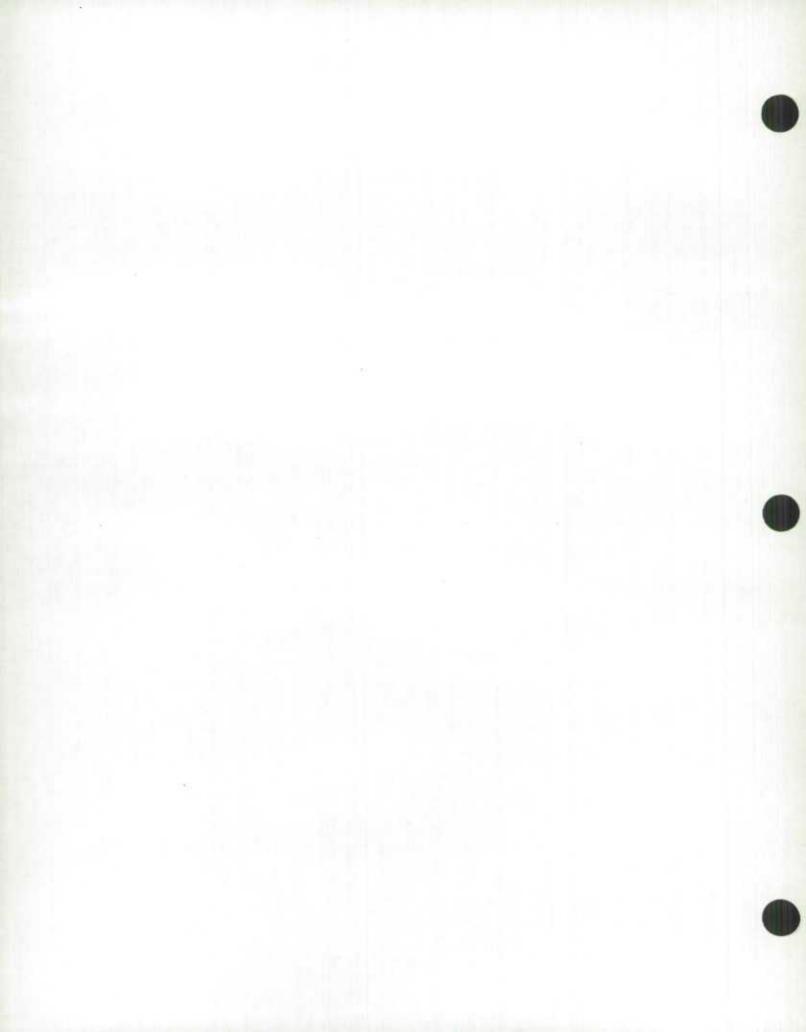


# Variable Guide

This guide consists of an encyclopaedic reference to SPSD/M variables. 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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#### 1 Introduction

### 1.1 Organisation 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 four sections. The remainder of this introductory section consists of a description of the naming conventions used for SPSD/M variables. This is followed by a section which organises variables by type of variable. This section should be useful for determining what SPSD/M variables exist in particular subject areas.

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

The final section, section 4, contains a short description of the various micro-data sources referred to in section 3.

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

# 1.2 Variable Naming Conventions

With only a few special exceptions, described in section 2.13 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 charcateristics
id	Individual data, from database
im	Individual data, from model
uc	UI claim data, from database

ub	UI claim data, from model
fx	Expenditure pattern data, from database
ct	Commodity tax data, from model
ex	User-specified analysis variables
Cl	User-specified classificatory variables

# 2 Variables by Type

The SPSD/M variables have been categorized into fourteen distