on the following items:

- Commissions for Sale of Real Estate
- Annuity Contracts
- Mutual Aid and Benefit Society Payments
- Gifts to Persons Outside Canada

#### Source:

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

ctmod (i) Compute commodity taxes for individuals and households

**fxnsave** Negative savings

#### DESCRIPTION

This analysis variable is directly derived from fxncal. If fxncal is negative, indicating that some consumption was financed through dissaving, then fxnsave is set equal to the amount of dissaving. Thus fxnsave is always either zero (indicating no savings or else positive savings) or positive (indicating financing of consumption through dissaving).

#### **CROSS REFERENCE**

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxprtax	Property tax

## **DESCRIPTION**

Property taxes paid on the household's principle accommodation and/or owned vacation home. This variable was previously named fxptax: property taxes.

Source:

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxpsave	Positive savings

# **DESCRIPTION**

This analysis variable is directly derived from fxncal. If fxncal is positive, fxpsave is set equal to the amount of savings, otherwise fxpsave is set equal to zero.

## **CROSS REFERENCE**

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxpvpen	private pension plan contributions

## **DESCRIPTION**

Retirement or pension funds payments excluding RRSP's. This variable was previously incorporated in fxretpen retirement pension contributions.

#### Source:

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxrecom	real estate commissions

## **DESCRIPTION**

This variable indicates household expenditures on real estate commissions.

Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

## **CROSS REFERENCE**

Function	Description	
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>	
fxrfees	Registration and license fees	

# **DESCRIPTION**

Household expenditure on registration and license fees.

Source:

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

ctmod (i) Compute commodity taxes for individuals and households

**fxrrspt** Total RRSP contributions (FAMEX)

#### DESCRIPTION

Total RRSP contributions.

Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

## **CROSS REFERENCE**

Function Description

fmfxopen (io) Routines for reading FAMEX (.fxv) file

**fxsaldur** Sale of durables

## **DESCRIPTION**

It is possible for negative expenditure to occur in certain expenditure categories. This can result when the disposal of a durable commodity (such a motor home) exceeds purchases of the same commodity. To avoid introducing artifacts when performing commodity tax modelling, such negative expenditures are removed from the fx variable and recorded (as positive amounts) in the fxsaldur analysis variable.

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Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxseqhv	FAMEX record sequence number

# **DESCRIPTION**

This variable indicates the unique spending unit sequence number identifying a consecutive group of households which have been matched to a single FAMEX spending unit. It is used to merge the .spd and .fxv files during SPSM execution.

#### Source:

Calculated during SPSD Sub-sample Stratification Process.

## **CROSS REFERENCE**

Function	Description
fmfxopen ctmod	<ul><li>(o) Routines for reading FAMEX (.fxv) file</li><li>(i) Compute commodity taxes for individuals and households</li></ul>
fxtptax	Transfer of Property taxes

## **DESCRIPTION**

Household expenditure on transfer of property taxes(land transfer tax).

### Source:

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

ctmod (i) Compute commodity taxes for individuals and households

**fxuic** UI contributions

#### DESCRIPTION

Expenditures on unemployment insurance premiums.

Source:

FAMEX, Statistics Canada. Direct copy during Expenditure Vector Stochastic Match.

## **CROSS REFERENCE**

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**fxvrecs** FAMEX records

#### DESCRIPTION

This variable gives an unduplicated count of the number of FAMEX expenditure vector records represented by the current household. The variable which contains this characteristics is *hdnfxv*.

**hd** Housing characteristics data [struct]

#### DESCRIPTION

This structure holds information on housing characteristics and household level variables. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here

for 'glass box' users. All of the variables beginning with the prefix hd are members of this structure.

**hdageeld** Age of eldest in household

## **DESCRIPTION**

This class variable contains the age of the eldest person in the household. The maximum age is 99.

## **CROSS REFERENCE**

Function	Description	
oas gist cceopt	<ul><li>(i) Compute OAS for e</li><li>(i) Compute Provincia</li><li>(i) zero CCE for young</li></ul>	GIS top-ups for elderly
hdbdrms	Number of bedro	oms

#### **DESCRIPTION**

Includes all bedrooms which are used as bedrooms although the use may be occasional. There may be no bedrooms as in the case of bachelor apartments.

Source:

SCF/HFE, Statistics Canada.

## **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
hdclohh	Number of SCF clones

The number of duplicate copies of this household in the SPSD. The SCF demographic variables (but not necessarily the income variables) are identical for all of these copies. The reciprocal of the variable may be used to obtain the true number of observations underlying a cell of a cross-tabulation.

Source:

Derived during the SPSD Duplication process.

### **CROSS REFERENCE**

**Function** Description

fmspopen (o) Routines to read SPSD file (.spd)

**hdfrstfx** First household in FAMEX group flag

## **DESCRIPTION**

This class variable indicates when the first of the group of SPSD households associated with a given FAMEX expenditure vector record is being processed. Using the SPSM selection facility, this variable could be used to process each FAMEX record exactly once.

### **CROSS REFERENCE**

**Function** Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**hdlastfx** Last household in FAMEX group flag

#### DESCRIPTION

This class variable indicates when the last of the group of SPSD households associated with a given FAMEX expenditure vector record is being processed. Using the SPSM selection

Algorithm Guide Page 65 Version 5.0 11/19/97 facility, this variable could be used to process each FAMEX record exactly once.

#### CROSS REFERENCE

Function Description

fmfxopen (o) Routines for reading FAMEX (.fxv) file

**hdnadult** Number of adults in household

### **DESCRIPTION**

This class variable counts the number of persons aged 18 or over in the household.

## **CROSS REFERENCE**

**Function** Description

txqcalc (i) Calculate income tax (Quebec)

**hdnearn** Number of earners in household

## **DESCRIPTION**

This class variable counts the number of earners in the household. A person is considered an earner if he/she has employment or self-employment earnings equal or greater to the value specified in the EARNMIN parameter.

**hdneld** Number of elderly in household

#### **DESCRIPTION**

This class variable counts the number of persons aged 65 or over in the household.

**hdnfxv** FAMEX records

This analysis variable records the number of FAMEX records associated with the current household observation. This number is generally less than one, reflecting the fact that several SPSM households are associated with each FAMEX record. Unlike other SPSM analysis variables, hdnfxv is not automatically weighted when performing tabulations. This allows it to function correctly for its intended purpose: to give the number of observations (and hence an indication of statistical reliability) underlying each cell of some other tabulation.

**hdnkids** Number of children in household

#### DESCRIPTION

This class variable counts the number of persons aged under 18 in the household. Note that this number can include young unattached individuals or spouses.

#### **CROSS REFERENCE**

Function Description

cceopt (i) zero CCE for young kids if optimal

**hdnpers** Number of persons in household

## **DESCRIPTION**

This class variable counts the total number of persons in the household. It is often used in conjunction with the in pointer variable to process each person in the household in turn.

#### **CROSS REFERENCE**

**Function** Description

fmspopen (o) Routines to read SPSD file (.spd)

txqhstr (i) Compute family-related deductions or credits (Quebec)

**hdnscf** SCF records

#### DESCRIPTION

This analysis variable records the number of SCF records associated with the current observation. Depending on the roll-up context, this may count individuals, nuclear families, census families, economic families, or households. This number is generally less than one, reflecting the fact that several SPSM households are associated with each SCF record. Unlike other SPSM analysis variables, hdnscf is not automatically weighted when performing tabulations. This allows it to function correctly for its intended purpose: to give the number of observations (and hence an indication of statistical reliability) underlying each cell of some other tabulation.

hdnspsd SPSD records

#### DESCRIPTION

This analysis variable is used to tabulate the number of SPSD records. Depending on the roll-up context, this may count individuals, nuclear families, census families, economic families, or household observations. This number is always equal to one, but unlike other SPSM analysis variables, hdnspsd is not automatically weighted when performing tabulations. This allows it to function correctly for its intended purpose: to give the number of observations (and hence an indication of statistical reliability) underlying each cell of some other tabulation.

**hdprov** Province

#### DESCRIPTION

Province of residence. Note that the Yukon and the North-West Territories are not included in the SPSD.

Source:

SCF, SPSD randomization process.

In certain conditions, households are randomly relocated to another province based on the proportionate distribution of households by province in 1981. hdprov is the result of this randomization process. The conditions under which regional randomization takes place involve the risks of breaching confidentiality. These conditions include:

• 2+ Economic Families in the household,

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- 3+ Census Families in the household,
- 9 individuals in the household, and
- conditions involving the sex, income, and tax paid by household members.

Function	Description
fmfxopen adj ui fa txcalc txprov gist sa txctc ctmod	<ul> <li>(i) Routines for reading FAMEX (.fxv) file</li> <li>(io) Perform SPSD database adjustment</li> <li>(i) Compute UI benefits</li> <li>(i) Compute family allowance</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) Compute social assistance or guarantees</li> <li>(i) Compute child tax credit</li> <li>(i) Compute commodity taxes for individuals and households</li> </ul>
hdroom	Number of rooms

# **DESCRIPTION**

Total rooms in the dwelling. Includes all rooms in the dwelling which are suitable for living quarters, including rooms occupied by servants, lodgers and members of lodging families. Excludes rooms used solely for business purposes, clothing closets, bathrooms, pantries and halls.

Source:

SCF

## **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
hdseqhh	Household sequence number

Sequence number indicating the order of households.

Source:

SPSD systemics. Re-ordering of file sequence

#### CROSS REFERENCE

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

oas (i) Compute OAS for elderly

**hdsexeld** Sex of eldest in household

### **DESCRIPTION**

This class variable gives the sex of the eldest person in the household. The eldest person is used as reference person in the household.

hdspoflg Household contains married couple

#### **DESCRIPTION**

This class variable indicates whether the household contains a married couple.

**hdtenur** Tenure

#### DESCRIPTION

This item indicates whether or not there is one or more mortgages outstanding on the dwelling. This refers only to the dwellings occupied by the respondent at the time of the survey. In most cases this item refers to the dwelling and property. However, for farm households, the item refers to the dwelling only, and for condominium owners, the item refers to the dwelling and not the condominium complex.

Source: SCF

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

gist (i) Compute Provincial GIS top-ups for elderly

hdtpval Current value of adjustment (TP facility)

#### DESCRIPTION

This variable contains the value of the independent variable for the current household 'clone' generated by the turning point facility. It can be either an income amount, or an income scaling factor, depending on the value of the TPMETH parameter.

**hdtype** Household type

## **DESCRIPTION**

This class variable gives a general purpose way of classifying family units based on the number of adults, kids and elderly in the unit. Note that in the scheme given below, the presence of kids takes precedence over the presence of elderly for families with both kids and elderly. Kids are persons aged under 18, Adults are persons aged 18 or over (including elderly), and elderly are persons aged 65 or over.

**hdunits** Unit count

#### DESCRIPTION

This variable is not directly accessible to the user, but is documented here for completeness. It is used in the implementation of the 'units' variable, which is used to count up the number of family units. Its value is always 1, independent of the current roll-up level.

**hdurb** Size of urban area

Size of urban area. In certain conditions, households are randomly relocated to another urban class based on the proportionate distribution of households by size in 1981. hdurb is the result of this randomization process. The conditions under which regional randomization takes place involve the risks of breaching confidentiality. These conditions include:

- 2+ Economic Families in the household,
- 3+ Census Families in the household,
- 9 individuals in the household, and
- conditions involving the sex, income, and tax paid by household members.

A complementary randomization of province is described in hdprov.

#### Source:

SCF, Statistics Canada. SPSD randomization process and collapsing original SCF to 5 class levels.

#### CROSS REFERENCE

Function	Description
fmspopen ui	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute UI benefits</li></ul>
hdwgtfx	Sum of household weight for FAMEX group

#### DESCRIPTION

This analysis variable cumulates the household weights for all SPSD households that match a given FAMEX expenditure vector record. It can be used in conjunction with hdlastfx to produce a FAMEX expenditure file.

#### **CROSS REFERENCE**

Function	Description
fmfxopen	(o) Routines for reading FAMEX (.fxv) file

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The weights of all members of the same household are identical. Each weight provides a factor which will blow estimates up to the national level (i.e. on an individual, family, or household basis).

Source:

SPSD Weight Adjustment Process (Raking)

SCF survey base weights were adjusted using an integrated (or 'Lagrangian') weighting technique until weighted estimates of certain margins (population by age, sex, and province) agree with known control totals.

Note that the population represented is essentially that represented in the Labour Force Survey (i.e. excluding the Yukon, North-West Territories, inmates in institutions, Indians on reserves, and certain members of the armed forces) with the addition of the institutionalized elderly.

### **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**hdwgthhs** Sub-sample adjusted household weight

#### DESCRIPTION

This analysis variable is provided for the convenience of users of the SPSM SAS interface facility. If a SAS output file is produced with the hdwgthh variable included on a 5 percent sample run, tabulations produced by SAS using the result file will be too low by a factor of twenty, due to the fact that hdwgthh weights records correctly only if the entire SPSD file is processed. hdwgthhs adjusts hdwgthh by the reciprocal of the requested sample (given by the user in the SAMPLEREQ parameter) so that resulting tabulations will at least have the correct order of magnitude. Since hdwgthhs is equal to hdwgthh if SAMPLEREQ equals one, it is preferable to use the hdwgthhs as the weight variable in SAS output files, so that test runs will appear reasonable. Note that the results will not be identical to those produced using the SPSM cross tabulation facility for sub-sample runs, since the fractional part of hdwgthhs is represented with limited precision in the SAS result file.

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This structure holds information on all variables, both SPSD database and modelled, that pertain to an individual household. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix hh are members of this structure.

**hhncf** Number of census families in household

## **DESCRIPTION**

This class variable counts the number of census families contained in the household. It can be used (in the 'glass box' mode) in conjunction with the cf pointer array to process each census family in turn.

## **CROSS REFERENCE**

Function	Description	
txqcalc ui txccea txhstr txcalc txnfld txqccea txqhstr txont	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute family-related deductions or credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute family-related deductions or credits (Quebec)</li> <li>(i) Compute social assistance or quarantees</li> </ul>	
txctc txfstc cceopt	<ul> <li>(i) Compute social assistance or guarantees</li> <li>(i) Compute child tax credit</li> <li>(i) Compute federal sales tax credit</li> <li>(i) zero CCE for young kids if optimal</li> <li>Number of economic families in household</li> </ul>	

## **DESCRIPTION**

This class variable counts the number of economic families contained in the household. It

Algorithm Guide Version 5.0 can be used (in the 'glass box' mode) in conjunction with the ef pointer array to process each economic family in turn.

**hhnin** Number of individuals in household

# **DESCRIPTION**

This class variable counts the number of persons contained in the household. It can be used (in the 'glass box' mode) in conjunction with the in pointer array to process each person in turn.

# **CROSS REFERENCE**

Function		Description
fmspopen	(o)	Routines to read SPSD file (.spd)
adj .	(i)	Perform SPSD database adjustment
ui	(i)	Compute UI benefits
oas	(i)	Compute OAS for elderly
dem	(i)	Compute new taxable demogrants
txinet	(i)	Compute net income
txitax	(i)	Compute taxable income and individual credits
txhstr	(i)	Compute family-related deductions or credits
txnfld	(i)	Compute provincial taxes for Newfoundland
txpei	(i)	Compute provincial taxes for P.E.I.
txns	(i)	Compute provincial taxes for Nova Scotia
txnb	(i)	Compute provincial taxes for New Brunswick
txqinet	(i)	Compute net income (Quebec)
txqitax	(i)	Compute taxable income and individual credits (Quebec)
txqhstr	(i)	Compute family-related deductions or credits (Quebec)
txont	(i)	Compute provincial taxes for Ontario
txman	(i)	Compute provincial taxes for Manitoba
txsask	(i)	Compute provincial taxes for Saskatchewan
txalta	(i)	Compute provincial taxes for Alberta
txbc	(i)	Compute provincial taxes for British Columbia
gist	(i)	Compute Provincial GIS top-ups for elderly
memo1	(i)	Compute memo items for reporting
ctmod	(i)	Compute commodity taxes for individuals and households
memo2	(i)	Compute consumable income, etc.
cceopt	(i)	zero CCE for young kids if optimal

**hhnnf** Number of nuclear families in household

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This class variable counts the number of nuclear families contained in the household. It can be used (in the 'glass box' mode) in conjunction with the nf pointer array to process each nuclear family in turn.

## **CROSS REFERENCE**

Function	Description
fa txinet txnb txman txalta txbc gis senben txctc	<ul> <li>(i) Compute family allowance</li> <li>(i) Compute net income</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute child tax credit</li> </ul>
ic	Individual model control variables [struct]

### **DESCRIPTION**

This structure holds information used internally to implement various SPSM facilities. It is a sub-structure of the in structure. It is not directly accessible by the SPSM 'black box' variable facilities, but is nevertheless documented here for completeness. 'Glass box' users should not make use of these variables. All of the variables beginning with the prefix ic are members of this structure.

	Y CODOD:	1
icmaramt	Amount of SPSD income	adilistment
iciliai allic		adiasament

### **DESCRIPTION**

This variable is not directly accessible to the user, but is documented here for completeness. It is used in the implementation of the marginal tax rate facility.

	- 0 11
icmarinc	Income after adjustment

This variable is not directly accessible to the user, but is documented here for completeness. It is used in the implementation of the marginal tax rate facility.

icmarold

Saved old SPSD income before adjustment

#### DESCRIPTION

This variable is not directly accessible to the user, but is documented here for completeness. It is used in the implementation of the marginal tax rate facility.

icninco

Saved no income flag before adjustment

### **DESCRIPTION**

This variable is not directly accessible to the user, but is documented here for completeness. It is used in the implementation of the marginal tax rate facility.

icrolled

Individual already rolled up flag

#### **DESCRIPTION**

This variable is not directly accessible to the user, but is documented here for completeness. It is used to control the roll-up of analysis variables to various family levels.

icselect

Individual selected flag

## DESCRIPTION

This variable is not directly accessible to the user, but is documented here for completeness. It is used in the implementation of the SPSM record selection facility.

ictpflg

Person will be changed (TP facility)

This variable is used internally by the turning point facility to remember who (specified by TPSPEC) in the household is to have income values modified as independent variables.

id

Individual SPSD variables [struct]

#### **DESCRIPTION**

This structure holds SPSD information (as opposed to modelled result information) on a single individual. It is a sub-structure of the in structure. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix id are members of this structure.

idaddded

Additional deductions from net income (256)

#### DESCRIPTION

This variable represents additional deductions from net income. Corresponds to Line 256 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

### **CROSS REFERENCE**

Function	Description
fmspopen txitax	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute taxable income and individual credits</li></ul>
idage	Age

### **DESCRIPTION**

Note that 0 is a valid age assigned to infants. The maximum value allowed is 99. This is a class variable. A corresponding analysis variable exists, and is called idnage.

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#### Source:

For individuals 80 years or older, a new age is selected at random from a probability distribution derived from a census distribution of population by age, sex, and whether or not they were institutionalized.

## **CROSS REFERENCE**

Function	Description
fmspopen (i	) Routines to read SPSD file (.spd)
ui (i	,
fa (i	
oas (i	
txccea (i	
txitax (i	
txhstr (i	) Compute family-related deductions or credits
txnfld (i	) Compute provincial taxes for Newfoundland
txns (i	) Compute provincial taxes for Nova Scotia
txqccea (i	
txqitax (i	
txqhstr (i	
txont (i	
txsask (i	
txbc (i	
gis (i	
senben (i	
gist (i	
sa (i	
	) Compute child tax credit
	Compute federal sales tax credit
cceopt (i	) zero CCE for young kids if optimal
idalexp	Other allowable employment expenses (229)

# **DESCRIPTION**

This variable corresponds to Line 229, General Tax Guide. Certain special employment expenses not claimable elsewhere are allowed. These expenses can include:

- employee's expenses for travel, office and wages to assistants,
- commission sales employees may claim certain expenses paid to earn their income,
- transport employees may deduct the cost of meals and lodging while away from home, and
- power saw operators may claim expenses incurred in operating the power saw.

This is a special deduction from employment income and is not available to most employees.

### Source:

Imputed from the Green Book (Revenue Canada's Taxation Statistics publication) separately for High Income filers (Total income, excluding Capital Gains over \$110,000) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txinet txqinet	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute net income</li><li>(i) Compute net income (Quebec)</li></ul>
idcapgex	Capital gains exemptions (254)

#### DESCRIPTION

This variable represents the calculated amount a filer may be eligible to claim if there were reported capital gains. Corresponds to Line 254 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

## **CROSS REFERENCE**

Function	Description
fmspopen txitax txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idcarry	Carrying charges (221)

## **DESCRIPTION**

Interest on money borrowed for investment. Corresponds to Line 221, General Tax Guide.

#### Source:

Imputed separately from the Green Book for High Income filers (Total income, excluding

Capital Gains over \$110,000) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txinet txitax txqinet txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute net income</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idccet	Child care expenses associated with child

## **DESCRIPTION**

This variable is imputed to each child in the family, and represents the total child care expenses associated with the child. This variable is derived from Family Expenditure data.

#### Source:

Please see the SPSD Database Creation Guide for more information.

## **CROSS REFERENCE**

Function	Description
fmspopen txccea txqccea txont	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> </ul>
idccett	Child care expenses (Limit A, Form T778)

## **DESCRIPTION**

The child care expenses eligible for the child care expense deduction imputed from the Greenbook. This variable is associated with the child on whose behalf the expenditure was made.

Source:

This variable is imputed from the Green Book for all filers.

## **CROSS REFERENCE**

Function	Description
fmspopen txccea txqccea txont	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> </ul>
idccqp	Converted CPP/CQP benefit

## **DESCRIPTION**

This variable indicates if the individual had Canada Pension Plan (CPP) benefits or Québec Pension Plan (QPP) benefits which were converted from zero to a non-zero value using the rank order method of conversion. Note that the actual value of CPP/QPP (idicqp) reflects the choice made in the IMPCQPOPT adjustment parameter. Please see the SPSD Database Creation Guide for more information.

## **CROSS REFERENCE**

Function	Description
fmspopen	(i) Routines to read SPSD file (.spd)
idcf	Person's census family [pointer]

## **DESCRIPTION**

This pointer variable is not accessible using the SPSM 'black box' facilities, but is described here for the benefit of 'glass box' users. It points to the cf structure of the census family containing the individual, and can be used to easily reference information about the containing census family.

**Function** Description

txns (i) Compute provincial taxes for Nova Scotia txbc (i) Compute provincial taxes for British Columbia

**idcfpub** SCF CF publication flag

# **DESCRIPTION**

The activation of this flag allows for the replication of published SCF census family quantities for the base year.

Source:

SCF.

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idcfrh** Relationship to census family head

# **DESCRIPTION**

This variable gives the relationship of the individual to the 'head' of the containing census family.

Source:

SCF.

Function	Description
fmspopen ui txcalc txns txont txbc gist cceopt	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) zero CCE for young kids if optimal</li> </ul>
idcfseq	Census family sub-sequence number

## **DESCRIPTION**

Sequence number indicating a member of a given census family (census families within the same household or economic family are consecutive and members of the same family are consecutive).

Source:

SPSD Systemics. Re-ordering of file sequence

# **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
idcharit	Charitable donations (340)

#### **DESCRIPTION**

This represents the total gross amount of charitable donations which can be claimed to a maximum of 20% of net income. This includes donations made during the base year as well as donations made in the previous 5 years that were not previously claimed. The net amount corresponds to Line 340 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

## **CROSS REFERENCE**

Function	Description
fmspopen txitax txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idcintim	Converted interest income (imputed)

## **DESCRIPTION**

This variable indicates if the individual had interest income which was converted from a zero to a non-zero value using probability distributions. Note that the actual value of interest income (idiint) reflects the choice made in the IMPINTOPT adjustment parameter. Please see the SPSD Database Creation Guide for more information.

## **CROSS REFERENCE**

Function	Description	
fmspopen	(i) Routines to read SPSD file (.spd)	
idcloss	Allowable other years capital loss (253)	

## **DESCRIPTION**

Capital losses of other years are a deduction from net income. Corresponds to Line 253, General Tax Guide.

#### Source:

Imputed from the Green Book file separately for High Income filers (Total Income excluding Capital Gain over \$110,000) and all other filers.

Function	Description
fmspopen txitax txcalc txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idcluflg	Common-Law union flag

## **DESCRIPTION**

See source and codes below.

#### Source:

1991 Census of Canada, Statistics Canada. Randomly imputed based on age of the spouse, family income and number and age of children.

# **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
idcount	Person count

# **DESCRIPTION**

This variable is used to implement the 'persons' variable, and should not be modified by the user. It always contains the value 1.

## **DESCRIPTION**

This variable indicates if the individual had social assistance which was converted from zero

to a non-zero value using the rank order method of conversion. Note that the actual value of social assistance (idisa) reflects the choice made in the IMPSAOPT adjustment parameter. Please see the SPSD Database Creation Guide for more information.

#### **CROSS REFERENCE**

Function Description

fmspopen (i) Routines to read SPSD file (.spd)

**idcuib** Converted UI benefit

## **DESCRIPTION**

This variable indicates if the individual had a UI history which was created using the rank order method of conversion. A value of 1 indicates conversion occurred.

## **CROSS REFERENCE**

Function Description

fmspopen (io) Routines to read SPSD file (.spd)

**iddalimo** Alimony paid (220)

#### DESCRIPTION

This variable is the amount paid for alimony or maintenance allowance. Corresponds to Line 220 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

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Function	Description
fmspopen txinet txqinet txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
iddisab	Disability status

## **DESCRIPTION**

This flag indicates whether or not the individual is disabled. A more sophisticated imputation may be possible, but at the moment iddisab is set to 1 if the value of idnonlf indicates that the individual was permanently unable to work.

**iddisoth** Disability amount for dependants (318)

## **DESCRIPTION**

The unused portion of the disability amount claimed for dependants other than spouse. Corresponds to Line 318 of the General Tax Guide.

#### Source:

This variable is imputed from the Green Book for all filers.

Function	Description
fmspopen txitax txqitax txont txman	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> </ul>
iddisslf	Disability amount for self (316)

The disability amount one is allowed to claim for themselves. Corresponds to Line 316 of the General Tax Guide.

#### Source:

This variable is imputed from the Green Book for all filers.

# **CROSS REFERENCE**

Function	Description	
fmspopen txitax txqitax txman	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute provincial taxes for Manitoba</li> </ul>	
iddues	Union and professional dues (212)	

# **DESCRIPTION**

Union and professional dues claimed. This item corresponds to Line 212, General Tax Guide.

#### Source:

Imputed from the Green Book for all filers.

Function	Description	
fmspopen txinet txqinet	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute net income</li><li>(i) Compute net income (Quebec)</li></ul>	
idedlev	Educational level	

Highest level of education completed. Note that this information is collected only for household members who are 15 years of age or over.

Source:

SCF, Derived.

# **CROSS REFERENCE**

Function	Description	
fmspopen	(o) Routines to read SPSD file (.spd)	
ideducm	Eligible months of education allowance	

## **DESCRIPTION**

The months for which the education amount can be claimed. It is converted into dollars using the using the EDXPM adjustment parameter.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txitax txman	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute taxable income and individual credits</li><li>(i) Compute provincial taxes for Manitoba</li></ul>
idef	Person's economic family [pointer]

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This pointer variable is not accessible using the SPSM 'black box' facilities, but is described here for the benefit of 'glass box' users. It points to the ef structure of the economic family containing the individual, and can be used to easily reference information about the containing economic family.

## **CROSS REFERENCE**

Function Description

memo2 (o) Compute consumable income, etc.

**idefpub** SCF EF publication flag

#### **DESCRIPTION**

The activation of this flag allows for the replication of published SCF economic family quantities for the base year.

Source:

SCF.

#### **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idefrh** Relationship to economic family head

#### DESCRIPTION

This variable describes the relationship of each individual to the 'head' of the containing economic family.

Source:

SCF, Derived. Derived from SCF reported relationship to head.

## **CROSS REFERENCE**

**Function** Description

fmspopen (o) Routines to read SPSD file (.spd)

**idefseq** Economic family sub-sequence number

#### **DESCRIPTION**

Sequence number indicating a member of a given economic family (economic families within the same household are consecutive, and members of the same family are consecutive).

Source:

SPSD Systemics. Randomized re-ordering of file sequence

## **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idemplo** Employee home relocation loan dedn (248)

## **DESCRIPTION**

The deduction a filer is eligible to claim having received a taxable benefit on a home relocation loan. Corresponds to Line 248 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

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Function	Description
fmspopen txitax txcalc txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idestat	Educational status

## **DESCRIPTION**

This item indicates if the individual was enrolled as a part-time/full-time student the month before the Labour Force Survey. Whether a person is classified full-time or part-time depends on how he or she is classified by the educational institution. Note that information for this item is collected only for persons aged 15 or over.

Source:

**SCF** 

## **CROSS REFERENCE**

Function	Description
fmspopen txccea txhstr txqhstr	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute family-related deductions or credits</li> <li>(i) Compute family-related deductions or credits (Quebec)</li> </ul>
idexplor	Exploration and development expenses (224)

#### **DESCRIPTION**

The amount that can be claimed for expenses if investments were made in a petroleum, natural gas or mining venture. Corresponds to Line 224 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

txinet (i) Compute net income

txcalc (i) Calculate federal income tax

**idext** Extra numbers [array]

#### **DESCRIPTION**

This maximum 20 element array, part of an advaced feature of the SPSD/M, is used to hold additional variables or fields read from a user modified .spd file. If a user creates a .spd file using the BLDSPD[##] program, and the input ASCII file to that program has more fields than the original V##Y##.SPD file, then when SPSM is run the additional fields will be read in sequence into this array. In glass-box mode MACROS may be assigned to give more meaningful variable names.

#### CROSS REFERENCE

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

idfdfatc Forward averaging tax credit (478)

## **DESCRIPTION**

The credit amount that can be claimed when agreeing with the accumulated forward averaging amount withdrawal. Corresponds to Line 478 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

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Function	Description
fmspopen txcalc	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Calculate federal income tax</li></ul>
idfdsft	Foreign tax credit applied to surtax (511)

## **DESCRIPTION**

The amount of additional federal foreign tax credit claimed. Corresponds to Line 511, Schedule 1 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

## **CROSS REFERENCE**

Function	Description
fmspopen txcalc	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Calculate federal income tax</li></ul>
idforavg	Forward averaging amount withdrawal (237)

## **DESCRIPTION**

The amount which is added to net income when making a withdrawal from an accumulated averaging amount from a previous year. Corresponds to Line 237 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

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Function Description

fmspopen (o) Routines to read SPSD file (.spd)

txitax (i) Compute taxable income and individual credits

**idforinc** Net foreign income (508)

#### DESCRIPTION

The amount of net income received from a foreign country. Corresponds to Line 508, Schedule 1 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

## **CROSS REFERENCE**

fmspopen (o) Routines to read SPSD file (.spd) txcalc (i) Calculate federal income tax

**idfortx** Foreign tax paid (507)

#### **DESCRIPTION**

The amount of income tax or profits tax paid to a foreign country. Corresponds to Line 507, Schedule 1 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

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Function

Description

(o) Routines to read SPSD file (.spd)
txcalc

(i) Calculate federal income tax

idfsitc

Additional investment tax credit (518)

#### DESCRIPTION

The amount of additional federal foreign tax credit from Section II, Form T2038 used to reduce federal individual surtax. Corresponds to Line 518, Schedule 1 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

#### **CROSS REFERENCE**

Function	Description
fmspopen txcalc	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Calculate federal income tax</li></ul>
idgifts	Gifts to Canada/provinces/culture (342)

## **DESCRIPTION**

The amount claimed for donations made to Canada, a province, or a cultural institution. The amount may be claimed in part, with the unused portion carried forward for up to 5 years. Corresponds to Line 342 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

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Function

Description

(o) Routines to read SPSD file (.spd)
txitax
(i) Compute taxable income and individual credits
txqitax
(i) Compute taxable income and individual credits (Quebec)

idhh

Person's household [pointer]

#### DESCRIPTION

This pointer variable is not accessible using the SPSM 'black box' facilities, but is described here for the benefit of 'glass box' users. It points to the hh structure of the household containing the individual, and can be used to easily reference information about the containing household. Since there is only one containing household, this variable may seem redundant, but it allows one to retrieve household level information without accessing the global household structure. This might be necessary if, for example, a function was passed an individual pointer, but required household information as well.

**idhhrh** Relationship to head of household

#### DESCRIPTION

This item describes the relationship of each of the household members to head of the household:

Source:

SCF

Function		Description
fmspopen ctmod	(o) (i)	Routines to read SPSD file (.spd) Compute commodity taxes for individuals and households
idhomstu		College res/resdnt homeowner assist (558)

For Ontario residents, the amount of occupancy cost a resident can claim or a residence can be claimed for if part of an Ontario university, college and school of nursing. For Manitoba residents it is the Resident Homeowner Tax Assistance received. Corresponds to Line 558 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

#### **CROSS REFERENCE**

Function	Description	
fmspopen txont	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute provincial taxes for Ontario</li></ul>	
idhosslf	Hosp. contributions - self (598)	

## **DESCRIPTION**

The amount contributed by an individual used in the calculation of the Ontario and Nova Scotia Home Ownership Savings Plan Tax Credit. See Line 598, Form T1C (ONT) and Form T1C (N.S.) of the General Tax Guide.

#### Source:

This variable is imputed from the Green Book for all filers.

Function	Description
fmspopen txns txont	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for Ontario</li> </ul>
idhosspo	Hosp. contributions - spouse (599)

The amount contributed by a spouse used in the calculation of the Ontario and Nova Scotia Home Ownership Savings Plan Tax Credit. See Line 599, Form T1C (ONT) and (NS) of the General Tax Guide.

#### Source:

This variable is imputed from the Green Book for all filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txns txont	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for Ontario</li> </ul>
idicapg	Capital gains (actual)

## **DESCRIPTION**

This variable represents the actual capital gains or the actual capital losses (taxable capital gains or allowable capital losses multiplied by 1/CAPGIR). Corresponds to Line 127, General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
ui	(i) Compute UI benefits
txinet	(i) Compute net income
txcalc	(i) Calculate federal income tax
txqinet	(i) Compute net income (Quebec)
memo1	(i) Compute memo items for reporting

CPP/QPP benefits are as stated on the SCF for all individuals. Benefits include retirement pensions, survivors' benefits, and disability pensions but exclude lump sum death benefits and pensions from other sources.

Source:

**SCF** 

#### CROSS REFERENCE

Function	Description	
fmspopen txinet txqinet gis senben memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>	
ididiv	Dividend income (actual)	

#### DESCRIPTION

The SPSD Value of Dividends is composed of two slightly different concepts of Dividends. For persons with incomes below \$110,000 Dividends are as reported on the SCF which represent actual dividend payments from all types of domestic and foreign stocks. Excluded are cash dividends from life insurance policies and regular income from an estate or trust fund.

For persons with income over \$110,000 Dividends are imputed from the Green Book File which represent the actual amount of dividends received from taxable Canadian corporations including amounts designated as "Dividends from taxable Canadian corporations" which form part of the income allocated under an employee's profit sharing plan, or received from an estate or trust or a personal corporation.

#### Source:

For individuals with income under \$110,000 the original SCF value is used. Individuals with total income of \$110,000 or over, the value is imputed from the Green Book.

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<b>Function</b>	Description
fmspopen ui txinet txcalc txqinet txqitax gis senben memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
idieflag	Cloned institutionalized elderly person

## **DESCRIPTION**

This flag indicates if the current individual is a synthetic individual meant to represent an institutionalized elderly person. See the *SPSD Database Creation Guide* for more information.

## **CROSS REFERENCE**

Function	Description
fmspopen gist	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute Provincial GIS top-ups for elderly</li></ul>
idiemp	Wages & salaries

#### **DESCRIPTION**

For persons having total income below \$110,000 the value is as reported on the SCF which represents gross cash wages and salaries net of taxable allowances and benefits provided by employers such as free lodging, bursaries, travelling expenses of spouse and so forth. Also included are earnings of farm labourers, newspaper carriers, cleaning persons, baby-sitters and general handypersons as well as the commissions of sales persons on commission who

worked for only one company at a time if they did not pay for an office and staff of their own.

For persons with income above \$110,000 the value is as imputed from the Green Book data which represents wage and salary income together with taxable allowances, directors fees, gross commissions from employment, and other employment earnings such as adult training allowances, net research grants, tips and gratuities, and benefits received from income replacement insurance plans.

#### Source:

For individuals with income under \$110,000, the SCF value is used. For those with a total income of \$110,000 or more, the value is imputed from the Green Book.

## **CROSS REFERENCE**

Function	Description
fmspopen ui txinet txccea txnb txqinet txqccea txqitax txalta gis senben txctc memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute child tax credit</li> <li>(ii) Compute memo items for reporting</li> </ul>
idiint	Interest income (121)

### **DESCRIPTION**

The SCF value of interest is attributed to individuals with income below \$110,000 and represents all interest received on deposits in banks, credit unions, trust companies, etc., and on all kinds of Bonds and saving certificates. Interest received from outside Canada is also included.

The Green Book value for interest is imputed to individuals with income above \$110,000 and represents net rental income, Bond interest, bank interest, mortgage interest and trust income that is eligible investment income, dividends and the taxable portion of annuity income.

A comparison of the Green Book and the SCF indicates that some interest income is missing

Algorithm Guide Page 103 Version 5.0 11/19/97 on the SCF. A comparison of mean amounts between the two databases suggests that the discrepancy is the result of a certain amount of non-reporting of interest income on the SCF. Accordingly, for certain records, a non-zero interest income is imputed based on distributions derived from the Green Book. This imputed value replaces the 0 value recorded on the SCF. Records which have been converted in this way can be identified using the ideintim variable.

#### Source:

For individuals with income under \$110,000, the SCF value is used. For those with a total income of \$110,000 or more, the value is imputed from the Green Book.

## **CROSS REFERENCE**

Function	Description
fmspopen ui txinet txitax txqinet txqitax gis senben memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
idiloss	Business investment losses (217)

#### **DESCRIPTION**

Allowable business investment losses deduction for debts of Canadian-controlled private corporations and allowable capital losses arising from the termination of an indexed security investment plan (ISIP). Corresponds to Lines 217, General Tax Guide.

#### Source:

Imputed from the Green Book separately for High Income filers and all other filers.

Function	Description
fmspopen txinet txqinet	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute net income</li><li>(i) Compute net income (Quebec)</li></ul>

txqitax (i) Compute taxable income and individual credits (Quebec)

**idimmi** Years since immigration

## **DESCRIPTION**

Note that immigrants who arrived before 1946 have, to avoid distorting the OAS algorithm, been assigned a value of 40 for idimmi. A value of 99 has been assigned for Canadian-born individuals.

#### Source:

SPSD randomization process. The number of years since immigration is randomly blurred by shifting the reported year +1, -1, or 0 years.

## **CROSS REFERENCE**

Function	Description
fmspopen oas	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute OAS for elderly</li></ul>
idind	Industry

## **DESCRIPTION**

This item shows the industry in which the individual was working at the time of the survey or at their most recent job within the last five years if they are not currently employed.

#### Source:

SCF. Recoded from SCF original.

## **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
idinogv	Other government income (non-taxable)

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This item gives the amount of other government income from non-taxable sources and includes income from:

- Veteran's Pensions
- Pensions to Widows and Dependants of Veterans
- Workmen's Compensation, and
- Civilian War Allowances

#### Source:

SCF. Derived by subtracting SCF value for Taxable Other Government Income (iditogv) from all other government income.

#### **CROSS REFERENCE**

Function	Description
fmspopen memo1	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute memo items for reporting</li></ul>
idinoth	Other money income (non-taxable)

#### **DESCRIPTION**

The SCF provides an item for Other Money Income which includes:

- alimony
- income from abroad (if not already reported)
- money for children kept for Children's Aid
- payments from an income maintenance insurance plan or as a guaranteed annual wage plan, etc.
- royalties on books, oil wells, etc.

This item includes all the non-taxable components of Other Money Income. For a list of the taxable items see iditoth.

#### Source:

SCF. Other Money Income minus Taxable Other Money Income.

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Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

memo1 (i) Compute memo items for reporting

**idinseq** Individual sub-sequence number

#### **DESCRIPTION**

Sequence number indicating the order of an individual (members same household, or economic and census family are consecutive).

Source:

SPSD Systemics. Re-ordering of file sequence

#### **CROSS REFERENCE**

**Function** Description

fmspopen (o) Routines to read SPSD file (.spd)

**idinspo** Person's spouse [pointer]

#### DESCRIPTION

This pointer variable is not accessible using the SPSM 'black box' facilities but is documented here for the convenience of the 'glass box' user. It points to the in structure which holds information on the individual's spouse. If the individual has no spouse, this variable is NULL, and should not be used. The inspoflg variable can be used to determine if the individual has a spouse. Note that this variable can only be used to reference spouses found within the same household. SPSD contains no linkage between divorced spouses in different households.

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Function	Description
ui txns txont txman txbc gist cceopt	<ul> <li>(i) Compute UI benefits</li> <li>(io) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) zero CCE for young kids if optimal</li> </ul>
idioinv	Other investment income with net rental

#### **DESCRIPTION**

The SCF value of Other Investment Income is attributed to individuals with income below \$110,000 and represents Net Rents from real estate including rents from leased farmland, interest from loans and mortgages, regular income from an estate or trust fund, and cash dividends received from life insurance policies.

The Green Book value of Other Investment Income is imputed to individuals with total incomes of \$110,000 and over and represents mortgage interest and income from trusts that is ineligible for the interest income deduction, other Canadian investment income such as royalties except for any portion segregated as "Dividends from taxable Canadian corporations", and foreign investment income.

#### Source:

For individuals with total income under \$110,000, the SCF value is used. For individuals with a total income (excluding Capital Gains) of \$110,000 or over the value is imputed from the Green Book.

Function	Description
fmspopen ui txinet txqinet gis	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> </ul>

senben	(i)	Compute Seniors Benefit for elderly
memo1	(i)	Compute memo items for reporting

**idipens** Pension income (115)

#### **DESCRIPTION**

This item includes:

- pensions paid to widows or other relatives of deceased pensioners,
- pensions of retired civil servants and armed forces personnel and R.C.M.P. officers,
- annuity payments received from the Canadian government annuities fund, an insurance company, etc.,
- allowances paid at the time of retirement, where no pension plan is in effect,
- pensions received from RRSPs in the form of a life annuity, a registered retirement investment fund, a fixed term annuity or an income-averaging annuity contract.

Source:

SCF.

# **CROSS REFERENCE**

Function	Description
fmspopen ui txinet txitax txqinet txqitax gis senben gist memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
idiroom	Net income from roomers and boarders (126)

#### DESCRIPTION

This variable is from the SCF and represents gross income from roomers and boarders excluding payments received from relatives.

Source:

SCF.

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Function	Description
fmspopen ui txinet txqinet gis senben memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
idisa	Social assistance income

#### **DESCRIPTION**

This variable corresponds to Social Assistance as reported on the SCF. The reported or converted value is used for all Individuals with the exception of modelled GIS supplement recipients whose reported value for social assistance is replaced with the modeled value of the GIS supplement (imigist). This may cause underestimation for those elderly who had income from more than one provincial supplement program.

The value of this variable depends on the setting of the IMPSAOPT parameter.

Source:

SCF.

# **CROSS REFERENCE**

Function	Description
fmspopen sa	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute social assistance or guarantees</li></ul>
idisefm	Self-employed income - farming

# **DESCRIPTION**

The SPSD Value of Net Income From Farm Self-Employment is composed of Gross Income

minus costs and expenses. Items of a capital nature (e.g., new buildings) are excluded form expenses. Also included in this item are government farm supplementary payments.

#### Source:

For persons with income below \$110,000 the value is as reported on the SCF and for persons with income of \$110,000 and over, the value is imputed from the Green Book file.

#### **CROSS REFERENCE**

Function	Description
fmspopen ui txinet txccea txnb txqinet txqccea txont txalta gis senben txctc memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute child care expense allowance (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute child tax credit</li> <li>(ii) Compute memo items for reporting</li> </ul>
idisenf	Self-employed income - non-farming

# **DESCRIPTION**

The SPSD Value of Net Income From Non-Farm Self-Employment is composed of Gross Income (business income, professional income, commission income, fishing income) minus costs and expenses.

#### Source:

For Persons with income below \$110,000 the value is as reported on the SCF and for persons with income of \$110,000 and over, the value is imputed from the Green Book file.

Function	Description
fmspopen ui	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute UI benefits</li></ul>

txinet	(i)	Compute net income
txccea	(i)	Compute child care expense allowance
txnb	(i)	Compute provincial taxes for New Brunswick
txqinet	(i)	Compute net income (Quebec)
txqccea	(i)	Compute child care expense allowance (Quebec)
txont	(i)	Compute provincial taxes for Ontario
txalta	(i)	Compute provincial taxes for Alberta
gis	(i)	Compute GIS/SPA for elderly
senben	(i)	Compute Seniors Benefit for elderly
txctc	(i)	Compute child tax credit
memo1	(i)	Compute memo items for reporting

# **iditc** Federal investment tax credits (412)

# **DESCRIPTION**

The Federal Investment Tax Credit (also referred to as the Business Investment Tax Credit) corresponds to Line 412, General Tax Guide. This is a tax credit for the purchase of new buildings, machinery or equipment to be used in Canada for qualifying activities such as farming, fishing, logging or construction.

#### Source:

Imputed from the Green Book for all filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txcalc	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Calculate federal income tax</li></ul>
iditogv	Other government income (taxable)

# **DESCRIPTION**

This item gives the amount of taxable other government income and includes:

- Canada Manpower training allowances
- Provincial Incentive Program
- Canada Corps of Commissionaires
- Adult Training Allowances, and
- Home Insulation Program.

#### Source:

Function	Description
fmspopen txinet txqinet gis senben gist memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
iditoth	Other non-government income (taxable)

# **DESCRIPTION**

The SCF value of Other Money Income is attributed to individuals with income below \$110,000 and represents taxable items not reported elsewhere in the SCF questionnaire such as:

- non-refundable scholarships,
- research grants less expenses, research assistantships,
- royalties on books, oil wells etc.,
- strike pay or sick pay benefits from unions,
- alimony,
- group insurance disability payments,
- company profit sharing plan or savings plan,
- pensions from abroad,
- oil lease,
- credit union share,
- wage loss replacement benefit,
- IBEW unions pension,
- children's maintenance payments,
- Social Security,
- sale of purebred dogs,
- medical equalization payments,
- indemnity payments,
- past service gratuities.

For filers with income over \$110,000 the SCF value is replaced by a value imputed from the Green Book. This represents other income as defined by Line 130 in the General Tax Guide:

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- alimony received,
- RRSP payments,
- RHOSP withdrawals,
- scholarships, fellowships and bursaries,
- registered education savings plan payments,
- home insulation or energy conversion grants.

#### Source:

For Persons with income below \$110,000 the value is as reported on the SCF and for persons with income of \$110,000 and over, the value is imputed from the Green Book file.

# **CROSS REFERENCE**

Function	Description
fmspopen ui txinet txqinet gis senben memo1	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
idlabtxc	Labour funds tax credit (414)

# **DESCRIPTION**

The credit amount which can be claimed if a filer acquired an approved share of a labour-sponsored venture capital corporation during the year. See Line 414 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

Function	Description
fmspopen txcalc	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Calculate federal income tax</li></ul>

See codes below. Note that idlfst refers to the week in which the SCF survey was administered. This is a week in April in the year following the calendar year corresponding to the SCF income data.

Source:

SCF.

# **CROSS REFERENCE**

Function	Description
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fmspopen (o) Routines to read SPSD file (.spd)

**idlyfp** Last year full/Part time

# **DESCRIPTION**

This LFS variable indicates if the weeks worked in the last year were primarily full-time or part-time.

#### Source:

SCF. This item tells whether or not the individual worked in the previous year and whether the work was mostly full-time or part-time in terms of weekly hours. Full-time work is defined as 30 or more hours per week.

#### **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
idlystr	Last year stretches unemployed

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This item indicates the actual number of continuous stretches during which this individual was without work and looking for work in the previous year.

Source:

SCF.

#### **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idlyun** Weeks unemployed

#### **DESCRIPTION**

This item gives the number of weeks the individual was unemployed in the previous year. Only weeks in which no work was done, or a person is on temporary layoff are included. Weeks in which a person had a job, but was not at work due to holidays or illness are not included. Also excluded are weeks in which full-time students looked for work.

Source:

SCF.

#### **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

idlyww Weeks worked

#### **DESCRIPTION**

This item indicates the actual sum of weeks worked in the previous year. Included as weeks

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#### worked are:

- the number of weeks in which the person did any work
- the number of weeks the person had a job, but was absent with pay (e.g., for job-related training)
- the number of weeks the person had a job but was not at work due to holidays, vacation, illness, maternity leave, strike or lock-out
- the number of weeks the person was self-employed.

These are not necessarily the complete weeks which the individual was paid.

Source:

SCF.

# **CROSS REFERENCE**

Function	Description	
fmspopen txinet	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute net income</li></ul>	
idmarst	Marital status	

# **DESCRIPTION**

See codes below.

Source:

SCF.

Function	Description
fmspopen gis senben gist	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> </ul>
idmedgro	Medical expenses, gross (330)

The gross eligible medical expenses for the medical expenses tax credit. Corresponds to Line 330 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txitax txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idmincar	Minimum tax carryover (504)

# **DESCRIPTION**

The deduction of minimum tax from taxes payable which can be claimed if minimum tax was paid in the last six years. Corresponds to Line 504, Schedule 1, General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function		Description
fmspopen txcalc	٠,	Routines to read SPSD file (.spd) Calculate federal income tax
idmovexp		Imputed moving expenses (219)

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The allowed deduction of moving expenses from income earned at the new work location. Corresponds to Line 219 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function	Description	
fmspopen txinet txqinet	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute net income</li><li>(i) Compute net income (Quebec)</li></ul>	
idnage	Age	

# **DESCRIPTION**

This variable is a direct copy of idage, but is an analysis variable rather than a class variable. This means that idnage will be rolled up to the current level of analysis and cumulated within groups when cross-tabulations are performed. It is useful for performing such tasks as computing mean age of persons in families, or mean ages of individuals in socio-economic groups.

Source:

SCF.

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
idnclos	Allowable other years non-capital loss (252)

Non-capital losses of other years. Corresponds to Line 252, General Tax Guide. Includes Allowable Business Investment Loss and Indexed Security Investment Plan (ISIP) Allowable Capital Loss.

# Source:

Imputed from the Green Book separately for High Income Filers and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txitax txcalc txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idnf	Person's nuclear family [pointer]

# **DESCRIPTION**

This pointer variable is not accessible using the SPSM 'black box' facilities, but is described here for the benefit of 'glass box' users. It points to the nf structure of the nuclear family containing the individual, and can be used to easily reference information about the containing nuclear family.

Function		Description
txns txont txbc	(i) (i) (i)	Compute provincial taxes for Nova Scotia Compute provincial taxes for Ontario Compute provincial taxes for British Columbia
idninco		No income flag (SPSD variables)

This class variable is used internally in the SPSM to record if the individual had any income on the SPSD database. It is used to initialize the idninc variable when appropriate. Its value should not be used or set by the user.

#### **CROSS REFERENCE**

Function	Description	
fmspopen adj ui cceopt	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(o) Perform SPSD database adjustment</li> <li>(i) Compute UI benefits</li> <li>(i) zero CCE for young kids if optimal</li> </ul>	
idnonlf	Major non-LF activity	

# **DESCRIPTION**

This item indicates what this person did mostly when neither working nor looking for work.

Source:

SCF.

# **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
idnorth	Northern deductions (255)

# **DESCRIPTION**

The allowed deductions for residing in a prescribed, remote location in Canada for at least six continuous months and specific travelling expenses which are included in employment income as a taxable benefit. Corresponds to Line 255 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txitax txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idocc	Occupation

# **DESCRIPTION**

This item shows the occupation in which the individual was working at the time of the survey or at their most recent job within the last five years if they are not currently employed.

#### Source:

SCF. Recoded reported occupation.

#### **CROSS REFERENCE**

Function	Description	
fmspopen	(o) Routines to read SPSD file (.spd)	
idothded	Other deductions from total income (232)	

# **DESCRIPTION**

Other allowed deductions from total income as follows: repayment of income amounts, refund interest, unemployment insurance benefits repayments, RHOSP late occupancy, legal and accounting fees, capital cost allowance on Canadian motion picture films and videotapes, and depletion allowances. Corresponds to Line 232 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000

Algorithm Guide Page 122 Version 5.0 11/19/97 in total income excluding Capital Gains) and all other filers.

#### **CROSS REFERENCE**

Function	Description
fmspopen txinet txcalc txqinet	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute net income</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute net income (Quebec)</li> </ul>
idothpe	Other dependant exemptions (305)

# **DESCRIPTION**

This item is the total allowed exemptions for other dependants resident in Canada. Other dependants include parents, grandparents, brothers, sisters (including in-laws), aunts and uncles (including in-laws).

#### Source:

Schedule 6, General Tax Guide. Imputed from the Green Book for all filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txitax	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute taxable income and individual credits</li></ul>
idpartlo	Limited partnership losses (251)

# **DESCRIPTION**

Allowed deduction for limited partnership losses not previously claimed. Corresponds to Line 251 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

txitax (i) Compute taxable income and individual credits

txcalc (i) Calculate federal income tax

**idpolcon** Federal political contributions (409)

#### **DESCRIPTION**

The eligible amount contributed to a registered federal political party or candidate. Corresponds to Line 409 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

#### CROSS REFERENCE

Function	Description
fmspopen txcalc	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Calculate federal income tax</li></ul>
idproptx	Net property taxes paid (556)

# **DESCRIPTION**

The amount of net property tax paid in the base year as corresponds to Line 556 of the T1C, General Tax Guide.

#### Source:

Note that this entry is non-zero only if the filer filled in this portion of the form, i.e. if they were eligible for a provincial property tax credit.

Function	Description	
fmspopen	(o) Routines to read SPSD file (.spd)	
idprvftc	Provincial foreign tax credit (Form T2036)	

# **DESCRIPTION**

The eligible amount of provincial foreign tax credit as calculated on Form T2036 and reported in T1C of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txnfld txpei txns txnb txont txman txsask txalta	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute provincial taxes for P.E.I.</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Saskatchewan</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(ii) Compute provincial taxes for Rritich Columbia</li> </ul>
txbc	(i) Compute provincial taxes for British Columbia
idprvpol	Provincial political contributions (565)

# **DESCRIPTION**

The eligible amount contributed to a provincial political party or candidate. Corresponds to Line 565 of the T1C,General Tax Guide.

Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txnfld txpei txns txnb txont txman txalta txbc	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute provincial taxes for P.E.I.</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute provincial taxes for British Columbia</li> </ul>
idrand	Random numbers [array]

#### DESCRIPTION

These analysis variables are random numbers drawn independently from the uniform distribution between 0.0 and 1.0 inclusive. Up to twenty such random numbers, (named idrand0 through idrand19) are available for use, depending on the number of random streams requested through the SEED control parameter. One of these random number variables should always be used for simulating random take-up rates or other similar events since these variables are always computed under all circumstances. In particular, they are computed independently of any record selection. Because of this, each record will always have the same set of random numbers, resulting in consistent simulation results at the individual record level independent of any record selection (using the SELSPEC parameter) that may be occurring.

Function		Description
ui	(i)	Compute UI benefits
fa	(i)	Compute family allowance
gis	(i)	Compute GIS/SPA for elderly
txctc	(i)	Compute child tax credit

The total amount of rental payments made during the year. Corresponds to Line 555, T1C of the General Tax Guide.

#### Source:

Note that this entry is non-zero only if the filer filled in this portion of the form, i.e. if they were eligible for a provincial property tax credit.

#### **CROSS REFERENCE**

fmspopen (o) Routines to read SPSD file (.spd)

idrklyun Raking foundation: weeks unemployed

# **DESCRIPTION**

Number of weeks unemployed adjusted such that the average proportion of the year unemployed agrees with the labour force mean annual unemployment to population ratio. In effect, this produces a smoothed function of weeks unemployed.

#### Source:

**SPSD Systemics** 

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idrklyww** Raking foundation: weeks worked

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Number of weeks worked adjusted such that the average proportion of the year worked agrees with the labour force mean annual employment to population ratio. In effect, this produces a smoothed function of weeks worked.

Source:

**SPSD Systemics** 

# **CROSS REFERENCE**

Function	Description	
fmspopen	(o) Routines to read SPSD file (.spd)	
idrpp	Registered pension plan contributions (207)	

# **DESCRIPTION**

This item is the allowed Registered Pension Plan Contribution including lump-sum payments corresponding to Line 207, General Tax Guide.

# Source:

Imputed from the Green Book separately for filers with less than \$110,000 in total income and for those with a total income of \$110,000 or more.

Function	Description	
fmspopen adj txinet txcalc txqinet	<ul> <li>(o) Routines to read SPSD file (.sp</li> <li>(i) Perform SPSD database adjust</li> <li>(i) Compute net income</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute net income (Quebec)</li> </ul>	tment
idrrsp	RRSP calculated amount (20	18)

This is the allowed deduction for Registered Retirement Savings Plan Premiums corresponding to Line 208, General Tax Guide.

#### Source:

Imputed from the Green Book separately for filers with less than \$110,000 in total income and for those with a total income of \$110,000 or more.

# **CROSS REFERENCE**

Function	Description	
fmspopen adj txinet txcalc txqinet	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(io) Perform SPSD database adjustment</li> <li>(i) Compute net income</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute net income (Quebec)</li> </ul>	
idscfctc	Child tax credit	

# **DESCRIPTION**

This variable is the value of the child tax credit reported on the SCF. It is not a component of SPSM disposable income, rather the modeled Child tax credit (imctc) is used.

Source:

SCF.

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
idscffa	Family allowances

This variable is the value of federal family allowances reported on the SCF. It is not a component of SPSM disposable income, rather modeled family allowance (imffa) is used.

Source:

SCF.

# **CROSS REFERENCE**

Function	Description	
fmspopen	(o) Routines to read SPSD file (.spd)	
idscfflg	SCF high-income preservation flag	

# **DESCRIPTION**

When the value of this variable is 1 then the individual has a total income of over \$110,000 reported on the SCF.

Source:

SCF.

# **CROSS REFERENCE**

Function	Description	
fmspopen	(o) Routines to read SPSD file (.spd)	
idscfftc	Federal tax credit	

# **DESCRIPTION**

This variable is the value of the refundable Federal Sales Tax Credit reported on the SCF. It is not a component of SPSM disposable income, but rather a modeled value (imfstc) is used.

Source:

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**Function** Description

fmspopen (o) Routines to read SPSD file (.spd)

**idscfoas** Old age security

#### **DESCRIPTION**

This variable is the combined value of federal OAS, GIS, and SPA payments reported on the SCF. It is not a component of SPSM disposable income, rather modeled OAS(imioas), GIS(imigis), and SPA(imispa) are used.

Source:

SCF.

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idscfuib** Unemployment insurance benefits

# **DESCRIPTION**

This variable is the value of Federal Unemployment Insurance Benefits reported on the SCF. It is not a component of SPSM disposable income, rather modeled UI benefits(imiuib) is used.

Source:

SCF.

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idschtp** School type

# **DESCRIPTION**

Type of school attended. Note that this information is only collected for household members who are 15 years of age or over and who were enrolled in school the month before the Labour Force Survey (idestat equal to 1 or 2).

Source:

SCF/LFS.

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

idsex Sex

#### **DESCRIPTION**

See codes below.

Source:

SPSD randomization process. Large families might be identifiable by their age and sex composition alone. Consequently, the sex of children (aged 0-14) has been randomly flipped. The complementary randomization of age is described under idage.

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Function	Description	
fmspopen fa txccea txnb txont txalta txbc gis txctc	<ul> <li>(i) Routines to read SPSD file (.spd)</li> <li>(i) Compute family allowance</li> <li>(i) Compute child care expense allowance</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute child tax credit</li> </ul>	
idsheltr	Manitoba shelter allowance (T1C-Man)	

# **DESCRIPTION**

The amount received by either spouse under the Shelter Allowance Programs (SAFER or SAFFR) which is subtracted from the total Manitoba property tax credit to determine the net Manitoba property tax credit. Corresponds to Line 560, Form T1C (MAN) of the General Tax Guide.

# **CROSS REFERENCE**

Function	Description
fmspopen txman	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute provincial taxes for Manitoba</li></ul>
idspoflg	Person has spouse

# **DESCRIPTION**

This flag indicates if the individual has a spouse within the family. Spouses may be common-law.

Function		Description
ui txns txont txman txbc gist	(i) (i) (i) (i) (i) (i)	Compute UI benefits Compute provincial taxes for Nova Scotia Compute provincial taxes for Ontario Compute provincial taxes for Manitoba Compute provincial taxes for British Columbia Compute Provincial GIS top-ups for elderly
idstkded		Stock option deduction (249)

#### **DESCRIPTION**

The allowed deduction for benefits received for qualifying stock options. Corresponds to Line 249 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txitax txcalc txqitax	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> </ul>
idsynthi	Synthetic high income person

# **DESCRIPTION**

This variable is one if the individual is a synthetically created high income individual. Such records, which replace the original SCF high income records, are statistically similar to high income filers found in administrative data.

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**idtuitn** Tuition fees (320)

# **DESCRIPTION**

This item represents the allowable deduction for tuition fees. It corresponds to Line 320, General Tax Guide.

#### Source:

Imputed from the Green Book to individuals over 18 who are attending school either full-time or part-time.

# **CROSS REFERENCE**

Function	Description
fmspopen txinet txqinet txman	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute provincial taxes for Manitoba</li> </ul>
idvencap	Venture capital tax credit (564)

# **DESCRIPTION**

British Columbia Refundable Venture Capital Tax Credit and Newfoundland Non-refundable Venture Capital Tax Credit. Line 564 in Form T1C of the Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

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Function	Description
fmspopen txnfld txbc	<ul> <li>(o) Routines to read SPSD file (.spd)</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute provincial taxes for British Columbia</li> </ul>
idxii2	Part XII.2 tax credit (Trusts) (456)

#### DESCRIPTION

Part XII2 trust refundable tax credit from Line 456 of the General Tax Guide.

#### Source:

This item is imputed from the Green Book separately for high income filers (over \$110,000 in total income excluding Capital Gains) and all other filers.

# **CROSS REFERENCE**

Function	Description
fmspopen txcalc	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Calculate federal income tax</li></ul>
im	Individual variant result variables [struct]

# **DESCRIPTION**

This structure holds modelled result information (as opposed to SPSD database information) pertaining to single individual. It is a sub-structure of the in structure. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix im are members of this structure.

**imalexp** Allowable employment expenses

The original value for Other Allowable Employment Expenses is imputed from the Green Book. The model allows for a reduction in this value by applying the parameter ALEXPP. The result of the multiplication of ALEXPP with idalexp is saved in imalexp.

#### **CROSS REFERENCE**

**Function** Description

txinet (io) Compute net income

gis (i) Compute GIS/SPA for elderly senben (i) Compute Seniors Benefit for elderly

**imamtdf** Difference due to minimum tax

# **DESCRIPTION**

This represents the increase in Net Federal Tax Payable due to the application of the Alternate Minimum Tax algorithm.

#### **CROSS REFERENCE**

Function Description

txcalc (o) Calculate federal income tax

**imamtfg** Minimum tax flag

#### DESCRIPTION

This flag is attributed to filers for whom the amtbft (Alternate Minimum Tax) is greater than Basic Federal Tax imbft. If this flag has the value 1, the filer has paid a higher amount of tax due to the minimum tax rules.

See the description of the Minimum Tax algorithm in the txcalc section of the SPSD/M

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Function Description

txcalc (o) Calculate federal income tax

**imatxc** Age tax credit

#### **DESCRIPTION**

The Age Tax Credit is the alternative to the Age Exemption which is applied to all filers aged 65 or more. Setting the parameter AOPT to 2 (for Tax Credits) will cause the model to calculate and apply an Age Tax Credit instead of an Age Exemption.

The age tax credit is calculated as the federal non-refundable tax credit rate (FNTCR) proportion of the age credit (AXM) net of the age credit reduction rate (AXRR) proportion of net income (iminet) in excess of the age credit reduction turndown (AXTD) time the age credit reduction phase-in (AXPI). Or:

imatxc = FNTCR \* (AXM - AXPI\*min(AXM, AXRR\*nneg(iminet-AXTD)))

#### **CROSS REFERENCE**

Function	Description
txitax txcalc txman	<ul> <li>(o) Compute taxable income and individual credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes for Manitoba</li> </ul>
imatxcrt	Total tax credits applied

#### **DESCRIPTION**

This value represents the amount of non-refundable, non-transferrable tax credits which have been applied to reduce Basic Federal Tax. If the amount of the tax credits exceeds Basic Federal Tax, then the amount applied equals Basic Federal Tax.

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Function Description

txcalc (o) Calculate federal income tax

**imaxm** Age personal exemption

#### **DESCRIPTION**

Filers aged 65 and over receive an additional personal exemption as specified by the parameter AXM. The definition corresponds to line 301, General Tax Guide.

If the age exemption is converted to a tax credit (AOPT=1), the value for this variable becomes zero for all filers.

#### **CROSS REFERENCE**

Function	Description
txitax txhstr	<ul><li>(o) Compute taxable income and individual credits</li><li>(i) Compute family-related deductions or credits</li></ul>
imbase	Individual base result variables [struct]

#### **DESCRIPTION**

This structure should never be modified by the user. It is used to contain values for base variables, if the user has specified base results through the BASMETH parameter. Please see the *SPSD/M User's Guide* for more information on the base/variant facility.

**imbft** Basic federal tax

# **DESCRIPTION**

This item corresponds to Basic Federal Tax after the application of tax credits.

In the pre-reform tax system prior to 1988 this amount was total federal tax less the Dividend Tax Credit. For a complete definition, see Line 505, 1984 General Tax Guide.

For 1988 and later, basic federal tax has been reduced by the subtraction of tax credits. This correspond to Line 406 of the General Tax Guide. In the event that minimum tax is calculated and the tax is higher than regular basic federal tax, imbft takes on the value of the Alternate Minimum Basic Tax.

#### **CROSS REFERENCE**

Function	Description
txcalc (io txnfld (i) txpei (i) txns (i) txnb (i) txont (i) txman (i) txsask (i) txalta (i) txbc (i) memo1 (i)	Calculate federal income tax Compute provincial taxes for Newfoundland Compute provincial taxes for P.E.I. Compute provincial taxes for Nova Scotia Compute provincial taxes for New Brunswick Compute provincial taxes for Ontario Compute provincial taxes for Manitoba Compute provincial taxes for Saskatchewan Compute provincial taxes for Alberta Compute provincial taxes for British Columbia Compute memo items for reporting
imbpt	Basic provincial tax

#### **DESCRIPTION**

Some provinces (Newfoundland, Nova Scotia, New Brunswick, Manitoba, Alberta and British Columbia) compute the basic provincial tax as a proportion of the basic federal tax. The Quebec basic provincial tax is derived from algorithms which nearly parallel the federal. In Ontario, basic provincial tax is a proportion of basic federal tax reduced within a certain tax range. For certain years, Saskatchewan has applied a surtax on taxable income which is added to imbpt.

For a more complete description of provincial algorithms for calculating tax, see the description of the function txprov in the SPSD/M Algorithm Guide.

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Function	Description	
txqcalc txnfld	(io) Calculate income tax (Quebec) (io) Compute provincial taxes for Newfoundland	
txpei	(io) Compute provincial taxes for P.E.I.	
txns	(io) Compute provincial taxes for Nova Scotia	
txnb	(io) Compute provincial taxes for New Brunswick	
txont	(io) Compute provincial taxes for Ontario	
txman	(io) Compute provincial taxes for Manitoba	
txsask	(io) Compute provincial taxes for Saskatchewan	
txalta	(io) Compute provincial taxes for Alberta	
txbc	(io) Compute provincial taxes for British Columbia	
imbtc	Basic personal tax credit	

# **DESCRIPTION**

In the event that Personal Tax Credits are calculated (PEROPT=1), the Basic Tax Credit (imbtc) takes on the value of parameter BTC.

# **CROSS REFERENCE**

Function	Description
txitax txcalc	<ul><li>(o) Compute taxable income and individual credits</li><li>(i) Calculate federal income tax</li></ul>
imcapgex	Modelled capital gains deduction (254)

# **DESCRIPTION**

The amount which can be claimed as a deduction if a filer sells or disposes of eligible capital property. Corresponds to Line 254 of the Tax Guide. Note that the lifetime exemptions have already been applied.

Function Description

txitax (io) Compute taxable income and individual credits txcalc (i) Calculate federal income tax

imccea Child care expenses allowed

## **DESCRIPTION**

This variable represents the modelled Child Care expenses. They are either assigned to the mother if present (if CCEROPT is equal to 1) or to the partner with the lower net income.

## **CROSS REFERENCE**

Function Description

txccea (o) Compute child care expense allowance

imccec Child care expenses claimed on behalf of child

## **DESCRIPTION**

This is the actual amount of child care expenses claimed on behalf of this particular child.

## **CROSS REFERENCE**

Function	Description
txccea txctc cceopt	<ul><li>(io) Compute child care expense allowance</li><li>(i) Compute child tax credit</li><li>(i) zero CCE for young kids if optimal</li></ul>

This is the income the individual would receive if the family claimed their child care expenses.

## **CROSS REFERENCE**

Function	Description
cceopt	(io) zero CCE for young kids if optimal
imccez	Is CCE zeroed?

# **DESCRIPTION**

When Child care expense optimization is turned on (CCEZOPT==1), this flag is set to 1 if the current family was better off in terms of consumable income by not claiming any child care expenses.

# **CROSS REFERENCE**

Function	Description	
txccea cceopt	(i) Compute child care expense allowance (io) zero CCE for young kids if optimal	
imccezi	Consumable income with CCE zeroed	

# **DESCRIPTION**

This is the income the individual would receive if the family chose not to claim their child care expenses.

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Function Description

cceopt (io) zero CCE for young kids if optimal

**imcchc** Child's non-refundable credit

#### **DESCRIPTION**

This is the maximum amount of non-refundable credit that could be claimed on behalf of a child.

## **CROSS REFERENCE**

Function Description

txhstr (o) Compute family-related deductions or credits

**imcdeds** Dependent children deductions

#### DESCRIPTION

If personal exemptions are calculated (PEROPT=1), the contribution of each dependant to the Exemption for Wholly Dependent Children is calculated based on their ages, school attendance and net income. In the case of single-parent families, this total amount is reduced in the event of the application of the Married Equivalent Exemption. The amount accumulated for all children is stored in this variable. The result is claimed by the spouse with the higher income.

Corresponds to Line 324 of the General Tax Guide.

Function Description

txhstr (io) Compute family-related deductions or credits

**imcemc** Child's equivalent to married credit

#### DESCRIPTION

This is the amount which may be claimed as an equivalent to married credit on behalf of a child. It is calculated as FNTCR percent of the maximum equivalent to married credit (parameter EMXM) less the child's net income in excess of the turndown EMXMT.

## **CROSS REFERENCE**

**Function** Description

txhstr (o) Compute family-related deductions or credits

**imchara** Allowable charitable donations and gifts (calculated)

## **DESCRIPTION**

This variable holds the calculated amount of allowable charitable expenses for use in calculating taxable income.

## **CROSS REFERENCE**

**Function** Description

txitax (io) Compute taxable income and individual credits

The Charitable Donations Tax Credit is an alternative to the Charitable Donations Deduction. It is calculated if the parameter MDCROPT is set to 2.

An amount for the Charitable Donations Deduction in imputed from the Green Book. If parameter MDCROPT is set to a value of 1 (for tax credits) a Charitable Donations Tax Credit will be calculated. The model allows for two rates of tax credit (CHATR1 and CHATR2) above and below a specified level (CHATL1).

Note that the imputed value (imchara) corresponds to the definition of Charitable Donations Deduction Allowed in the base year, i.e., it is limited to 20% of Net Income. A different definition of Net Income will not result in a different amount of Tax Credit.

#### CROSS REFERENCE

Function	Description
txitax txcalc	<ul><li>(o) Compute taxable income and individual credits</li><li>(i) Calculate federal income tax</li></ul>
imchclm	Number of dependent children claimed

#### **DESCRIPTION**

This value is the number of children claimed for the Exemption for Wholly Dependent Children. If a child is claimed for the Married Equivalent Exemption, that child is not included in this value.

## **CROSS REFERENCE**

Function	Description
txhstr txbc	<ul><li>(o) Compute family-related deductions or credits</li><li>(i) Compute provincial taxes for British Columbia</li></ul>

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CPP/QPP Contributions may be applied either as a deduction or a tax credit by setting the parameter CPPOPT (1=exemption, 2=tax credit). If applied as tax credits, the CPP/QPP contributions (imcqppc) are multiplied by the CPP/QPP Contribution Tax Credit Rate (parameter FNTCR). The result is reported in the variable imcppctc.

### **CROSS REFERENCE**

Function	Description
txinet txcalc	<ul><li>(o) Compute net income</li><li>(i) Calculate federal income tax</li></ul>
imcqppc	CPP/QPP contributions

## **DESCRIPTION**

Total CPP/QPP contributions on employment and self-employment income. This value is calculated by taking a proportion (See the description of the parameter WSCF in the *SPSD/M Parameter Guide*) of employment earnings (based on idiemp) subject to contribution. Contributions on self-employment earnings are calculated by applying the rate (parameter SECF) to all pensionable earnings and subtracting twice the amount already contributed through employment.

#### **CROSS REFERENCE**

Function	Description
txinet	(io) Compute net income
txcalc	(i) Calculate federal income tax
txqinet	(i) Compute net income (Quebec)
gis	(i) Compute GIS/SPA for elderly
senben	(i) Compute Seniors Benefit for elderly
memo1	(i) Compute memo items for reporting

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The Child Tax Credit is calculated as a basic amount (parameter CTCPC) per eligible child (those under 18 years of age), reduced by a percentage (Parameter CTCRR) of the sum of the incomes of the head and the spouse exceeding a specified base amount (parameter CTCTD). The tax credit is assigned to the spouse who claims the Family Allowance income.

This item corresponds to Schedule 10, General Tax Guide.

### **CROSS REFERENCE**

Function	Description
txctc memo1	(o) Compute child tax credit (i) Compute memo items for reporting
imctcben	Federal child tax credit and child benefits

## **DESCRIPTION**

This variable includes the Federal Child Tax Credit (imctc) and the total Federal Child Tax Benefits (imfcben).

#### **CROSS REFERENCE**

Function	Description	
memo1	(o) Compute memo items for reporting	
imctxcrt	Tax credits transferred from children	_

#### DESCRIPTION

This is the total amount of tax credits transferred to a parent from all dependent children. It

Algorithm Guide Page 148 Version 5.0 11/19/97 amounts to the sum of the disability tax credit (imdisatc), education tax credit (imedtxc), and tuition tax credit (imtutxc).

See the description of this algorithm in the section txcalc in the SPSD/M Algorithm Guide.

#### **CROSS REFERENCE**

Function Description

txcalc (o) Calculate federal income tax

**imctxcs** Dependent children tax credits

### **DESCRIPTION**

The model either applies personal exemptions or personal tax credits according to the setting of the parameter PEROPT. If PEROPT is set to 2 (for Tax Credits), wholly dependent children will generate tax credits.

The Tax Credit for Dependent Children depends on the number of children in the household with amounts YCXM1, YCXM2, YCXM3, and is reduced by the income of the children in excess of YCXMT.

#### CROSS REFERENCE

Function	Description
txhstr txcalc	<ul><li>(o) Compute family-related deductions or credits</li><li>(i) Calculate federal income tax</li></ul>
imdedea	Employment allowance

# **DESCRIPTION**

When EAOPT is set to 1 imdedea is calculated as the minimum of a base amount (parameter EAMAX) and a percentage (parameter EAPRP) of employment income (idiemp). The definition corresponds to Line 108, General Tax Guides.

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Function Description

txinet (io) Compute net income

**imdedfn** All deductions from net income

## **DESCRIPTION**

The sum of all deductions from net income:

- Employee home relocation loan (idemplo)
- Stock option deduction (idstkded)
- Limited Partnership losses (idpartlo)
- Non-capital Losses of Other Years (idnclos)
- Capital Losses of Other Years (idcloss)
- Capital gains deduction (idcapgex)
- Pension Income Deduction (impendn)
- Northern resident deduction (idnorth)
- Additional deduction (idaddded)

The definition corresponds to Line 257, General Tax Guide without the Other payment deductions which are also not included in the Total income (imitot).

#### **CROSS REFERENCE**

Function	Description
txitax txhstr txcalc	<ul><li>(io) Compute taxable income and individual credits</li><li>(io) Compute family-related deductions or credits</li><li>(i) Calculate federal income tax</li></ul>
imdedft	Deductions from total income

# **DESCRIPTION**

The sum of all deductions from total income:

- RPP Contributions (idrpp)
- RRSP Contributions (idrrsp)
- Union and Professional Dues (iddues)
- Child Care Expenses allowed (idccet for FAMEX or idccett for Greenbook)
- Allowable Business Investment Losses and Indexed Security Investment Plan allowable capital losses (idiloss)
- Moving expenses (idmovexp)
- Alimony allowance paid out (iddalimo)
- Carrying charges (idcarry).
- Exploration expenses (idexplor)
- Other employment expenses (idalexp)
- Other Deductions from total income (idothded)

This correspond to Line 233 of the General Tax Guide.

#### **CROSS REFERENCE**

Function	Description	
txinet txccea	<ul><li>(io) Compute net income</li><li>(o) Compute child care expense allowance</li></ul>	
imdedt	Deductions transfered from spouse	

# **DESCRIPTION**

The Investment Income Deduction (imintdn), Pension Income Deduction (impendn) and Disability Deduction (imdisex) are eligible to be transferred to the spouse with the higher income. Any amount in excess of the amount required to reduce one spouse's taxable income to zero may be transferred to the other spouse.

This variable stores the amount transferred from the spouse. The definition corresponds to Line 251, General Tax Guide.

Note that under the tax reform scenarios many of these deductions may be set to zero and treated as tax credits.

See the section describing the function txhstr in the SPSD/M Algorithm Guide.

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Function Description

txhstr (o) Compute family-related deductions or credits

txcalc (i) Calculate federal income tax

**imdepni** Dependant's net income

#### DESCRIPTION

This is the net income used to reduce claimable dependent amounts. It includes (for certain years) social assistance income as well as other forms of net income.

### **CROSS REFERENCE**

Function Description

txhstr (io) Compute family-related deductions or credits

txcalc (i) Calculate federal income tax

**imdisatc** Disability tax credit

#### DESCRIPTION

Blind persons or persons confined to a wheelchair or a bed are eligible to claim either a special deduction or tax credit.

This variable is the sum of modelled disability tax credits for self and for dependants other than spouse. (Lines 316 and 318 in the General Tax Guide)

The parameter DISOPT determines whether the standard algorithm applies a Disability Deduction (DISOPT=1) or Disability Tax Credit (DISOPT=2). The value of the Disability Tax Credit or deduction is determined by the value of parameter MAXDX. If a tax credit is to be applied, individuals who have been imputed a value for Disability Deduction (iddisslf) are given the maximum Disability Tax Credit which may be transferred to a spouse or parent. If the filer also has a non-zero value for disability deductions for dependants other than spouse (iddisoth) then a similar substitution of MAXDX is performed and added to imdisatc.

Function	Description
txitax txcalc	(o) Compute taxable income and individual credits (i) Calculate federal income tax
imdisex	Disability exemption

#### DESCRIPTION

Blind persons or persons confined to a wheelchair or a bed are eligible to claim either a special deduction or tax credit for themselves.

This variable is the sum of disability exemptions for self and dependants other than spouse. (Lines 316 and 318 in the General Tax Guide)

If the parameter DISOPT is set to 1, the Disability deduction is calculated. The model substitutes the maximum allowable disability deduction (MAXDX) if iddisslf is greater than zero. The value resulting from this substitution is imdisex. If the filer also has a non-zero value for disability deductions for dependants other than spouse (iddisoth) then a similar substitution of MAXDX is performed and added to imdisex.

#### **CROSS REFERENCE**

Function	Description
txitax txhstr txman	<ul> <li>(o) Compute taxable income and individual credits</li> <li>(i) Compute family-related deductions or credits</li> <li>(i) Compute provincial taxes for Manitoba</li> </ul>
imedrcv	Education and tuition transfered from others

### DESCRIPTION

These are the education credits (imtutxc and imedtxc) which a person received from their children or spouse because these latter did not need them to reduce their basic federal tax to zero. This credit is represented in total dollars prior to the application of the Federal Tax

Function Description

txcalc (o) Calculate federal income tax

txman (i) Compute provincial taxes for Manitoba

**imedtrf** Education and tuition transferred to others

#### **DESCRIPTION**

These are the education credits (imtutxc and imedtxc) which a person transfers to their parent or spouse because they do need them to reduce their basic federal tax to zero. This credit is represented in total dollars prior to the application of the Federal Tax Credit Rate (FNTCR).

#### CROSS REFERENCE

Function Description

txcalc (io) Calculate federal income tax

txman (i) Compute provincial taxes for Manitoba

**imedtxc** Education allowance tax credit

#### **DESCRIPTION**

The parameter EDUCOPT determines whether the model applies an Education Expense Deduction (EDUCOPT=1) or an Education Tax Credit (EDUCOPT=2). In the case of the Education Tax Credit, the number of months is calculated as the amount of Education Deduction imputed (ideduc) divided by the maximum monthly Education Deduction. The parameter EDTXPM determines the amount of Tax Credit per month to allow. imedtxc reports the amount of Education Tax Credit available for this individual. The tax credit may be applied to reduce Basic Federal Tax or transferred to a parent or spouse. The model applies a cap on the amount of Education and Tuition Tax Credit transferable. This maximum amount transferable is determined by parameter MAXET.

Function	Description
txitax txcalc	<ul><li>(o) Compute taxable income and individual credits</li><li>(i) Calculate federal income tax</li></ul>
imeduc	Education allowance for student (322)

## **DESCRIPTION**

imeduc reports the education expense deduction available to this individual. It is set to zero if Education Tax Credits are being applied (EDUCOPT=2) otherwise it takes on the value of the imputed value ideducm \* EDXPM..

Although this deduction may be transferred to a spouse, the value of imeduc is not reduced to reflect any amount transferred.

## **CROSS REFERENCE**

Function	Description
txitax txhstr txman	<ul><li>(io) Compute taxable income and individual credits</li><li>(i) Compute family-related deductions or credits</li><li>(i) Compute provincial taxes for Manitoba</li></ul>
imexm	Personal exemptions (Basic+Age)

## **DESCRIPTION**

Sum of Basic Exemption BXM and the Age Exemption imaxm.

Function Description

txitax (io) Compute taxable income and individual credits

**imfar** Family allowance recovery

## **DESCRIPTION**

Repayment of family allowances under the repayment of social benefits provisions (clawback) of the Tax Act.

## **CROSS REFERENCE**

Function Description

txinet (io) Compute net income

**imfcben** Total Federal Child Benefits

#### DESCRIPTION

Total benefits received under the Child Benefits program passed in October 1992 and commencing in calendar year 1993.

## **CROSS REFERENCE**

Function	Description
ui	(i) Compute UI benefits
txctc	(o) Compute child tax credit
memo1	(i) Compute memo items for reporting
cceopt	(io) zero CCE for young kids if optimal

Total benefits received less earned income benefits received under the Child Benefits program passed in October 1992 and commencing in calendar year 1993.

#### **CROSS REFERENCE**

Function Description

txctc (o) Compute child tax credit

**imfcbene** Total Federal Child Benefits Earning suppl

### **DESCRIPTION**

This variable contains the value of the supplemental earned income benefits received under the Child Benefits program passed in October 1992 and commencing in calendar year 1993.

When the parameter FCBEIE is set to 0, the value of this variable is calculated as a percentage (FCBESR) of nuclear family employment income above a threshold (FCBECI) to a maximum of FCBEIS less a percentage (FCBERR) of nuclear family net income in excess of the threshold FCBETD.

When the parameter FCBEIE is set to 1, the calculation is identical but the maximum benefit is based not on the per family maximum of FCBEIS, but on a per child basis where the entitlement with respect to the first child is FCBEIS1, the second child as FCBEIS2 and third and subsequent children as FCBEIS3 with varying reduction rates (FCBERR1, FCBERR2, FCBERR3).

#### **CROSS REFERENCE**

Function Description

txctc (o) Compute child tax credit

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Calculated as a proportion (parameter FDTCR) of the Taxable amount of Canadian Dividends (imidivt).

## **CROSS REFERENCE**

Function	Description
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txcalc (io) Calculate federal income tax

**imfedbal** Federal taxes less transfers

# **DESCRIPTION**

This variable contains the total federal taxes (including commodity taxes) paid by an individual, less federal transfers received.

## **CROSS REFERENCE**

**Function** Description

memo2 (o) Compute consumable income, etc.

**imfedtax** Federal tax before tax credits

#### **DESCRIPTION**

This is an intermediate value of federal tax which is calculated by looking up Taxable Income (imitax) in the federal tax table FTX.

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Function Description

txcalc (io) Calculate federal income tax

**imffa** Federal portion of family allowances

#### **DESCRIPTION**

For most provinces, the Federal contribution to Family Allowance is calculated as a base amount (parameter STDFA) per child under the age of 18. In Quebec, the amount per child varies with the total number of eligible children. In Alberta the benefit depends upon the age of the child. This variable stores the result of the calculation regardless of the method applied.

See the *SPSD/M Algorithm Guide* for a more complete description of the methods used for calculating Family Allowance.

#### **CROSS REFERENCE**

**Function** Description

fa (o) Compute family allowance

memo1 (i) Compute memo items for reporting

**imfiler** Taxable filer status

#### **DESCRIPTION**

This variable is derived from modelled values for Net Federal Taxes (imtxf) and net provincial taxes (imtxp). If either of these variables has a positive value, the individual is designated a taxable filer by setting the value of imfiler to 1. A zero value indicates a relevant non-taxable filer: one who has any negative income components, or receives provincial tax credits, child tax credits or the sales tax credit.

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Function Description

memo1 (o) Compute memo items for reporting

**imfill** filler array for im [array]

#### **DESCRIPTION**

imfill is an array of characters whose sole purpose is to fill out the im structure so that it is always the same size, independent of the size of the uv user variable structure. Its presence allows the user to define new variables at the individual level without forcing recompilation of the entire system.

**imfnewpg** Federal new programs

#### **DESCRIPTION**

This variable is a sum of Other Social Assistance or Guarantees (imiosa) and Other Taxable Demogrants (imiotg).

## **CROSS REFERENCE**

Function Description

memo1 (o) Compute memo items for reporting

**imfortc** Federal other refundable tax credits

#### **DESCRIPTION**

This variable includes the Part XII.2 Trust Tax Credit (idxii2) and the Forward Averaging Tax Credit (idfdfatc) which are also included in federal transfer income.

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Function Description

txcalc (o) Calculate federal income tax memo1 (i) Compute memo items for reporting

**imfortxc** Federal foreign tax credit (509)

#### DESCRIPTION

This variable is the eligible amount which can be claimed as a federal foreign tax credit. Corresponds to Lines 507 and 508 of Schedule 1,General Tax Guide.

#### **CROSS REFERENCE**

Function Description

txcalc (io) Calculate federal income tax

**imfoth** Federal other government income

## **DESCRIPTION**

This variable aggregates together other forms of federal income, both taxable (iditogv) and non-taxable (idinogv). It is created in the memol algorithm for convenience of reporting only.

## **CROSS REFERENCE**

Function Description

memo1 (io) Compute memo items for reporting

This variable includes Federal Other Government Income (imfoth) and Federal Other Refundable Tax Credits (imfortc).

## **CROSS REFERENCE**

Function	Description
memo1	(o) Compute memo items for reporting

**imfptc** Federal Political Contribution Tax Credit

# **DESCRIPTION**

Total allowable Federal political contribution tax credit. Line 410 in the Tax Guide.

## **CROSS REFERENCE**

Function	Description	
txcalc	(io) Calculate federal income tax	
imfsa	Federal social assistance	

# **DESCRIPTION**

imfsa is the federal share (SAFS ) by province of modeled Social Assistance income (imisa) representing the Federal contribution under the Canada Assistance Plan.

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Function Description

sa (io) Compute social assistance or guarantees memo1 (i) Compute memo items for reporting

Federal sales tax credit

## **DESCRIPTION**

imfstc

This tax credit, introduced in 1986, is a refundable credit calculated by summing a base amount for the head (parameter FSTCF), spouse (FSTCS) an amount (FSTCC) per child under 18 and reducing this amount by a proportion of family net income (the sum of iminet for the head and spouse, plus any income from social assistance (idisa, imigis, imigist and imispa). Children over 18 are eligible to claim this tax credit on their own tax returns. The credit is attributed to the spouse who receives the Child Tax Credit (imctc).

If FSTCREF is set to 1, then only persons 19 and over are eligible to claim this tax credit. Children aged 18 or less can be claimed by their parents.

If GSTFLAG is set to 1, then the credit is derived using last year's income (using PYINC) and there are additional amounts given to single persons and lone parent families.

See the description of the function txfstc in the SPSD/M Algorithm Guide.

#### **CROSS REFERENCE**

Function	Description
txfstc memo1	(o) Compute federal sales tax credit (i) Compute memo items for reporting
imfsur	Federal surtax

### **DESCRIPTION**

The federal surtax is calculated as a proportion of Basic Federal Tax (imbft) which is added

to Net Federal Tax (imtxf). In the event that the Alternate Minimum Tax algorithm is applied, the surtax is recalculated.

For a complete description of the federal surtax algorithm see the function txcalc in the *SPSD/M Algorithm Guide*.

#### **CROSS REFERENCE**

Function Description

txcalc (io) Calculate federal income tax

**imftax** Federal taxes

#### **DESCRIPTION**

This variable represents the sum of all federal taxes including income taxes, payroll taxes, repayments and commodity taxes: net federal income tax (imtxf); CPP/QPP Contributions (imcqppc), UI Contributions (imuic) and repayments including UI Benefits Repaid (imuibr), OAS repayments (imoasr), Family Allowance repayments (imfar), plus federal commodity taxes (imtxfc).

## **CROSS REFERENCE**

Function	Description
memo1 memo2	(io) Compute memo items for reporting (io) Compute consumable income, etc.
imftr	Federal tax reduction

#### DESCRIPTION

This variable represents the amount of the federal tax reduction applied to reduce basic federal tax and is calculated as the minimum of Basic Federal Tax (imbft) or a specified maximum federal tax reduction (parameter MXFTR). The unused portion of one spouse's tax reduction may be transferred to the other spouse. This value is the sum for the individual plus

Algorithm Guide Page 164 Version 5.0 11/19/97 any amount transferred from the spouse.

See the description of the federal tax reduction algorithm (in the function txcalc) in the SPSD/M Algorithm Guide.

#### **CROSS REFERENCE**

Function	Description
txcalc txman	<ul><li>(io) Calculate federal income tax</li><li>(i) Compute provincial taxes for Manitoba</li></ul>
<u>imftran</u>	Federal transfer income

### **DESCRIPTION**

This variable is the sum of all Federal Transfer to the individual, including refundable tax credits: Federal Family Allowances (imffa), OAS payments (imioas), GIS Benefits (imigis), Spouses Allowance (imispa), Seniors benefit (imisenb), Seniors benefit SPA (imisbspa), the Child Tax Credit (imctc), the Child tax Benefit (imfcben), CPP/QPP Benefits (imicqp), UI Benefits (imiuib), the Federal Sales Tax Credit (imfstc), Federal Social Assistance (imfsa), other social assistance (imiosa), the Quebec Tax Abatement (imqtar), foreign tax credit (imfortc), and other transfers (imfoth).

## **CROSS REFERENCE**

Function	Description	
memo1 memo2	<ul><li>(io) Compute memo items for reporting</li><li>(i) Compute consumable income, etc.</li></ul>	
imftrt	Federal tax reduction transferred from spouse	

#### DESCRIPTION

This variable represents the amount of the federal tax reduction imftr applied to reduce basic federal tax which has been transferred from the spouse. It is the amount by which the federal tax reduction imftr exceeds basic federal tax imbft. A non-zero amount is transferred to the

Algorithm Guide Page 165 Version 5.0 11/19/97 other spouse if that spouse' tax reduction imftr is equal to the maximum federal tax reduction MXFTR. The variable is also used in the calculation of the Manitoba Tax reduction imptr.

See the description of the federal tax reduction algorithm (in the function txcalc) in the SPSD/M Algorithm Guide.

#### **CROSS REFERENCE**

Function	Description	
txcalc txman	<ul><li>(o) Calculate federal income tax</li><li>(i) Compute provincial taxes for Manitoba</li></ul>	
imgisinc	Individual's income for GIS/SPA reduction	

## **DESCRIPTION**

This variable is an individual's income from a specified set of sources which is used to determine the amount of GIS/SPA benefits, if any. The variable is multiplied by the parameter PYINC prior to applying needs testing algorithms.

The sum of all income from employment (idiemp, idisenf, idisefm), investment income (ididiv, idiint, idiroom, idioinv), taxable government transfers (iditogv, imiuib), pensions (idicqp, idipens) and taxable other income (iditoth) less allowable employment expenses (imalexp), CPP/QPP contributions (imcqppc) and Unemployment Insurance contributions (imuic).

## **CROSS REFERENCE**

Function	Description
txns gis gist	<ul><li>(i) Compute provincial taxes for Nova Scotia</li><li>(io) Compute GIS/SPA for elderly</li><li>(i) Compute Provincial GIS top-ups for elderly</li></ul>

imgismax Maximum amount of GIS

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This variable contains the amount of GIS an individual could receive, before the amount is reduced based on income.

## **CROSS REFERENCE**

Function	Description	
gis gist	(o) Compute GIS/SPA for elderly (i) Compute Provincial GIS top-ups for elderly	

**imgistyp** Type of GIS entitlement

## **DESCRIPTION**

This variable is calculated for all individuals in the census family context based on age and marital status.

This variable indicates the category of GIS eligibility, before needs testing, for all individuals.

## **CROSS REFERENCE**

Function	Description	
gis gist	(o) Compute GIS/SPA for elderly (i) Compute Provincial GIS top-ups for elderly	
imiafetc	Alberta Family Employment Tax Credit Benefits	

## **DESCRIPTION**

This variable contains the value of the Alberta Family Employment Tax Credit announced in the Alberta Budget of 1997.

Algorithm Guide Page 167 Version 5.0 11/19/97 When the parameter AFETCFLAG is set to 1, the value of this variable is calculated as a percentage (AFETCBR) of nuclear family employment income above a threshold (AFETCCI) to a maximum dollar level which is calculated as AFETCBPC times the number of eligible children (nfnkids) up to a maximum number of children of AFETCNC. The maximum benefit is reduced by a percentage (AFETCRR) of nuclear family net income in excess of the threshold AFETCTD.

## **CROSS REFERENCE**

Function Description

txalta (o) Compute provincial taxes for Alberta

**imiasb** Alberta seniors benefit

#### DESCRIPTION

This variable represents the benefits accrued to individuals under the Alberta Senior's Benefit program. It is a component of the imigist variable for years in which the Alberta Senior's Benefit program is active.

#### **CROSS REFERENCE**

Function Description

gist (io) Compute Provincial GIS top-ups for elderly

**imibcfb** B.C. Family Bonus

#### DESCRIPTION

Total benefits received under the British Columbia Family Bonus program commencing in July 1996.

When the parameter BCFBFLAG is set to one the value of this variable is calculated as BCFBBAS times the number of children in the nuclear family (nfnkids) reduced by a proportion of head plus spouse net income (iminet + imisa) above the turndown of BCFBTD.

Algorithm Guide Page 168 Version 5.0 11/19/97 This proportion for families with one child is BCFBRRS and for multiple child families is BCFBRR. The value calculated in this manner is multiplied times the parameter BCFBPI.

B.C. Family Bonus benefits are assigned to the mother if present, or if not to the head of the nuclear family.

#### **CROSS REFERENCE**

Function	Description
txbc memo1	<ul><li>(o) Compute provincial taxes for British Columbia</li><li>(i) Compute memo items for reporting</li></ul>
imicapgt	Capital gains (taxable)

## **DESCRIPTION**

imicapgt reports the taxable portion of capital gains after multiplying by the Capital Gains Inclusion Rate (parameter CAPGIR).

## **CROSS REFERENCE**

Function	Description
txinet txitax gis senben	<ul> <li>(io) Compute net income</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> </ul>
imicqp	CPP/QPP payable

## **DESCRIPTION**

This is a copy of the original SCF value for CPP/QPP benefits (idicqp) used for reporting purposes.

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Function Description

memo1 (io) Compute memo items for reporting

**imidivt** Dividend income (taxable)

## **DESCRIPTION**

This represents the taxable amount of dividends from taxable Canadian Corporations. The definition corresponds precisely to that of Line 120 of the General Tax Guide. It is calculated by multiplying the actual amount of dividends (ididiv) by the Federal Dividend Gross-up Rate (FDGUR).

## **CROSS REFERENCE**

Function	Description
txinet txitax txcalc	<ul><li>(io) Compute net income</li><li>(i) Compute taxable income and individual credits</li><li>(i) Calculate federal income tax</li></ul>
imiemp	Wages and salaries

## **DESCRIPTION**

This is a copy of the value for Income from Earnings (idiemp) on the SPSD for reporting purposes.

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Function	Description
memo1	(o) Compute memo items for reporting
imigis	GIS benefits

# **DESCRIPTION**

This variable indicates the dollar amount of GIS benefits received. This variable is calculated for all individuals in the census family context based on age, income, marital status, and immigration status.

# **CROSS REFERENCE**

Function	Description
txqcalc txhstr txnfld txns txqhstr txont txman txbc gis	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(i) Compute family-related deductions or credits</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute family-related deductions or credits (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(o) Compute GIS/SPA for elderly</li> </ul>
gist txctc txfstc memo1	<ul> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) Compute child tax credit</li> <li>(i) Compute federal sales tax credit</li> <li>(i) Compute memo items for reporting</li> </ul>
ımıgıspa	GIS and spouse's allowance

## **DESCRIPTION**

This variable includes the GIS (imigis) and the Spouses Allowance program (imispa).

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Function Description

memo1 (o) Compute memo items for reporting

imigist GIS provincial top-up

## **DESCRIPTION**

This variable indicates the dollar amount of provincial GIS Supplement program benefits received under provincial income-tested elderly programs.

This variable is calculated for all individuals in the census family context based on age, income, marital status and relative portion of pension income. Only six provinces have supplement programs. Users should note that individuals who receive imigist have their social assistance (idisa) set to 0. Other options governing the relationship of imigist and idisa are controlled by the SAELDOPT parameter.

## **CROSS REFERENCE**

Function	Description	
gist sa memo1	<ul><li>(io) Compute Provincial GIS top-ups for elderly</li><li>(i) Compute social assistance or guarantees</li><li>(i) Compute memo items for reporting</li></ul>	
iminet	Net income	

# **DESCRIPTION**

This corresponds to Revenue Canada's definition of Net Income:

- Total income (imitot), minus
- deductions from total income (imdedft).

Function	Description
ui	(i) Compute UI benefits
txinet	(io) Compute net income
txccea	(io) Compute child care expense allowance
txitax	(i) Compute taxable income and individual credits
txhstr	(i) Compute family-related deductions or credits
txcalc	(i) Calculate federal income tax
txnfld	(i) Compute provincial taxes for Newfoundland
txns	(i) Compute provincial taxes for Nova Scotia
txnb	(i) Compute provincial taxes for New Brunswick
txont	(i) Compute provincial taxes for Ontario
txman	(i) Compute provincial taxes for Manitoba
txsask	(i) Compute provincial taxes for Saskatchewan
txalta	(i) Compute provincial taxes for Alberta
txbc	(i) Compute provincial taxes for British Columbia
txctc	(i) Compute child tax credit
txfstc	(i) Compute federal sales tax credit
memo1	(i) Compute memo items for reporting
cceopt	(io) zero CCE for young kids if optimal
imintdn	Interest income deduction allowed

## **DESCRIPTION**

This is calculated as the smaller of the Maximum Interest Income Deduction (parameter YINDL) and the sum of:

- Interest Income (idiint),
- Taxable Dividends (imidivt idcarry), and
- Taxable Capital Gains (imcapgt) included only if the parameter CGIFLAG has been set to 1.

## **CROSS REFERENCE**

Function	Description
txhstr	<ul><li>(io) Compute taxable income and individual credits</li><li>(i) Compute family-related deductions or credits</li><li>(i) Calculate federal income tax</li></ul>

SPSD modeled variable taking age and residential eligibility into account. Unknown error due to no information on dead persons as well as full year payment assumption.

## **CROSS REFERENCE**

<b>Function</b>	Description
oas txinet txqinet txqitax gis memo1	<ul> <li>(o) Compute OAS for elderly</li> <li>(io) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
imiosa	Other SA or guarantees

## **DESCRIPTION**

This analysis variable is always zero when running in 'black box' mode. The value is nevertheless added into disposable income after tax has been calculated, to provide a convenient interface for any user wishing to simulate (in the 'glass box' mode) a new refundable tax credit, guaranteed annual income, or similar program. See the *SPSM Programmer's Guide* for further information.

## **CROSS REFERENCE**

Function	Description
gai memo1	<ul><li>(o) Compute new refundable credits or guarantees</li><li>(i) Compute memo items for reporting</li></ul>
imiotg	Other taxable demogrants

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This analysis variable is always zero when running the standard tax/transfer algorithm. The value is nevertheless added into total income for tax purposes, to provide a convenient interface for any user wishing to simulate (in the 'glass box' mode) a new taxable demogrant program. See the *SPSM Programmer's Guide* for further information.

## **CROSS REFERENCE**

Function	Description
dem txinet txqinet memo1	<ul> <li>(o) Compute new taxable demogrants</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute memo items for reporting</li> </ul>
imisa	Social assistance (or replacement program)

## **DESCRIPTION**

This variable is modelled Social Assistance income (imisa).

# **CROSS REFERENCE**

Function	Description
txqcalc	(i) Calculate income tax (Quebec)
ui .	(i) Compute UI benefits
txhstr	(i) Compute family-related deductions or credits
txnfld	(i) Compute provincial taxes for Newfoundland
txnb	(i) Compute provincial taxes for New Brunswick
txqhstr	(i) Compute family-related deductions or credits (Quebec)
txont	(i) Compute provincial taxes for Ontario
txman	(i) Compute provincial taxes for Manitoba
txalta	(i) Compute provincial taxes for Alberta
txbc	(i) Compute provincial taxes for British Columbia
sa	(io) Compute social assistance or guarantees
txctc	(i) Compute child tax credit
txfstc	(i) Compute federal sales tax credit

cceopt (io) zero CCE for young kids if optimal

**imisbspa** Federal Seniors Benefit SPA

## **DESCRIPTION**

This variable indicates the dollar amount of SPA benefits received as calculated under the federal Senior's Benefits program. This variable is calculated for all individuals in the nuclear family context based on age, income, marital status, and immigration status. The variable does not include regular benefits under the federal Seniors Benefit program -- these are stored in the imisenb variable.

## **CROSS REFERENCE**

Function	Description
senben gist memo1	<ul> <li>(o) Compute Seniors Benefit for elderly</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
imiself	Total self-employment income

## **DESCRIPTION**

This variable is the sum of Self-employed Income - Farming (idisefm) and Self-employed Income - Non-farming (idsenf).

## **CROSS REFERENCE**

Function	Description
memo1	(o) Compute memo items for reporting
imisenb	Federal Seniors Benefit

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This variable indicates the dollar amount of federal Senior's Benefits benefits received. This variable is calculated for all individuals in the nuclear family context based on age, income, marital status, and immigration status. The variable does not include SPA benefits calculated under the Seniors Benefit -- these are stored in the imisbspa variable.

## **CROSS REFERENCE**

Function	Description	
senben gist memo1	<ul> <li>(o) Compute Seniors Benefit for elderly</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>	
imishri	Shared income concept (FAMEX & SPSD)	

## **DESCRIPTION**

This variable contains an identically-defined income concept that is used to adjust for discrepancies between a matched FAMEX household expenditure vector and a modelled SPSM household. Taxes associated with expenditures are scaled by the ratio of imishri (summed over the household) to ctishrh, and are then apportioned among household members according to imishri. Conceptually, imishri is equal to disposable income plus other money receipts, negative savings, and proceeds from the sale of assets.

### **CROSS REFERENCE**

Function	Description
ctmod	(io) Compute commodity taxes for individuals and households
imispa	Spouse's allowance

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This variable indicates the dollar amount of federal payments under the Spouses Allowance program (SPA).

## **CROSS REFERENCE**

Function	Description
txqcalc txhstr txnfld txqhstr txont txman txbc gis gist txctc txfstc memo1	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(i) Compute family-related deductions or credits</li> <li>(i) Compute provincial taxes for Newfoundland</li> <li>(i) Compute family-related deductions or credits (Quebec)</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(o) Compute GIS/SPA for elderly</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> <li>(i) Compute child tax credit</li> <li>(i) Compute federal sales tax credit</li> <li>(i) Compute memo items for reporting</li> </ul>
imitax	Taxable income

### **DESCRIPTION**

This is the sum of total income for tax purposes (imitot) minus all deductions (imdedft and imdedfn) and personal exemptions (impex). This corresponds to the Revenue Canada definition of Taxable Income (Line 260, General Tax Guide) except that forward averaging is not applied by the model and exceptions in the calculation of Net Income (See iminet above).

### **CROSS REFERENCE**

Function	Description
txitax	(o) Compute taxable income and individual credits
txhstr	(io) Compute family-related deductions or credits
txcalc	(i) Calculate federal income tax
txnfld	(i) Compute provincial taxes for Newfoundland

txont	(i)	Compute provincial taxes for Ontario
txman	(i)	Compute provincial taxes for Manitoba
txalta	(i)	Compute provincial taxes for Alberta
txbc	(i)	Compute provincial taxes for British Columbia
txfstc	(i)	Compute federal sales tax credit

**imitot** Total income

#### **DESCRIPTION**

This corresponds to the Revenue Canada definition of Total Income for tax purposes. It is the sum of:

- idiemp: Earnings From Employment
- imioas: Modelled OAS Benefits
- idicqp: CPP/QPP Benefits Received
- idipens: Pension Income
- imiuib: Modelled Unemployment Insurance Benefits Received
- iditoth: Other Taxable Income
- idiroom: Net Income From Roomers and Boarders
- idisefm: Self-employment Earnings (Farm)
- idisenf: Self-employment Earnings (Non-farm), scaled by the parameter FACTISENF (normally set to 1)
- idiint: Interest Income
- idioiny: Other Investment Income
- imidivt: Modelled Taxable Amount of Dividends
- imicapgt: Modelled Taxable Capital Gains and Losses
- iditogy: Other Taxable Government Income
- imiotg: Modelled New Taxable Demogrants

Note that Total Income does not include Worker's Compensation, Social Assistance and Net federal supplement (Line 147 of the General Taxation Guide) because the same amount is deduced in Line 250 of the General Taxation Guide.

#### **CROSS REFERENCE**

Function	Description
txinet gist	<ul><li>(io) Compute net income</li><li>(i) Compute Provincial GIS top-ups for elderly</li></ul>
iminib	Unemployment InsuranceInsurance benefits

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This variable is the UI Benefits calculated in ui.c

### **CROSS REFERENCE**

Function	Description
ui txinet txqinet gis senben memo1	<ul> <li>(io) Compute UI benefits</li> <li>(i) Compute net income</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
immanltc	Manitoba learning tax credit

#### **DESCRIPTION**

This is the Manitoba Learning Tax Credit. It is calculated as a proportion (MANLTCF) of the education and tuition tax credits (imedtxc and imtutxc) minus the education credits transferred to parents or spouse (imedtrf) plus the education credits transferred from children or spouse (imedrcv).

### **CROSS REFERENCE**

Function	Description
txman	(io) Compute provincial taxes for Manitoba
immaramt	Adjustment to income source

### **DESCRIPTION**

This analysis variable is used to compute marginal tax rates. When the marginal tax rate calculation facility is activated (using MARFLAG), increments of income of specific type

Algorithm Guide Page 180 Version 5.0 11/19/97 (MARVAR) and amount (MARAMT) are added to selected persons (MARSPEC). These amounts are recorded in immaramt and can be used (in conjunction with immartax) to compute marginal tax rates at an individual or family level of analysis. See the *SPSM User's Guide* for more information.

**immarex** Married exemption claimed

### **DESCRIPTION**

This variable contains the Married or Equivalent Exemption used by the filer. This is calculated by computing the potential exemption of both spouses and attributing the value calculated on behalf of the spouse with the lower net income to the spouse with the higher net income. The exemption is a base amount (parameter MXM) minus the amount that net income exceeds the Married Exemption Turndown Level (parameter MXMT).

In the absence of a spouse, immarex represents the Married Equivalent Exemption calculated on behalf of a dependant. This is calculated as a base amount (parameter EMXM) minus the amount that net income exceeds the Married Exemption Turndown Level (parameter MXMT).

See the description of the function txhstr in the SPSD/M Algorithm Guide for a more details on the calculation of immarex. The variable is valid only if PEROPT is set to 1.

#### **CROSS REFERENCE**

Function	Description
txhstr txont txsask txbc	<ul> <li>(io) Compute family-related deductions or credits</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Saskatchewan</li> <li>(i) Compute provincial taxes for British Columbia</li> </ul>
immartax	Change in consumable income after adjustment

#### DESCRIPTION

This analysis variable is used to compute marginal tax rates. When the marginal tax rate calculation facility is activated (using MARFLAG), increments of income of specific type (MARVAR) and amount (MARAMT) are added to selected (MARSPEC) persons. When the tax/transfer algorithm is re-applied with this higher income, a new consumable income results for each person in the household. From this new consumable income, an implicit

Algorithm Guide Page 181 Version 5.0 11/19/97 amount of tax (immartax) on the increment to income (immaramt) is calculated. immartax and can be used in conjunction with immaramt to compute marginal tax rates at an individual or family level of analysis. See the *SPSM User's Guide* for more information.

**immartxc** Married tax credit claimed

#### **DESCRIPTION**

The Married Tax Credit is only calculated if PEROPT is set to 2

The Married Tax Credit is calculated by reducing the maximum Married Tax Credit (parameter MXM) by the amount of Net Income exceeding a turndown level (parameter MXMT).

In the case of a single parent family, the Married Tax Credit may be attributed on behalf of an eligible dependant – the equivalent to married credit -- and is calculated using the EMXM and EMXMT parameters and is recorded in the variable imcemc.

#### **CROSS REFERENCE**

Function	Description
txhstr txcalc txns txont txman txsask txbc	<ul> <li>(o) Compute family-related deductions or credits</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Saskatchewan</li> <li>(i) Compute provincial taxes for British Columbia</li> </ul>
immdisp	Disposable income

#### **DESCRIPTION**

Disposable income is total income (immtot) minus total income taxes (immtax).

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Function	Description
memo1 ctmod memo2	<ul><li>(io) Compute memo items for reporting</li><li>(i) Compute commodity taxes for individuals and households</li><li>(i) Compute consumable income, etc.</li></ul>
immeda	Medical expenses allowed (computed)

#### **DESCRIPTION**

Estimated total medical expenses, used in the calculation of non-refundable tax credit.

### **CROSS REFERENCE**

Function	Description
txitax	(io) Compute taxable income and individual credits
immedatc	Medical expenses allowed tax credit

## **DESCRIPTION**

The parameter MDCROPT determines whether Medical Expenses and Charitable Donations are applied as Deductions (MDCROPT=1) or Tax Credits (MDCROPT=2). If they are applied as Tax Credits, the imputed Medical Expenses Deduction Allowable (idmeda) is multiplied by the Medical Expenses Tax Credit Rate (parameter MEDTCR). The resultant Medical Expenses Tax Credit is reported in immedatc.

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**Function** Description

txitax (o) Compute taxable income and individual credits

txcalc (i) Calculate federal income tax

**immemp** All employment income

## **DESCRIPTION**

The sum of all employment and self-employment income (idiemp, idisenf, idisefm).

### **CROSS REFERENCE**

Function Description

memo1 (io) Compute memo items for reporting

**immicons** Consumable income

### **DESCRIPTION**

This represents disposable income (immdisp) minus modeled Commodity Taxes (imtxfc + imtxpc).

### **CROSS REFERENCE**

Function	Description
memo1 memo2 cceopt	<ul><li>(o) Compute memo items for reporting</li><li>(o) Compute consumable income, etc.</li><li>(i) zero CCE for young kids if optimal</li></ul>

The sum of all investment income:

- idiroom, income from roomers and boarders
- idiint, interest income
- ididiv, dividend income received
- idicapg, capital gains received
- idioiny, other investment income.

## **CROSS REFERENCE**

**Function** Description

memo1 (io) Compute memo items for reporting

**immmkt** Market income

#### **DESCRIPTION**

The sum of all Market Income: immemp, imminv, immoth.

### **CROSS REFERENCE**

Function Description

memo1 (io) Compute memo items for reporting

**immoth** Other income

### **DESCRIPTION**

Other Market Income not included in employment income (immemp) or investment income (imminv). The sum of pension income (idipens), taxable other income (iditoth), and non-taxable other income (idinoth).

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Function Description

memo1 (io) Compute memo items for reporting

**immtax** All taxes

#### **DESCRIPTION**

The sum of all transfers from individuals to the federal and provincial government: imftax plus imptax.

## **CROSS REFERENCE**

Function Description

memo1 (io) Compute memo items for reporting memo2 (io) Compute consumable income, etc.

**immtot** Total income

### **DESCRIPTION**

All income received by individuals. The sum of Market Income (immmkt) and Transfer Income (immtran).

#### **CROSS REFERENCE**

Function Description

memo1 (io) Compute memo items for reporting memo2 (i) Compute consumable income, etc.

The sum of all transfers from the government to individuals: imptran plus imftran.

### **CROSS REFERENCE**

Function	Description
memo1 memo2	<ul><li>(io) Compute memo items for reporting</li><li>(i) Compute consumable income, etc.</li></ul>
imnbcbb	NB child tax Benefits base amount

### **DESCRIPTION**

Total benefits received less earned income benefits received under the New Brunswick Child Benefits program announced in the 1997 New Brunswick Budget and commencing in April 1997.

### **CROSS REFERENCE**

Function	Description
txnb	(o) Compute provincial taxes for New Brunswick
imnbcben	Total NB child tax Benefits

### **DESCRIPTION**

Total benefits received under the New Brunswick Child Benefits program announced in the 1997 New Brunswick Budget and commencing in April 1997.

When NBCTBFLG is assigned a value of 1, the New Brunswick Child Tax Benefit calculation is activated. iminbcben is the total of two components. A first component is the

Algorithm Guide Page 187 Version 5.0 11/19/97 base amount, imnbcbc, which is calculated as the base amount per child, NBCBBAS, times the number of children. The level of benefit is reduced, based on family income, at a rate NBCBRRS for families with only one child, and at rate NBCBRR for the others.

A second component is the work income supplement, imnbwis. If the family gross employment income is higher than a threshold, NBCBECI, then the maximum supplement is NBCBEIS. The supplement is reduced at a rate NBCBESR for each \$ of employment income exceeding the threshold FCBECI. If the family income is higher than NBCBETD then the work income supplement is reduce at a rate NBCBERR

#### **CROSS REFERENCE**

Function	Description
txnb memo1	<ul><li>(o) Compute provincial taxes for New Brunswick</li><li>(i) Compute memo items for reporting</li></ul>
imnbwis	NB child tax Benefits WIS

## **DESCRIPTION**

This variable contains the value of the supplemental earned income benefits received under the New Brunswick Child Benefits program announced in the 1997 New Brunswick Budget and commencing in April 1997.

The value of this variable is calculated as a percentage (NBCBESR) of neuclear family employment income above a threshold (NBCBECI) to a maximum of NBCBEIS less a percentage (NBCBERR) of nuclear family net income in excess of the threshold NBCBETD.

#### **CROSS REFERENCE**

Function	Description
txnb	(o) Compute provincial taxes for New Brunswick
imnettr	Net transfers to person

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This variable contains the difference between all government transfers received by an individual, less all taxes (including commodity taxes) paid by that individual.

#### **CROSS REFERENCE**

Function	Description
memo2	(o) Compute consumable income, etc.
imnfach	Number of family allowance children claimed

### **DESCRIPTION**

The number of children under 18 living at home and, therefore, eligible to be claimed for family allowances. This is used in the calculation of Family Allowances, the Child Tax Credit, the Saskatchewan Tax Reduction and the Sales Tax Credit.

## **CROSS REFERENCE**

Function	Description
fa txinet txont txman txsask	<ul> <li>(o) Compute family allowance</li> <li>(io) Compute net income</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Saskatchewan</li> </ul>
imninc	No income flag

#### **DESCRIPTION**

This flag is used to indicate whether the individual has no income of any kind, including transfers. 'Glass box' users should note that immine must be set to false (0) if any income is assigned to an individual. immine allows efficiency improvements in various parts of SPSM.

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Function	Description
ui	(o) Compute UI benefits
fa	(o) Compute family allowance
oas	(o) Compute OAS for elderly
txinet	(io) Compute net income
txccea	(o) Compute child care expense allowance
txitax	(i) Compute taxable income and individual credits
txnfld	(o) Compute provincial taxes for Newfoundland
txnb	(o) Compute provincial taxes for New Brunswick
txqinet	(i) Compute net income (Quebec)
txqitax	(i) Compute taxable income and individual credits (Quebec)
txont	(o) Compute provincial taxes for Ontario
txalta	(o) Compute provincial taxes for Alberta
txbc	(o) Compute provincial taxes for British Columbia
gis <sub>.</sub>	(o) Compute GIS/SPA for elderly
senben	(o) Compute Seniors Benefit for elderly
gist	(o) Compute Provincial GIS top-ups for elderly
sa	(o) Compute social assistance or guarantees
txctc	(o) Compute child tax credit
txfstc	(o) Compute federal sales tax credit
memo1	(i) Compute memo items for reporting
ctmod	(io) Compute commodity taxes for individuals and households
memo2	(i) Compute consumable income, etc.
cceopt	(o) zero CCE for young kids if optimal
imnptc	Non-refundable provincial tax credits

# **DESCRIPTION**

Total non-refundable provincial tax credits which may only be used to reduce provincial tax payable to zero. Includes, for example, provincial foreign tax credits and provincial political contribution tax credits.

# **CROSS REFERENCE**

Function	Description
txqcalc	(o) Calculate income tax (Quebec)
txnfld	(io) Compute provincial taxes for Newfoundland

txpei	(io) Compute provincial taxes for P.E.I.
txns	(io) Compute provincial taxes for Nova Scotia
txnb	(io) Compute provincial taxes for New Brunswick
txont	(io) Compute provincial taxes for Ontario
txman	(io) Compute provincial taxes for Manitoba
txsask	(io) Compute provincial taxes for Saskatchewan
txalta	(io) Compute provincial taxes for Alberta
txbc	(io) Compute provincial taxes for British Columbia

**imoaspar** Partial OAS residency flag

# **DESCRIPTION**

This flag indicates if the individual had the full amount of OAS reduced due to limited Canadian residence.

## **CROSS REFERENCE**

Function	Description
oas gis senben	<ul><li>(o) Compute OAS for elderly</li><li>(i) Compute GIS/SPA for elderly</li><li>(i) Compute Seniors Benefit for elderly</li></ul>
imoasr	OAS recovery

# **DESCRIPTION**

Repayment of OAS benefits under the repayment of social benefits provisions (clawback) of the Income Tax Act.

## **CROSS REFERENCE**

Function	Description
txinet txqitax	<ul><li>(io) Compute net income</li><li>(i) Compute taxable income and individual credits (Quebec)</li></ul>

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This variable contains the proportion of full OAS that the individual was eligible to receive. The amount of OAS is reduced depending on how many years the individual was resident in Canada prior to reaching age 65.

#### **CROSS REFERENCE**

Function	Description	
oas gis senben	<ul><li>(io) Compute OAS for elderly</li><li>(i) Compute GIS/SPA for elderly</li><li>(i) Compute Seniors Benefit for elderly</li></ul>	
imoccea	Ont. Child Care Exp. credit allowed (Family)	

## **DESCRIPTION**

This is the calculated amount of the Ontario refundable child care expense tax credit. When the parameter OCCEAFLG is set to 1, the maximum amount of the benefit is calculated as the lower of either actual child care expenses (imccet) or of a specified amount per child (OCCEAYNG) times the number of children age 6 and under in the census family. Maximum family benefits are then reduced by a proportion (OCCEARR) of family net income above the threshold (OCCEATD). The model assigns the imputed Child Care credit (imoccea) to the mother if present or otherwise to the head of the census family.

#### **CROSS REFERENCE**

Function	Description
txont memo1	<ul><li>(o) Compute provincial taxes for Ontario</li><li>(i) Compute memo items for reporting</li></ul>
imoccec	Ont. Child Care Exp. credit allowed (child)

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This is the actual amount of refundable Ontario child care expenses tax credits claimed on behalf of this particular child.

### **CROSS REFERENCE**

Function Description

txont (o) Compute provincial taxes for Ontario

**imoftca** Other federal tax credits applied (416)

#### DESCRIPTION

This variable represents the amount of other tax credits that can be used to reduce federal tax payable. If other tax credits (idlabtaxc+imfptc+iditc) exceed basic federal tax less reductions (imbft - imftr), imoftca is set to basic federal tax less reductions(imbft - imftr). Otherwise it is set equal to (idlabtaxc+imfptc+iditc).

#### CROSS REFERENCE

Function Description

txcalc (io) Calculate federal income tax

**imoldtyp** Type of GIS/SPA nuclear family

#### **DESCRIPTION**

This class variable indicates what type of elderly support program the individual may be eligible for.

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Function Description

gis (o) Compute GIS/SPA for elderly senben (o) Compute Seniors Benefit for elderly

**imonteht** Ontario Employers Heath Tax (Self-employed)

#### DESCRIPTION

This is the value of the Ontario Employer Health Tax. It only applies to self-employed persons, and is calculated when OEHTFLAG is set to 1. This value represents the total tax minus the deduction.

## **CROSS REFERENCE**

**Function** Description

txont (io) Compute provincial taxes for Ontario

**imothrep** Other federal repayments

## **DESCRIPTION**

The SPSM includes optional algorithms which allow the analysis of the effects of the deuniversalization of Family Allowances and the Old Age Supplement. This variable contains the sum of these repayments. It is calculated by subtracting the UI Benefit Repayment (imuibr) from the sum of all repayments (imrepay).

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Function Description

memo2 (o) Compute consumable income, etc.

**impalltc** All refundable provincial tax credits

### **DESCRIPTION**

This variable is the sum of Other Refundable Provincial Tax Credits (importc) and Refundable Provincial Tax Credits (imptc).

## **CROSS REFERENCE**

Function Description

memo1 (o) Compute memo items for reporting

**impeht** Provincial elderly health tax

#### DESCRIPTION

Total provincial tax levied specifically for health care for the elderly. Currently this variable is only used by Nova Scotia for its Pharmacare program.

#### **CROSS REFERENCE**

Function Description

txns (io) Compute provincial taxes for Nova Scotia

**impehtc** Provincial elderly health tax credit

Total provincial refundable tax credits specifically for purposes of health care for the elderly. Currently this variable is only used by Nova Scotia for its Pharmacare program.

### **CROSS REFERENCE**

Function	Description

txns (io) Compute provincial taxes for Nova Scotia

**impendn** Pension income deduction allowed

## **DESCRIPTION**

The parameter YPNOPT determines whether a Pension Income Deduction (YPNOPT=1) or Pension Income Tax Credit (YPNOPT=2) is calculated.

The deduction is calculated to be the lesser of the Maximum Pension Income Deduction (parameter YPNDL) and Total Eligible Pension Income (idipens).

#### CROSS REFERENCE

Function	Description
txitax txhstr txcalc	<ul><li>(io) Compute taxable income and individual credits</li><li>(i) Compute family-related deductions or credits</li><li>(i) Calculate federal income tax</li></ul>
impentxc	Pension income tax credit

### **DESCRIPTION**

Depending upon the setting of parameter YPNOPT, the model computes either a Pension Income Deduction (YPNOPT=1) or a Pension Income Tax Credit (YPNOPT=2). The Pension Income Tax Credit is calculated as a proportion (parameter YPNTR) of pension

Algorithm Guide Page 196 Version 5.0 11/19/97 income (idipens) up to a maximum set by parameter YPNTL.

#### **CROSS REFERENCE**

Function	Description
txitax txcalc	<ul><li>(o) Compute taxable income and individual credits</li><li>(i) Calculate federal income tax</li></ul>
impex	All personal exemptions and deductions

#### **DESCRIPTION**

This variable contains the filer's total personal exemptions. It is calculated as the sum of the filers own personal exemptions: Basic Exemption, Age Exemption (imexm), Deductions for Wholly Dependent Children (imcdeds), the Married or Equivalent Exemption (immarex), and Other Personal Exemptions (idothpe).

This variable is valid for the period before 1988 (PEROPT = 1).

## **CROSS REFERENCE**

Function	Description
txitax	(io) Compute taxable income and individual credits
txhstr	(o) Compute family-related deductions or credits
txont	(i) Compute provincial taxes for Ontario
txman	(i) Compute provincial taxes for Manitoba
impfa	Provincial family allowance

#### **DESCRIPTION**

For Quebec, the provincial contribution to family allowance is calculated based on the number of children under the age of 18. See the description of the parameter QFPSL in the SPSD/M Parameter Guide.

Function	Description
txqcalc fa memo1	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute family allowance</li><li>(i) Compute memo items for reporting</li></ul>
impfp	Provincial family programs

### **DESCRIPTION**

This aggregate variable is calculated as a sum of all provincial family allowance programs. It represents the total benefits from

## **QUEBEC**

the Quebec Provincial family allowance program (impfa),

the Quebec Newborn Allowance program (imnbcben),

the Quebec Availability Allowance (imqaafa) when paid as a supplement to family allowances,

#### **ONTARIO**

the Ontario refundable child care expense tax credit (imoccea),

#### **BRITISH COLUMBIA**

the British Columbia family bonus (imibcfb) that started in 1996.

## **CROSS REFERENCE**

Function	Description
txalta memo1	(o) Compute provincial taxes for Alberta (io) Compute memo items for reporting
imphotc	Provincial HOSP tax credits

Total provincial home ownership savings plan tax credits. Currently this variable is only used by Nova Scotia.

### **CROSS REFERENCE**

Function Description

txns (io) Compute provincial taxes for Nova Scotia

**impnit** Provincial net income tax

### **DESCRIPTION**

Total provincial net income tax calculated as a percentage of either net income (iminet in Manitoba and Saskatchewan) or taxable income (imitax in Alberta) in the T1C form.

## **CROSS REFERENCE**

Function	Description
txman txsask txalta	<ul><li>(o) Compute provincial taxes for Manitoba</li><li>(io) Compute provincial taxes for Saskatchewan</li><li>(io) Compute provincial taxes for Alberta</li></ul>
importc	Other refundable provincial tax credits

## **DESCRIPTION**

This variable includes the other refundable tax credit and is not currently used (value is 0).

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Function Description

memo1 (i) Compute memo items for reporting

**impoth** Provincial other government income

#### **DESCRIPTION**

This variable contains other transfers received by the individual from provincial government. At the moment, no other transfers are modelled, so the value of this variable is always zero.

## **CROSS REFERENCE**

Function Description

memo1 (o) Compute memo items for reporting

**impovinc** Income for low income measurement

#### DESCRIPTION

This variable contains the value of income used for low income line analysis. To avoid double-counting, this value contains economic family income, but only for the first person in the economic family. An expression of the form EF:impovinc < efpovthr would identify individuals in families below the low income threshold.

The family income for poverty analysis purposes is total income.

Function	Description
memo2	(o) Compute consumable income, etc.
impptc	Provincial Political Contrib Tax Credit

## **DESCRIPTION**

Total allowable provincial political contribution tax credit. Currently calculated for all provinces except Saskatchewan and Newfoundland. From form T1C in the Tax Guide.

## **CROSS REFERENCE**

Function	Description
txqcalc txnfld txpei txns txnb txont txman txalta	<ul> <li>(io) Calculate income tax (Quebec)</li> <li>(io) Compute provincial taxes for Newfoundland</li> <li>(io) Compute provincial taxes for P.E.I.</li> <li>(io) Compute provincial taxes for Nova Scotia</li> <li>(io) Compute provincial taxes for New Brunswick</li> <li>(io) Compute provincial taxes for Ontario</li> <li>(io) Compute provincial taxes for Manitoba</li> <li>(io) Compute provincial taxes for Alberta</li> </ul>
impptg	(io) Compute provincial taxes for British Columbia  Provincial property tax grant for seniors

## **DESCRIPTION**

This is a modelled variable. Ontario has a significant property tax grant program for the elderly the effective value of which is held in this variable. Ontario is the only province for which the SPSM currently uses this variable.

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Function Description

gist (io) Compute Provincial GIS top-ups for elderly

**impptxtc** Provincial Property tax tax credit

## **DESCRIPTION**

Total provincial property tax credit allowed. Currently available only in Manitoba.

### **CROSS REFERENCE**

Function Description

txman (o) Compute provincial taxes for Manitoba

**improptx** Imputed property tax paid

### **DESCRIPTION**

For the purposes of provincial tax credit calculations in Ontario, Manitoba, and British Columbia, property taxes from the FAMEX imputed to the heads of census families and their spouses (if they earned income).

### **CROSS REFERENCE**

Function	Description
txhhexp txont txman	<ul><li>(io) Compute and pro-rate household taxes, rent, etc.</li><li>(i) Compute provincial taxes for Ontario</li><li>(i) Compute provincial taxes for Manitoba</li></ul>

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This variable contains all provincial taxes (including commodity taxes) collected from an individual, less provincial transfers received by that individual.

### **CROSS REFERENCE**

Function	Description
memo2	(o) Compute consumable income, etc.
impsa	Provincial social assistance

## **DESCRIPTION**

impsa is the difference between the modelled Social Assistance income (imisa) and the share assumed by the Federal government (imfsa) under the Canada Assistance Plan.

## **CROSS REFERENCE**

Function	Description
sa memo1	<ul><li>(o) Compute social assistance or guarantees</li><li>(i) Compute memo items for reporting</li></ul>
impstg	Provincial sales tax grant for seniors

## **DESCRIPTION**

This is a modelled variable. Ontario has a significant sales tax grant program for the elderly. Ontario is the only province for which the SPSM currently uses this variable.

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Function Description

gist (io) Compute Provincial GIS top-ups for elderly

**impsur** Provincial surtax

# **DESCRIPTION**

This variable records the amount of various provincial surtaxes directly, so that it can be accessed by the SPSM black box facilities.

## **CROSS REFERENCE**

Function	Description	
txqcalc txnfld txpei txns txnb txont txman	<ul> <li>(io) Calculate income tax (Quebec)</li> <li>(io) Compute provincial taxes for Newfoundland</li> <li>(io) Compute provincial taxes for P.E.I.</li> <li>(io) Compute provincial taxes for Nova Scotia</li> <li>(io) Compute provincial taxes for New Brunswick</li> <li>(io) Compute provincial taxes for Ontario</li> <li>(io) Compute provincial taxes for Manitoba</li> </ul>	
txsask txalta txbc	<ul><li>(io) Compute provincial taxes for Saskatchewan</li><li>(io) Compute provincial taxes for Alberta</li><li>(io) Compute provincial taxes for British Columbia</li><li>Provincial taxes</li></ul>	

### **DESCRIPTION**

This variable is the total of all Provincial Taxes. It is calculated as the sum of net provincial taxes (imtxp) and provincial commodity taxes (imtxpc).

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Function	Description	
memo1 memo2	(io) Compute memo items for reporting (io) Compute consumable income, etc.	
imptc	Refundable provincial tax credits	

# **DESCRIPTION**

This is the calculated value for refundable provincial tax credits.

# **CROSS REFERENCE**

Function	Description
txqcalc txnfld txns txont txman txsask txbc memo1	<ul> <li>(o) Calculate income tax (Quebec)</li> <li>(o) Compute provincial taxes for Newfoundland</li> <li>(o) Compute provincial taxes for Nova Scotia</li> <li>(o) Compute provincial taxes for Ontario</li> <li>(o) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Saskatchewan</li> <li>(io) Compute provincial taxes for British Columbia</li> <li>(i) Compute memo items for reporting</li> </ul>
imptr	Provincial tax reduction

## **DESCRIPTION**

This variable records the amount of provincial reduction directly, so that it can be accessed by the SPSM black box facilities.

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Function	Description
txqcalc	(io) Calculate income tax (Quebec)
txns	(io) Compute provincial taxes for Nova Scotia
txont	(io) Compute provincial taxes for Ontario
txman	(io) Compute provincial taxes for Manitoba
txsask	(io) Compute provincial taxes for Saskatchewan
txalta	(io) Compute provincial taxes for Alberta
txbc	(io) Compute provincial taxes for British Columbia
imptran	Provincial transfer income

## **DESCRIPTION**

This variable represents all transfers from the provincial government to individuals. It is calculated as the sum of Provincial family programs (impfp), GIS Top-ups (imigist), Provincial Tax Credits (imptc), Provincial Social Assistance (impsa) and the Other refundable tax credits (importc – current value is 0).

## **CROSS REFERENCE**

Function	Description
memo1 memo2	<ul><li>(io) Compute memo items for reporting</li><li>(i) Compute consumable income, etc.</li></ul>
imqaafa	Quebec Availability Allowance FA Supplement

### **DESCRIPTION**

Amount of Quebec Availability Allowance administered as a supplement to family allowances. When QAAFAFLAG is set to one imqaafa is set to an appropriate value in the QAAFA table parameter.

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Function Description

fa (o) Compute family allowance

memo1 (i) Compute memo items for reporting

**imqaarc** Quebec Availability Allowance Refunded Tax Credit

#### DESCRIPTION

Amount of Quebec Availability Allowance administered as a refundable tax credit. When QAARCFLAG is set to one imqaarc is set to an appropriate value in the QAARC table parameter.

#### **CROSS REFERENCE**

Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqalexp** Quebec allowable employment expenses

#### DESCRIPTION

The original value for Other Allowable Employment Expenses (idalexp) is imputed from the Green Book. This value is also used for the calculation of the value for Other Allowable Employment Expenses for the calculation of Quebec income tax. The model allows for a reduction or increase in this value by multiplying by the parameter QALEXP. The result is saved in the variable impalexp.

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Function Description

txqinet (io) Compute net income (Quebec)

**imqatc** Quebec age tax credit

## **DESCRIPTION**

This variable represents one of the tax credits used in the post-reform Quebec tax system. It is calculated for the individual and summed with the remainder of the Quebec tax credits into improve, the variable which holds total tax credits.

### **CROSS REFERENCE**

Function	Description
txqcalc txqitax	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute taxable income and individual credits (Quebec)</li></ul>
imqaxm	Quebec age personal exemption

## **DESCRIPTION**

Quebec filers over the age of 65 receive an additional personal exemption as specified by the parameter QAXM.

This variable is valid only if QREFOPT is set to 1.

Function	Description
txqitax txqhstr	<ul><li>(o) Compute taxable income and individual credits (Quebec)</li><li>(i) Compute family-related deductions or credits (Quebec)</li></ul>
imqbtc	Quebec basic tax credit

## **DESCRIPTION**

This variable is the basic personal the tax credits used in the post-reform (after 1988) Quebec tax system. It is calculated for the individual and summed with the remainder of the Quebec tax credits into imputote, the variable which holds total tax credits.

## **CROSS REFERENCE**

Function	Description
txqcalc txqitax	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute taxable income and individual credits (Quebec)</li></ul>
imqcapgt	Quebec taxable capital gains

# **DESCRIPTION**

As in the federal case, for the calculation of Quebec income tax, only a portion of capital gains are taxable. This variable is calculated as a proportion (QCAPGIR) of capital gains received (idicapg).

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Function	Description
txqinet txqitax	<ul><li>(io) Compute net income (Quebec)</li><li>(i) Compute taxable income and individual credits (Quebec)</li></ul>
imqccea	Quebec child care expenses allowed (dedn)

### **DESCRIPTION**

For the Quebec provincial tax calculation, the model reassigns the imputed Child Care Exemptions (imqccea) to the spouse with the lower modeled net income for Quebec tax (imqinet).

This variable is valid only if QCCEOPT is set to 1.

### **CROSS REFERENCE**

Function	Description
txqccea	(o) Compute child care expense allowance (Quebec)
imqcceni	Quebec net income for refundable cce credit calculation

### **DESCRIPTION**

When QCCEOPT is set to 2, the refundable childcare expense tax credit uses head plus spouses net income (imqcceni) to determine what proportion of allowable childcare expenses (QCCETCR) may be claimed for the tax credit. The net income is defined as follows.

imqinet Plus	Quebec net income
idrpp	Registerd pension plan receipts
idrrsp	RRSP receipts
imisa	Social Assistance
imigis	Guaranteed Income Supplement
imispa	Spouses Allowance

Less the amount of

imqcpptc CPP tax credit imquictc UI Tax Credit

imqhsfc Heatlh Services Fund contributions

imqlatc living alone tax credit

imqdctc dependent children tax credit

QEIAA for elderly

#### **CROSS REFERENCE**

Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqccetc** Quebec refundable child care expenses Tax Credit

#### **DESCRIPTION**

When QCCEOPT is set to 2, the amount of the refundable childcare expense tax credit. is calculated as a proportion (QCCETCR) of allowable childcare expenses. Allowable expenses are calculated in the same manner as those for the childcare expense deduction (imqccea). Namely the lesser of total childcare expenses for the family (idccett) and the allowable expenses for children age 6 and under (QCCEAYNG) plus the allowance for children age 7-14 (QCCEAOLD).

#### **CROSS REFERENCE**

Function Description

txqcalc (o) Calculate income tax (Quebec)

**imqcdeds** Quebec dependent children deduction

#### **DESCRIPTION**

For the calculation of Quebec provincial taxes, the contribution of each dependant to the Exemption for Wholly Dependent Children is calculated based on their ages, school attendance, and net income. The amounts for all children are accumulated into the variable

Algorithm Guide Page 211 Version 5.0 11/19/97 imqcdeds. The result is claimed by the spouse with the higher income. In the case of single-parent families, this total amount may be reduced because of the application of the Married Equivalent Exemption.

This variable is valid only if QREFOPT is set to 1.

#### **CROSS REFERENCE**

Function	Description
txqcalc txqhstr	<ul><li>(i) Calculate income tax (Quebec)</li><li>(io) Compute family-related deductions or credits (Quebec)</li></ul>
imqchara	Quebec allowable charitable donations(calc)

### **DESCRIPTION**

Total allowable charitable donations in Quebec. Calculated as the lesser of total charitable donations ideharit and the percentage QCHATNF of net income imqinet.

When QREFOPT is set to 2, it also includes idgifts, Gifts to Canada, province and culture.

#### **CROSS REFERENCE**

Function	Description
txqitax	(io) Compute taxable income and individual credits (Quebec)
imqcpptc	Quebec CPP/QPP contributions tax credit

## **DESCRIPTION**

This variable contains the value of the Quebec non-refundable tax credit given for CPP/QPP payroll taxes. It is only calculated if QCPPOPT is set to 2. It is calculated as total CPP/QPP contributions (imcqppc) times the Quebec non-refundable nominal tax credit rate (QNTCR).

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Function	Description	
txqcalc txqinet	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute net income (Quebec)</li></ul>	
imqdctc	Quebec dependent child tax credits	

### **DESCRIPTION**

This variable contains the tax credit entitlement with respect to dependent children. It is used in the post-reform (after 1988) Quebec tax system. It is calculated for the individual and summed with the remainder of the Quebec tax credits into imptotte, the variable which holds total tax credits.

### **CROSS REFERENCE**

Function	Description
txqcalc txqhstr	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute family-related deductions or credits (Quebec)</li></ul>
imqdedea	Quebec employment allowance

### **DESCRIPTION**

Before 1993, as a deduction from total income, the Quebec employment allowance is calculated as the minimum of a base amount (parameter QEAMAX) and a percentage (parameter QEAP) of employment income (idiemp). Since 1993 this variable is zero.

Function	Description
----------	-------------

txqinet (io) Compute net income (Quebec)

**imqdedfn** Quebec all deductions from net income

### **DESCRIPTION**

When QREFOPT is set to 1 the variable represents the sum of all the following deductions from net income (imqinet):

```
Imqstddn
                  /* modelled standard deduction
                                                        */
                      /* Gifts to governments
                                                        */
idgifts
imqintdn
                  /* modelled interest deduction
                                                       */
imqpendn
                  /* modelled pension deduction
                                                        */
                  /* modelled disability exemption
                                                        */
imgdisex
idcloss
                  /* allowable other yrs capital loss
idnclos
                  /* allowable prior yrs non-capital loss */
                  /* Federal repayments */
imrepay
```

When QREFOPT is set to 2 the variable represents the sum of all the following deductions (when they apply) from net income (imqinet):

```
idcloss
                  /* allowable other yrs capital loss
                  /* allowable prior yrs non-capital loss */
idnclos
                  /* Federal repayments */
imrepay
                  /* charitable contributions & gifts */
imqchara
                  /*home relocation loan deduction include in other deductions/
idemplo
idstkded
                  /*stock option deduction as part of other deduction */
idnorth
                      /*Northern deduction used as designated remote area */
idcapgex
                  /Capital gains exemption */
```

#### CROSS REFERENCE

Function	Description
txgitax	(io) Compute taxable income and individual credits (Quebec)

## **imqdedft** Quebec deductions from total income

# **DESCRIPTION**

For Quebec filers, this item is the sum of all deductions from total income:

- Employment allowance (imqdedea) if QEAP > 0,
- CPP/QPP Contributions (imcqppc) if QCPPOPT is set to 1,
- UI Premiums (imuic) if QUICOPT is set to 1,
- RPP Contributions (idrpp),
- RRSP Contributions (idrrsp),
- Union and Professional Dues (iddues),
- Other employment expenses (imqalexp),
- Tuition Fees (idtuitn),
- Child Care Expenses allowed (imaccea) if QCCEOPT is set to 1,
- Allowable Business Investment Losses, Indexed Security Investment Plan allowable capital losses (idiloss),
- Carrying charges (idcarry),
- Other Deductions from total income (idothded),
- Moving expenses (idmovexp),
- Alimony allowance paid out (iddalimo).

No data was available to include exploration expenses when considered as a deduction from total income.

### **CROSS REFERENCE**

Function	Description
txqinet txqccea	<ul><li>(io) Compute net income (Quebec)</li><li>(o) Compute child care expense allowance (Quebec)</li></ul>
imqdedt	Quebec deductions transfered from spouse

### **DESCRIPTION**

For the calculation of Quebec provincial taxes, the Investment Income Deduction (imqintdn), Pension Income Deduction (imqpendn) and Disability Deduction (imqdisex) are eligible to be transferred to the spouse with the higher income. Any amount in excess of the amount

Algorithm Guide Page 215 Version 5.0 11/19/97 required to reduce one spouse's taxable income to zero may be transferred to the other spouse. impdedt represents the amount actually transferred.

## **CROSS REFERENCE**

Function	Description
txqcalc txqhstr	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute family-related deductions or credits (Quebec)</li></ul>
imqdepni	Quebec dependant's net income

## **DESCRIPTION**

Net income of dependants calculated for the purpose of determining the amount of credit which may be transferred to the person in the household claiming the dependent.

### **CROSS REFERENCE**

Function	Description
txqhstr	(io) Compute family-related deductions or credits (Quebec)
imqdisex	Quebec disability exemption

### **DESCRIPTION**

Blind persons or persons confined to a wheelchair or a bed are eligible to claim either a special deduction. The model substitutes the maximum allowable disability deduction (QMAXDX) if iddisex is greater than zero. This allows scaling the value of the deduction up or down. The value resulting from this substitution is impdisex.

This variable is valid only if QREFOPT is set to 1.

Function	Description
txqitax txqhstr	<ul><li>(io) Compute taxable income and individual credits (Quebec)</li><li>(i) Compute family-related deductions or credits (Quebec)</li></ul>
imqdistc	Quebec disability tax credit

## **DESCRIPTION**

This variable contains the disability tax credit used in the post-reform (after 1988) Quebec tax system. It is calculated for the individual and summed with the remainder of the Quebec tax credits into imputote, the variable which holds total tax credits.

## **CROSS REFERENCE**

Function	Description
txqcalc txqitax	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute taxable income and individual credits (Quebec)</li></ul>
imqdtxc	Quebec dividend tax credit

# **DESCRIPTION**

This item is the dividend tax credit for the calculation of Quebec provincial taxes. It is calculated as a fraction (parameter QDTCR) of the Taxable amount of Canadian Dividends (imqidivt).

Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqei** Quebec eligible income for tax reduction

### **DESCRIPTION**

A family's entitled amount of the Quebec family tax reduction is reduced by imqei. See the txqcalc function section in the SPSM Algorithm Guide.

## **CROSS REFERENCE**

Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqexm** Quebec personal exemptions (Basic+Age)

### **DESCRIPTION**

This variable represents the personal exemptions claimed on behalf of the filer for calculating Quebec income tax. It is calculated as the sum of Basic Exemption (parameter QBXM) and the Age Exemption (imqaxm) for the Quebec provincial tax calculation.

This variable is valid only if QREFOPT is set to 1.

### **CROSS REFERENCE**

Function Description

txqitax (io) Compute taxable income and individual credits (Quebec)

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This variable records the classification of family type used in the calculation of the family eligible income for tax reduction.

### **CROSS REFERENCE**

txqcalc (io) Calculate income tax (Quebec)

**imqftr** Quebec family tax reduction

### **DESCRIPTION**

Actual amount of reduction based on income and family classification. Applied to spousal tax payable and then to elder, if any remaining.

### **CROSS REFERENCE**

Function	Description	
txqcalc	(io) Calculate income tax (Quebec)	

Description

**imqhsfc** Quebec Health Services Fund Contributions

### **DESCRIPTION**

Eunction

This is the amount payable as a Quebec Health Services Fund Contribution. It is calculated when QHSCFLAG is set to 1. It is calculated as an interpolated table lookup of parameter QHSC using a net income concept described below.

The net income used to lookup an individual's contribution is defined as:

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imqitot Total Income

less

idiemp Wages and salaries

imioas \* QHSOASFG Optional exemption of OAS benefits

imoasr \* !QHSOASFG OAS Repayments

imuibr UI Repayments iddalimo Alimony Paid idcarry Carrying charges

idiloss Allowable investment losses

See also:

lkup1 Table lookup with interpolation

### **CROSS REFERENCE**

Function Description

txqcalc (i) Calculate income tax (Quebec)

txqitax (io) Compute taxable income and individual credits (Quebec)

**imqhsftc** Quebec Health Services Fund Cont.tax credit

### DESCRIPTION

This variable is the maximum tax value of the non-refundable Quebec health services fund contibution tax credit. It is calculated as the actual contributions to the Quebec heath services fund (imphsfc) times the Quebec non-refundable tax credit nominal rate (QNTCR).

### **CROSS REFERENCE**

Function Description

txqcalc (i) Calculate income tax (Quebec)

txqitax (o) Compute taxable income and individual credits (Quebec)

**imqidivt** Quebec taxable dividends

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This represents the taxable amount of dividends from taxable Canadian Corporations for the purpose of computing Quebec income tax. It is calculated by multiplying the actual amount of dividends (ididiv) by the Quebec Dividend Gross-up Rate (QDGUR).

## **CROSS REFERENCE**

Function	Description
txqcalc txqinet txqitax	<ul><li>(i) Calculate income tax (Quebec)</li><li>(io) Compute net income (Quebec)</li><li>(i) Compute taxable income and individual credits (Quebec)</li></ul>
imqinet	Quebec net income

## **DESCRIPTION**

This corresponds to Revenue Quebec's definition of Net Income:

- Total income impitot, minus
- deductions from total income (imqdedft).

The only exception in this definition is that RHOSP contributions for 1984 are not deducted.

## **CROSS REFERENCE**

Function	Description
txqcalc txqinet txqccea txqitax txqhstr	<ul> <li>(i) Calculate income tax (Quebec)</li> <li>(o) Compute net income (Quebec)</li> <li>(io) Compute child care expense allowance (Quebec)</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute family-related deductions or credits (Quebec)</li> </ul>
imqintdn	Quebec interest income deduction allowed

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This is calculated as the smaller of the Maximum Interest Income Deduction (parameter QYIDL) and the sum of:

Interest Income (idiint),

Taxable Dividends (imqidivt- idcarry)

# **CROSS REFERENCE**

Function	Description	
txqitax txqhstr	<ul><li>(io) Compute taxable income and individual credits (Quebec)</li><li>(i) Compute family-related deductions or credits (Quebec)</li></ul>	
imqitax	Quebec taxable income	

## **DESCRIPTION**

This is the sum of all total income for Quebec income tax purposes (imqitot) minus all deductions (imqdedft and imqdedfn) and personal exemptions (imqpex).

## **CROSS REFERENCE**

Function	Description
txqcalc txqitax txqhstr	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute taxable income and individual credits (Quebec)</li><li>(io) Compute family-related deductions or credits (Quebec)</li></ul>
imqitot	Quebec total income

## **DESCRIPTION**

This is similar to the federal definition of total income except the addition of the family

#### allowance

- idiemp: Earnings From Employment
- imioas: Modeled OAS Benefits
- idicqp: CPP/QPP Benefits Received
- idipens: Pension Income
- imiuib: Modeled Unemployment Insurance Benefits Received
- iditoth: Other Taxable Income
- idiroom: Net Income From Roomers and Boarders
- idisefm: Self-employment Earnings (Farm)
- idisenf: Self-employment Earnings (Non-farm), scaled by the parameter FACTISENF (normally set to 1)
- idiint: Interest Income
- idioiny: Other Investment Income
- imidivt: Modeled Taxable Amount of Dividends
- imicapgt: Modeled Taxable Capital Gains and Losses
- iditogy: Other Taxable Government Income
- imiotg: Modeled New Taxable Demogrants
- imqtfa: Modeled Federal Family Allowance (only if QFAIFLAG is set to 1)

This corresponds to Line 199 of the Quebec Income Tax Return. It does not include Worker's Compensation, Income Security Benefit, GIS and SPA because they are fully deductible (line 296) of the net income in the calculation of taxable income.

### **CROSS REFERENCE**

Function	Description
txqinet txqitax	<ul><li>(io) Compute net income (Quebec)</li><li>(i) Compute taxable income and individual credits (Quebec)</li></ul>
imqittr	Quebec income tested tax reduction

### DESCRIPTION

This is the Quebec income tested tax reduction originally introduced in 1994. The amount of this reduction varys with basic provincial tax payable (imbpt) phasing out to zero at the QTRBE level of basic tax payable. The maximum tax reduction possible can be calculated by multiplying QTRBE times QTRP. The exact formula is as follows:

imqittr = QTRP \* nneg(QTRBE - imbpt);

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Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqlatc** Quebec living alone tax credit

### DESCRIPTION

This variable represents one of the tax credits used in the post-reform (after 1988) Quebec tax system. It is calculated for the individual and summed with the remainder of the Quebec tax credits into imputote, the variable which holds total tax credits in the function txqcalc.

#### CROSS REFERENCE

Function	Description
txqcalc txqhstr	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute family-related deductions or credits (Quebec)</li></ul>
imqmarex	Quebec married exemption claimed

### **DESCRIPTION**

This is calculated by computing the potential exemption of both spouses and attributing the value calculated on behalf of the spouse with the lower net income to the spouse with the higher net income. The exemption is calculated as a base amount (parameter QMXM) minus the net income exceeding the Married Exemption Turndown Level (parameter QMXT).

This variable is valid only if QREFOPT is set to 1.

Function Description

txqhstr (io) Compute family-related deductions or credits (Quebec)

imqmeda Quebec medical expenses allowed

## **DESCRIPTION**

This variable is the medical expenses allowed for the purposes of calculating Quebec provincial income taxes.

## **CROSS REFERENCE**

Function Description

txqcalc (i) Calculate income tax (Quebec)

txqitax (io) Compute taxable income and individual credits (Quebec)

**imqmtc** Quebec married tax credit

## **DESCRIPTION**

This variable represents one of the tax credits used in the post-reform (after 1988) Quebec tax system. It is calculated for the individual and summed with the remainder of the Quebec tax credits into imputate, the variable which holds total tax credits in the function txqcalc.

# **CROSS REFERENCE**

txqhstr

Function	Description	
txqcalc	(i) Calculate income tax (Quebec)	

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(o) Compute family-related deductions or credits (Quebec)

This item represents the amount of the newborn allowance granted by the Quebec government. Rank of the children are randomly increased to reflect the rank structure of children as observed from RRQ published data. Note that this allowance is not included in the calculation of total income for the residents of Quebec.

## **CROSS REFERENCE**

Function	Description
fa memo1	<ul><li>(o) Compute family allowance</li><li>(i) Compute memo items for reporting</li></ul>
imqndc	Quebec number of dependent children

### DESCRIPTION

This variable reports the number of dependent children used to calculate dependent exemptions. The variable will be non-zero only for the spouse actually claiming the exemptions. If QCXMOPT is set to 1, then imaginate will be incremented for:

- A) each child age 16-17 having income below QYCT and
- B) each child age 18-20 having income below QOCT and
- C) each child in school having income below QOCT.

If QCXMOPT is set to 2, then imqndc will be incremented for each child either under age 18 or in school with income below QYCXM1 in the cxase of the first child or below QYCXM2 for second and subsequent children

This variable is valid only if QREFOPT is set to 1.

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Function	Description
txqcalc txqhstr	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute family-related deductions or credits (Quebec)</li></ul>
imqpendn	Quebec pension income deduction allowed

## **DESCRIPTION**

This item represents the pension income deduction allowed for the calculation of Quebec provincial taxes. It is calculated as the lesser of the maximum pension income deduction (parameter QYPDL) and eligible pension income (idipens).

This variable is valid only if QREFOPT is set to 1.

## **CROSS REFERENCE**

Function	Description	
txqitax txqhstr	<ul><li>(io) Compute taxable income and individual credits (Quebec)</li><li>(i) Compute family-related deductions or credits (Quebec)</li></ul>	
imqpex	Quebec personal exemptions and deductions	

### **DESCRIPTION**

This item is the sum of all personal exemptions for the calculation of Quebec provincial taxes:

imqexm, Basic Exemption + Age Exemption, imqcdeds, Deductions for Wholly Dependent Children, imqmarex, Married or Equivalent Exemption, Other Personal Exemptions are not included (no data available).

This variable is valid only if QREFOPT is set to 1.

Function	Description
txqitax txqhstr	<ul><li>(io) Compute taxable income and individual credits (Quebec)</li><li>(o) Compute family-related deductions or credits (Quebec)</li></ul>
imqptr	Quebec property tax refund

## **DESCRIPTION**

Property tax refund applied to spouse and balance to elder, or the opposite, depending on which party has the higher income.

### **CROSS REFERENCE**

Function	Description
txqcalc	(o) Calculate income tax (Quebec)
imqrepay	Quebec repayments

## **DESCRIPTION**

If the Quebec family allowance repayment is activated by setting QFARFLAG to 1, then the amount of Quebec taxable family allowances which are repaid (imqrepay) is set as a percentage of taxable income plus deductions transferred from spouse less Quebec taxable family allowances. The percentage is set as the lowest tax rate in the Quebec tax table QTX. The repayment is constrained not to exceed Quebec provincial family allowances and is paid by the spouse with the higher value for taxable income plus deductions transferred from spouse less Quebec taxable family allowances.

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Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqritc** Quebec retirement income tax credit

### **DESCRIPTION**

This variable represents one of the tax credits used in the post-reform (after 1988) Quebec tax system. It is calculated for the individual and summed with the remainder of the Quebec tax credits into improte, the variable which holds total tax credits in the function txqcalc.

## **CROSS REFERENCE**

Function	Description
txqcalc txqitax	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute taxable income and individual credits (Quebec)</li></ul>
imqstddn	Quebec stand. /medical+charitable allowed

### DESCRIPTION

This variable is the combined deduction for medical expenses, charitable sdonations and gifts to Canada or a province for the calculation of Quebec Provincial Taxes. This is the maximum of the Standard Deduction (parameter QSTD) and the sum of Allowable Medical Expenses (imqmeda) and Charitable Donations (imqchara). In 1984 and years following this is simply the sum of imqmeda and imqchara since the Standard Deduction is zero. This is a valid variable only if QREFOPT is set to 1.

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Function Description

txqitax (io) Compute taxable income and individual credits (Quebec)

imqstr Quebec sales tax refund

## **DESCRIPTION**

Sales tax refund applied to spouse and balance to elder, or the opposite, depending on which party has the higher income.

# **CROSS REFERENCE**

Function Description

txqcalc (o) Calculate income tax (Quebec)

imqta Quebec tax abatement (total)

## **DESCRIPTION**

The Quebec Tax Abatement is a refundable tax credit which is calculated as a proportion (QTAP) of Basic Federal Tax (imbft). This item represents the total amount of the abatement.

### **CROSS REFERENCE**

Function Description

memo2 (o) Compute consumable income, etc.

**imqtaa** Quebec tax abatement (applied)

The Quebec Tax Abatement is a refundable tax credit which is calculated as a proportion (QTAP) of Basic Federal Tax (imbft). This item represents the amount of the abatement which is applied to reducing federal taxes. If the total abatement exceeds federal taxes (imtxf: after the Federal Tax Reduction is applied) then the excess is refunded (See imqtar).

## **CROSS REFERENCE**

Function	Description	
txcalc memo2	<ul><li>(io) Calculate federal income tax</li><li>(i) Compute consumable income, etc.</li></ul>	
imqtar	Quebec tax abatement (refundable)	

## **DESCRIPTION**

The remainder (if any) of the Quebec Tax Abatement after the rest is applied to reducing Federal Taxes (imtxf) to zero.

### **CROSS REFERENCE**

Function	Description	
txcalc memo1 memo2	<ul><li>(o) Calculate federal income tax</li><li>(i) Compute memo items for reporting</li><li>(i) Compute consumable income, etc.</li></ul>	
imqtca	Quebec tax credits applied	

# **DESCRIPTION**

Tax credits applied to tax payable. If unused transferred to spouse.

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Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqtct** Quebec tax credits transferable

# **DESCRIPTION**

Tax credits unused and available to be transferred to other member of household.

## **CROSS REFERENCE**

Function Description

txqcalc (io) Calculate income tax (Quebec)

**imqtcts** Quebec tax credits transferred from spouse

# **DESCRIPTION**

Tax credits actually transferred from spouse.

## **CROSS REFERENCE**

Function Description

txqcalc (io) Calculate income tax (Quebec)

imqtfa Quebec taxable family allowances

The Quebec taxable family allowance variable is used throughout the Quebec income tax calculations.

# **CROSS REFERENCE**

Function	Description	
txqcalc fa txinet txqinet	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute family allowance</li><li>(io) Compute net income</li><li>(i) Compute net income (Quebec)</li></ul>	
imqtottc	Quebec total tax credits	

# **DESCRIPTION**

The variable represents the total of the Quebec tax credits as calculated in the function txqcalc.

## **CROSS REFERENCE**

Function	Description
txqcalc	(io) Calculate income tax (Quebec)
imquictc	Quebec UI contributions tax credit

# **DESCRIPTION**

This variable contains the value of the Quebec non-refundable tax credit given for Unemployment Insurance payroll taxes. It is only calculated if QUICOPT is set to 2. It is calculated as total UI contributions (imuic) times the Quebec non-refundable nominal tax credit rate (QNTCR).

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Function	Description
txqcalc txqinet	<ul><li>(i) Calculate income tax (Quebec)</li><li>(o) Compute net income (Quebec)</li></ul>
imrentpd	Imputed rent paid

## **DESCRIPTION**

For the purposes of provincial tax credit calculations in Ontario, Manitoba, and British Columbia, paid rents from the FAMEX imputed to the heads of census families and their spouses (if they earned income).

## **CROSS REFERENCE**

Function	Description
txhhexp txont txman txbc gist	<ul> <li>(io) Compute and pro-rate household taxes, rent, etc.</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute Provincial GIS top-ups for elderly</li> </ul>
imrepay	Social Benefits Repayments

### DESCRIPTION

The sum of UI Benefits repaid (imuibr) and any simulated repayments for Family Allowance repayment (imfar) and OAS repayment (imoasr).

The standard algorithm allows the simulation of repayment of Family Allowances based on family net income and the repayment of OAS based on individual net income. A Family Allowance repayment rate (parameter FARR) may be applied to family net income exceeding a turndown level (parameter FATD). Similarly, for OAS, the reduction rate (OASRR) may be applied to net income exceeding a turndown level (OASTD).

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Function	Description
txinet txitax txqitax memo1 memo2	<ul> <li>(io) Compute net income</li> <li>(i) Compute taxable income and individual credits</li> <li>(i) Compute taxable income and individual credits (Quebec)</li> <li>(i) Compute memo items for reporting</li> <li>(i) Compute consumable income, etc.</li> </ul>
imsbinc	Individual income reducing Seniors Benefit

# **DESCRIPTION**

This variable is an individual's income from a specified set of sources which is used to determine the amount of the federal Seniors Benefits, if any. The variable is multiplied by the parameter PYINC prior to applying needs testing algorithms.

The sum of all income from employment (idiemp, idisenf, idisefm), investment income (ididiv, idiint, idiroom, idioinv), taxable government transfers (iditogv, imiuib), pensions (idicqp, idipens) and taxable other income (iditoth) less allowable employment expenses (imalexp), CPP/QPP contributions (imcqppc) and Unemployment Insurance contributions (imuic).

### **CROSS REFERENCE**

Function	Description	
senben	(io) Compute Seniors Benefit for elderly	
imsbmax	Federal Seniors Benefit maximum benefit	

### **DESCRIPTION**

This variable contains the amount of federal Senior's Benefits an individual could receive, before the amount is reduced based on income.

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Function

Description

senben (o) Compute Seniors Benefit for elderly gist (i) Compute Provincial GIS top-ups for elderly

imsbni Consum inc with Seniors Benefit not zeroed

### DESCRIPTION

This variable is calculated during the federal Senior's Benefit program calculations if optimization is requested (SBOPTFLG). This is the income the individual would receive if the family chose to claim their federal Seniors Benefits and not their OAS/GIS instead.

## **CROSS REFERENCE**

Function	Description
cceopt	(io) zero CCE for young kids if optimal
imsboas	Federal Seniors Benefit OAS portion

## **DESCRIPTION**

This variable indicates the dollar amount of the OAS portion of the federal Senior's Benefit. This portion is subject to modification for recent immigrants to Canada. The amount represents the maximum OAS portion available and not the payable amount after needstesting.

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Function Description

senben (o) Compute Seniors Benefit for elderly

gist (i) Compute Provincial GIS top-ups for elderly

**imsbtyp** Type of Seniors Benefit entitlement

### DESCRIPTION

This variable is calculated for all individuals in the census family context based on age and marital status.

This variable indicates the category of eligibility for the federal Senior's Benefits Program, before needs testing, for all individuals.

## **CROSS REFERENCE**

**Function** Description

senben (o) Compute Seniors Benefit for elderly

**imsbz** Is Seniors Benefit Zeroed?

### **DESCRIPTION**

When Seniors Benefit optimization is turned on (SBOPTFLG==1), this flag variable is set to 1 if the current family was better off in terms of consumable income by receiving OAS/GIS instead of the federal Senior's Benefit.

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Function	Description	
oas gis senben cceopt	<ul> <li>(i) Compute OAS for elderly</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(io) zero CCE for young kids if optimal</li> </ul>	
imsbzi	Consum inc with Seniors benefit zeroed	

## **DESCRIPTION**

This variable is calculated during the federal Senior's Benefit program calculations if optimization is requested (SBOPTFLG). This is the income the individual would receive if the family chose not to claim their federal Seniors Benefits and claimed their OAS/GIS instead.

# **CROSS REFERENCE**

Function	Description
cceopt	(io) zero CCE for young kids if optimal
imspamax	Maximum amount of SPA

## **DESCRIPTION**

This variable contains the maximum amount of Spouse's Allowance that an individual was eligible to receive, before taking into account the person's income.

Function Description

gis (o) Compute GIS/SPA for elderly

gist (i) Compute Provincial GIS top-ups for elderly

**imspatyp** Type of SPA entitlement

### DESCRIPTION

This variable is calculated for all individuals in the census family context based on age and marital status.

This variable indicates the category of Spouse's Allowance eligibility, before needs testing, for all individuals.

## **CROSS REFERENCE**

Function	Description	
gis senben gist	<ul><li>(o) Compute GIS/SPA for elderly</li><li>(o) Compute Seniors Benefit for elderly</li><li>(i) Compute Provincial GIS top-ups for elderly</li></ul>	
imstddn	Standard or medical+charitable allowed	

## **DESCRIPTION**

This is the maximum of the Standard Deduction (parameter STDED) and the sum of Allowable Medical Expenses (immeda) and Charitable Donations (imchara). If the Standard Deduction is zero, imstddn becomes the sum of immeda and imchara.

This variable is valid if MDCROPT is set to 1 (exemption).

Function Description

txitax (io) Compute taxable income and individual credits

**imstxcrt** Tax credits transfered from spouse

### **DESCRIPTION**

This variable represents the amount of transferable tax credits (the sum of the Age (imatxc), Disability (imdisatc), Education (imedtxc), Tuition (imtutxc), and Pension Income (impentxc) Tax Credits) actually transferred to a spouse after reduction based on the net income of the transferring spouse.

### **CROSS REFERENCE**

**Function** Description

txcalc (o) Calculate federal income tax

txman (i) Compute provincial taxes for Manitoba

**imtaxcr** Total tax credits

### DESCRIPTION

This represents the total tax credits available to reduce basic federal tax (imbft) including non-transferable tax credits (imatxcr), transferable credits, credits transferred from the spouse (imstxcrt), and credits transferred from children (imctxcrt).

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Function Description

txcalc (io) Calculate federal income tax

imtfa Taxable family allowances

### **DESCRIPTION**

For all provinces, except Quebec, all Family Allowances are taxable. In Quebec, however, the proportion of the provincial benefits on behalf of children aged 12-15 is not taxable.

# **CROSS REFERENCE**

Function Description

fa (o) Compute family allowance txinet (io) Compute net income

imttxcrt Total tax credits transfered

## **DESCRIPTION**

This variable reports the sum of the Age (imatxc), Disability (imdisatc), Education (imedtxc), Tuition (imtutxc), and Pension Income (impentxc) Tax Credits which may be transferred from a dependant to a supporting parent or between spouses.

## **CROSS REFERENCE**

Function Description

txcalc (io) Calculate federal income tax

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The parameter TUITOPT determines whether the model calculates a Tuition Deduction (TUITOPT=1)) or a Tuition Tax Credit (TUITOPT=2)). The Tuition Tax Credit is calculated as a proportion (parameter FNTCR) of tuition fees (idtuitn). The number used by the model for tuition fees (idtuitn) correspond to the value and definition of the Tuition Deduction allowed in the base year.

## **CROSS REFERENCE**

Function	Description	
txinet txcalc	<ul><li>(o) Compute net income</li><li>(i) Calculate federal income tax</li></ul>	
imtxf	Federal income tax payable	

### **DESCRIPTION**

This is calculated from Basic Federal Tax (imbft) by subtracting the Federal Tax Reduction (imftr) and Federal Tax Credits (idlabtxc, imfptc, and iditc). Computed federal surtaxes (imfsur) are then added to this amount.

### **CROSS REFERENCE**

Function	Description
txcalc txbc memo1	<ul><li>(io) Calculate federal income tax</li><li>(i) Compute provincial taxes for British Columbia</li><li>(i) Compute memo items for reporting</li></ul>
imtxfc	Federal commodity taxes

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This analysis variable contains the federal commodity taxes associated with household consumption, allocated to individuals. Household commodity taxes are allocated to the individuals in a household in proportion to their share of household income, as measured by imishri.

# **CROSS REFERENCE**

Function	Description
ctmod memo2	<ul><li>(o) Compute commodity taxes for individuals and households</li><li>(i) Compute consumable income, etc.</li></ul>
imtxp	Provincial income tax payable

## **DESCRIPTION**

This is calculated from Basic Provincial Tax (imbpt), reduced by non-refundable tax credits and then by applying any tax reductions or surtaxes (impsur). Refundable tax credits are considered as transfers:

## **CROSS REFERENCE**

Function	Description
txqcalc	(io) Calculate income tax (Quebec)
txnfld	(io) Compute provincial taxes for Newfoundland
txpei	(io) Compute provincial taxes for P.E.I.
txns	(io) Compute provincial taxes for Nova Scotia
txnb	(io) Compute provincial taxes for New Brunswick
txont	(io) Compute provincial taxes for Ontario
txman	(io) Compute provincial taxes for Manitoba
txsask	(io) Compute provincial taxes for Saskatchewan
txalta	(io) Compute provincial taxes for Alberta
txbc	(io) Compute provincial taxes for British Columbia
memo1	(i) Compute memo items for reporting

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This analysis variable contains the provincial commodity taxes associated with household consumption, allocated to individuals. Household commodity taxes are allocated to the individuals in a household in proportion to their share of household income, as measured by imishri.

### **CROSS REFERENCE**

Function	Description
ctmod memo2	<ul><li>(o) Compute commodity taxes for individuals and households</li><li>(i) Compute consumable income, etc.</li></ul>
imuibr	UI benefit recovery

### **DESCRIPTION**

imuibr is used as a deduction in the calculation of Taxable Income and is a component of total taxes (imftax) for reporting purposes.

When UIEIOPT is set to 1, if net income exceeds a specified level (parameter UIBRA), a proportion (UIBRP) of UI Benefits must be repaid. The repayment amount is calculated by taking the proportion of either UI Benefits or the amount Net Income exceeds the base amount, whichever is lower.

When UIEIOPT is set to 2, the proportion of UI Benefits to be repaid (UIEIBRP) is based on the number of weeks of UI benefits in the past UIEIYRS years (ubeiwpb).

### **CROSS REFERENCE**

Function	Description
txinet	(io) Compute net income
txqitax	(i) Compute taxable income and individual credits (Quebec)
memo2	(i) Compute consumable income, etc.

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This variable represents the modelled annual UI premiums payable. This is calculated based upon the reported number of weeks worked (idlyww) and earnings from employment (idiemp). The model makes the assumption that earnings are evenly distributed among the weeks worked. No contributions are made if the average weekly earnings are lower than the minimum insurable earnings (MNWEL). The weekly contribution is a proportion (parameter UIPF) of earnings not exceeding the maximum level for insurable earnings (MXWEL). The annual contribution is the number of weeks worked times the weekly contribution.

### **CROSS REFERENCE**

Function	Description
txinet txcalc txqinet gis senben memo1	<ul> <li>(io) Compute net income</li> <li>(i) Calculate federal income tax</li> <li>(i) Compute net income (Quebec)</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute memo items for reporting</li> </ul>
imuicrf	UI EI contribution refund

### DESCRIPTION

This variable describes the amount of EI contribution, imuic, which a person with income less than UIEIREF would get refunded. It is subtracted from imuic.

This variable is valid only if UIEIOPT is set to 2 (Dec 1995 reform implemented in 1997).

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Function Description

txinet (io) Compute net income

**imuictc** UIC contributions tax credit

## **DESCRIPTION**

The parameter UICOPT determines whether UI Contributions are considered a deduction or a tax credit. If UICOPT is set to 2 (for tax credits), The UI Contribution Tax Credit (imuictc) is calculated as a proportion (parameter UICTR) of UI contributions (imuic).

### CROSS REFERENCE

**Function** Description

txinet (o) Compute net income

txcalc (i) Calculate federal income tax

**imuidpfg** UI claimants has dependents flag

### DESCRIPTION

This flag is set to one for UI climants who have dependants and whose average UI ensurable earinings are below a set proportion (UIENSRTCO) of the Maximum Weekly Insurable Earnings (UIERNMAX). The flag is calculated only when UIDEPOPT is set to 2.

This variable is valid only if UIEIOPT is set to one (Before Dec 1995 reform implemented in 1997).

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Function Description

ui (i) Compute UI benefits

in Individual data [array]

### **DESCRIPTION**

This is an array each element of which is a structure whose sub-structures hold all information, both database and modelled, on a single individual. It is not directly accessible to the 'black box' variable facilities, but is documented here for glass box users. The primary substructures of each element of the in array are named id (database variables) and im (modelled variables). The number of elements containing valid data within this array is given by the variable hhnin, which is the number of individuals contained in the current household.

**nf** Nuclear family data [array]

#### DESCRIPTION

This is an array each element of which is a structure holding information on each nuclear family in the household. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. All of the variables beginning with the prefix of an element of this array. The number of elements containing valid data within this array is given by the variable hhnnf, which is the number of nuclear families contained in the current household.

**nfageeld** Age of eldest in nuclear family

### **DESCRIPTION**

This class variable contains the age of the eldest person in the current nuclear family. The maximum age is 99.

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Function	Description
gis senben	<ul><li>(i) Compute GIS/SPA for elderly</li><li>(i) Compute Seniors Benefit for elderly</li></ul>
nfin	First person in nuclear family [pointer]

### DESCRIPTION

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the first person in the current nuclear family. Since persons in a nuclear family are arranged sequentially in memory, nfin is commonly used to initialize a working pointer used to process each person of a nuclear family in turn.

**nfinch** First child in nuclear family [pointer]

### **DESCRIPTION**

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the first child in the current nuclear family. Since the children in a nuclear family are arranged sequentially in memory, cfin is commonly used to initialize a working pointer used to process each child of a nuclear family in turn. Note that children in nuclear families, (unlike those in census families) are by definition under 18 years of age.

### **CROSS REFERENCE**

Function		Description
fa txctc	(i) (i)	Compute family allowance Compute child tax credit
nfineld		Eldest person in nuclear family [pointer]

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This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the eldest person in the current nuclear family. The eldest person is used as a reference person for the nuclear family.

## **CROSS REFERENCE**

Function	Description
fa txinet txnb txman txalta txbc gis senben txctc	<ul> <li>(io) Compute family allowance</li> <li>(i) Compute net income</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute child tax credit</li> </ul>
nfinspo	Spouse of eldest [pointer]

### **DESCRIPTION**

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a C language pointer, which points to the in structure corresponding to the spouse of the eldest person in the nuclear family. If the eldest person has no spouse, this variable is NULL and should not be used. The variable nfspoflg can be used to determine if there is a spouse in the nuclear family.

## **CROSS REFERENCE**

Function		Description
fa	(i)	Compute family allowance
txinet	(i)	Compute net income
txnb	(i)	Compute provincial taxes for New Brunswick

txman (i) Compute provincial taxes for Manitoba txalta (i) Compute provincial taxes for Alberta

txbc (i) Compute provincial taxes for British Columbia

gis (i) Compute GIS/SPA for elderly senben (i) Compute Seniors Benefit for elderly

txctc (i) Compute child tax credit

**nfnadult** Number of adults in nuclear family

### **DESCRIPTION**

This class variable counts the number of persons aged 18 or over in the nuclear family.

**nfnearn** Number of earners in nuclear family

### **DESCRIPTION**

This class variable counts the number of earners in the nuclear family. A person is considered an earner if he/she has employment or self-employment earnings equal or greater to the value specified in the EARNMIN parameter.

**nfneld** Number of elderly in nuclear family

### **DESCRIPTION**

This class variable counts the number of persons aged 65 or over in the nuclear family.

**nfnkids** Number of children in nuclear family

### DESCRIPTION

This class variable counts the number of persons aged under 18 in the current nuclear family. Note that this number can include young unattached individuals or spouses.

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Function	Description
fa txinet txns txnb txont txman txalta txbc txctc	<ul> <li>(i) Compute family allowance</li> <li>(i) Compute net income</li> <li>(i) Compute provincial taxes for Nova Scotia</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute provincial taxes for Ontario</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute child tax credit</li> </ul>
nfnpers	Number of persons in nuclear family

# **DESCRIPTION**

This class variable counts the total number of persons in the nuclear family. It is often used in conjunction with the nfin pointer variable to process each person in the nuclear family in turn.

**nfsexeld** Sex of eldest in nuclear family

# **DESCRIPTION**

This class variable gives the sex of the eldest person in the nuclear family. The eldest person is used as reference person in the nuclear family.

**nfspoflg** Nuclear family contains married couple

# **DESCRIPTION**

This class variable indicates whether the nuclear family contains a married couple. If true, the pointer variable cfinspo will point to the in structure containing data on the spouse of the eldest person (the reference person) in the nuclear family.

Function	Description
fa txinet txnb txman txalta txbc gis senben txctc	<ul> <li>(i) Compute family allowance</li> <li>(i) Compute net income</li> <li>(i) Compute provincial taxes for New Brunswick</li> <li>(i) Compute provincial taxes for Manitoba</li> <li>(i) Compute provincial taxes for Alberta</li> <li>(i) Compute provincial taxes for British Columbia</li> <li>(i) Compute GIS/SPA for elderly</li> <li>(i) Compute Seniors Benefit for elderly</li> <li>(i) Compute child tax credit</li> </ul>
nftype	Nuclear family type

## **DESCRIPTION**

This class variable gives a general purpose way of classifying family units based on the number of adults, kids and elderly in the unit. Note that in the scheme given below, the presence of kids takes precedence over the presence of elderly for families with both kids and elderly. Kids are persons aged under 18, Adults are persons aged 18 or over (including elderly), and elderly are persons aged 65 or over.

scfrecs SCF records	
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### DESCRIPTION

This variable gives an unduplicated count of the number of SCF demographic/income records represented by the current household. The variable which contains this characteristic is *hdnscf*.

spsdrecs	SPSD records	
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# **DESCRIPTION**

This variable gives a count of the number of SPSD records represented by the current household. This number is always one, but the variable is treated specially because it is not subject to weighting. The variable which contains this characteristic is *hdnspsd*.

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The structure identified by the letters 'uc' holds SPSD variables pertaining to a UI claim. See descriptions of ub1 and ub2 These variables are read directly from the SPSD database. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users.

ub1

UI claim #1 results [struct]

### **DESCRIPTION**

This structure is not directly accessible to the 'black box' user but is documented here for completeness. It is a sub-structure of the im structure, and contains modelled information on the first of up to two UI claims pertaining to a given individual. All variables with the prefix ub1 are members of this structure.

ub2

UI claim #2 results [struct]

### **DESCRIPTION**

This structure is not directly accessible to the 'black box' user but is documented here for completeness. It is a sub-structure of the im structure, and contains modelled information on the second of up to two UI claims pertaining to a given individual. All variables with the prefix ub2 are members of this structure.

ubcalfs

Family supplement paid in calendar year

# **DESCRIPTION**

Modeled family supplement paid within the calendar year. The family supplement is only activated when UIEIOPT is set to 2, and UIEIFSFLG is set to 1. The family supplement is included as part of ubcalpd. The supplement is given to EI recipients whose families received federal child tax benefits (imfcben) during the year.

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Function Description

ui (o) Compute UI benefits

**ubcalpd** Benefits paid in calendar year

# **DESCRIPTION**

Modeled benefits paid (\$) over the weeks of claim activity in the calendar year. Calculated from benefit rate parameters of the current model, and the weeks of modeled claim activity that fall within the calendar year.

# **CROSS REFERENCE**

Function		Description
ui txinet	(i) (i)	Compute UI benefits Compute net income
ubcalwk		Weeks on claim in calendar year

### **DESCRIPTION**

Modeled paid weeks on claim within the calendar year, which may include, for example, the final part of a first claim or the initial part of a second. Calculated as the difference between the first and last (windowed) claim week pointers (ubp1c and ubp4c).

# **CROSS REFERENCE**

Function	Description
ui	(o) Compute UI benefits

Modeled family supplement paid during a claim. The family supplement is only activated when UIEIOPT is set to 2, and UIEIFSFLG is set to 1. The family supplement is included as part of ubclmpd. The supplement is given to EI recipients whose families received federal child tax benefits (imfcben ) during the year.

# **CROSS REFERENCE**

Function	Description
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ui (o) Compute UI benefits

**ubclmpd** Benefits paid on claim

### DESCRIPTION

Modeled benefits paid (\$) in all weeks of claim activity. Calculated from benefit rate parameters of the current model, and the weeks of modeled claim activity.

### **CROSS REFERENCE**

Function Description

ui (o) Compute UI benefits

**ubclmwk** Weeks on claim

### DESCRIPTION

Modeled paid weeks on claim, which may include, for example, the final part of a first claim or the initial part of a second. Calculated as the difference between the first and last claim week pointers (ubp1 and ubp4).

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**Function** Description

ui (io) Compute UI benefits

**ubeiwbp** Weeks of past EI benefits

# **DESCRIPTION**

This variable describes the total number of weeks of EI received in the past UIEIYRS years. It is derived using ucy1 to ucy5.

# **CROSS REFERENCE**

Function Description

ui (o) Compute UI benefits txinet (i) Compute net income

**ubern** Modelled insurable weekly earnings

# **DESCRIPTION**

Weekly insurable earnings derived by applying a ceiling (UIERNMAX) to the grown average weekly insurable earnings (ucern).

# **CROSS REFERENCE**

Function Description

ui (o) Compute UI benefits

ubp1 is a number identifying the week of the first payment to a modeled claim (i.e., usually the second week following establishment of a claim under the current program). Week of January 1, 1992 = 0.

### **CROSS REFERENCE**

ui (i) Compute UI benefits

**ubp1c** Week # of first payment (windowed)

### **DESCRIPTION**

ubp1c is a number identifying the week of the first payment to a modeled claim within the calendar year. Week of January 1, 1992 = 0.

### **CROSS REFERENCE**

Function	Description	

ui (io) Compute UI benefits

**ubp2** Week # of start of second phase

### DESCRIPTION

ubp2 is a number identifying the week of the first payment within the second phase of a modeled claim. ubp2 is always greater than or equal to ubp1 (equality indicates zero weeks of first phase payments). Week of January 1, 1992 = 0.

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Function Description

ui (o) Compute UI benefits

**ubp2c** Week # of start of second phase (windowed)

### **DESCRIPTION**

ubp2c is a number identifying the week of the first payment within the second phase of a modeled claim within the calendar year. ubp2c is always greater than or equal to ubp1c (equality indicates zero weeks of first phase payments or that first phase payments were in the previous calendar year). Week of January 1, 1992 = 0.

## **CROSS REFERENCE**

Function Description

ui (o) Compute UI benefits

**ubp3** Week # of start of third phase

### **DESCRIPTION**

ubp3c is a number identifying the week of the first payment within the third phase of a modeled claim within the calendar year. ubp3c is always greater than or equal to ubp2c (equality indicates zero weeks of second phase payments or that second phase payments were in the previous or subsequent calendar years). Week of January 1, 1992 = 0.

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Function Description

ui (o) Compute UI benefits

**ubp3c** Week # of start of third phase (windowed)

# **DESCRIPTION**

ubp3c is a number identifying the week of the first payment within the third phase of a modeled claim within the calendar year. ubp3c is always greater than or equal to ubp2c (equality indicates zero weeks of second phase payments or that second phase payments were in the previous or subsequent calendar years). Week of January 1, 1992 = 0.

## **CROSS REFERENCE**

Function Description

ui (o) Compute UI benefits

**ubp4** Week # of last payment

### DESCRIPTION

ubp4 is a number identifying the week after the termination of a modeled claim. ubp4 is always greater than or equal to ubp3 (equality indicates zero weeks of third phase payments). ubp4 may equal ubp1 indicating that the modeled claim was disentitled. Week of January 1, 1992 = 0.

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Function Description

ui (i) Compute UI benefits

**ubp4c** Week # of last payment (windowed)

### DESCRIPTION

ubp4c is a number identifying the week after the last payment to a modeled claim within the calendar year. ubp4c is always greater than or equal to ubp3c (equality indicates zero weeks of third phase payments or that second phase payments were in the previous or subsequent calendar years). ubp4 may equal ubp1 indicating that the modeled claim was disentitled or that the reduction in entitlement was sufficient to imply claim activity only in the previous calendar year. Week of January 1, 1992 = 0.

### **CROSS REFERENCE**

Function Description

ui (i) Compute UI benefits

**ubp5** Week # of last training payment

### DESCRIPTION

ubp5 is a number identifying the week of the last training payment to a modeled claim.

### **CROSS REFERENCE**

**Function** Description

ui (i) Compute UI benefits

ubp5c is a number identifying the week of the last training payment to a modeled claim within the calendar year.

### **CROSS REFERENCE**

Function	Description
ui	(io) Compute UI benefits
uc	UI claim structure

## **DESCRIPTION**

The structure identified by the letters 'uc' holds SPSD variables pertaining to a UI claim. See descriptions of uc1 and uc2. These variables are read directly from the SPSD database. It is not directly accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users.

uc1 UI claim #1 data [struct]

### DESCRIPTION

This structure is not directly accessible to the 'black box' user but is documented here for completeness. It is a sub-structure of the id structure, and contains database information on the first of up to two UI claims pertaining to a given individual. All variables with the prefix uc1 are members of this structure. The member ucstat of uc1 (denoted uc1stat) indicates if the structure contains claim data or not.

uc2 UI claim #2 data [struct]

This structure is not directly accessible to the 'black box' user but is documented here for completeness. It is a sub-structure of the id structure, and contains database information on the second of up to two UI claims pertaining to a given individual. All variables with the prefix uc2 are members of this structure. The member ucstat of uc2 (denoted uc2stat) indicates if the structure contains claim data or not.

**ucbtyp** Claim type

### DESCRIPTION

Benefit type at the time the claim was established.

Source:

EIC Administrative Data.

## **CROSS REFERENCE**

Function	Description
fmspopen ui txinet	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute UI benefits</li><li>(i) Compute net income</li></ul>
uceff	Effective weekly rate

### **DESCRIPTION**

Ratio of total claim benefits to claim weeks observed in administrative data. This benefit rate incorporates special program payments (e.g., job creation) and is adjusted for reduced payment levels (e.g., due to earnings reported while on claim).

uceff is grown from the observed base year value by preserving its base year ratio to ucern.

Source:

EIC Administrative Data.

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Function Description

fmspopen (io) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucern** Insurable weekly earnings

### DESCRIPTION

Insurable earnings are accumulated over the most recent 20 weeks of work prior to the establishment of a UI claim. These earnings are represented by a weekly average.

For example, in 1984, the minimum weekly insurable earnings was \$85 (having less than that earnings level and having less than 15 hours of employment weekly does not qualify as insurable employment). Similarly, the maximum level of insurable earnings, in 1984, was set at \$425.

ucern is grown from the observed base year value using employment income growth rates by industry GFIEMP, together with the parameters UIBASEYRMAX and UITARGYRMAX. If the base year value of ucern equals or exceeds UIBASEYRMAX, ucern is set to UITARGYRMAX. Otherwise ucern is grown using the appropriate rate taken from GFIEMP, but is in any case not allowed to exceed the value UITARGYRMAX.

#### Source:

EIC Administrative Data.

### **CROSS REFERENCE**

Function Description

fmspopen (io) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucexhas** Exhaustee flag

This flag indicates that the individual completely exhausted their entitled weeks of UI benefits in the claim.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
ucgotpa	Received paternity benefits

# **DESCRIPTION**

This flag is set to 1 if a person received paternity benefits and 0 otherwise. It is not currently used in the code which uses the UIEXTMATWKS parameter.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

Function	Description
fmspopen	(o) Routines to read SPSD file (.spd)
ucquitp	Penalty for voluntary quit

# **DESCRIPTION**

Weeks of disqualification resulting from voluntary separation from employment (minimum - 0 weeks, maximum - 6 weeks).

Source:

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

ucrpeat Repeat claim flag

### **DESCRIPTION**

Flag taking values 1 or 0 indicating whether a given claim was a repeat claim or not. A repeat claim is one which was preceded by a previous claim within 52 weeks of the current claim's establishment.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucstart** Week claim established

### **DESCRIPTION**

Identification number for the week in which a UI claim was established. The week of Jan. 1 is coded 0.

This variable has been randomly adjusted (within narrow limits) as part of the SPSD database creation process.

Source:

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucstat** Claim status flag

### DESCRIPTION

This flag is used to indicate if the data in the uc structure contains claim data or not. All individuals in the household contain two uc structures (to hold information on up to two UI claims), and the ucstat variable indicates which structures actually contain data.

#### Source:

**Function** 

EIC Administrative Data.

# **CROSS REFERENCE**

fmspopen	(o) Routines to read SPSD file (.spd)	
ui	(i) Compute UI benefits	
tvinot	(i) Compute not income	

Description

txinet (i) Compute net income

cceopt (i) zero CCE for young kids if optimal

**uctpcng** Type change flag

### DESCRIPTION

Flag indicating a change in benefit type over the course of a UI claim. Only one type change per claim is permitted on the file. Most frequently the change is from sickness or maternity benefits to regular benefits.

#### Source:

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**uctrnbr** Training benefit weekly rate

### DESCRIPTION

This variable gives the weekly payment rate which, if applied to the number of weeks of training benefits (uctrnwk), would produce the payment made to the individual for training.

#### Source:

EIC Administrative Data.

### **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**uctrnwk** Weeks of training benefits

# **DESCRIPTION**

This variable gives the number of weeks spent in training during the claim. Note that a claim may have both training and non-training benefits.

### Source:

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucuer** Local unemplyment rate (x10)

### DESCRIPTION

This variable contains the local unemployment rate applicable in the week of claim initiation. This variable may be inconsistent with the province and urbanisation of the individual, since these data come from different data sources.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucuero** Local unemplyment rate (x10)-original value

### **DESCRIPTION**

This variable contains the original local unemployment rate applicable in the week of claim initiation. This variable may be inconsistent with the province and urbanisation of the individual, since these data come from different data sources.

This variable is used only in the transfer of ucuer in ASCII format.

Source:

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

**ucweeks** Weeks of benefits

# **DESCRIPTION**

Weeks of benefits paid on a given claim.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

**Function** Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucwkhr** Weekly hours of work

# **DESCRIPTION**

This variable describes the average number of hours worked per week.

Source:

This item is imputed from the Survey of Labour and Income Dynamics (SLID)

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

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(i) Compute UI benefits

ui

**ucwwork** Weeks of work prior to claim

# **DESCRIPTION**

The number of weeks of insured employment in the 52 weeks prior to the establishment of a claim.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

Function	Description
fmspopen ui	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute UI benefits</li></ul>
ucy1	Weeks on UI in first year before claim

# **DESCRIPTION**

The number of weeks of EI receipt received in the first year prior to a claim.

Source:

Eupotion

EIC Administrative Data.

# **CROSS REFERENCE**

Function	Description
fmspopen ui	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute UI benefits</li></ul>
ucv2	Weeks on UI in second year prior to claim

Deceriation

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The number of weeks of EI receipt received in the second year prior to a claim.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucy3** Weeks on UI in third year prior to claim

# **DESCRIPTION**

The number of weeks of EI receipt received in the third year prior to a claim.

Source:

EIC Administrative Data.

# **CROSS REFERENCE**

**Function** Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucy4** Weeks on UI in fourth year prior to claim

# **DESCRIPTION**

The number of weeks of EI receipt received in the fourth year prior to a claim.

Source:

Function Description

fmspopen (o) Routines to read SPSD file (.spd)

ui (i) Compute UI benefits

**ucy5** Weeks on UI in fifth year prior to claim

# **DESCRIPTION**

The number of weeks of EI receipt received in the fifth year prior to a claim.

Source:

EIC Administrative Data.

## **CROSS REFERENCE**

Function	Description
fmspopen ui	<ul><li>(o) Routines to read SPSD file (.spd)</li><li>(i) Compute UI benefits</li></ul>
uv	user variables [struct]

# **DESCRIPTION**

This structure is a sub-structure of the im structure, and is designed to allow the 'glass box' user to add new modelled variables. The method by which such new variables are added, defined, and used is described in the *SPSM Programmer's Guide*.

**uvdummy** dummy variable

### DESCRIPTION

This member of the uv user-defined variable structure is present because the C language does not allow empty structures.

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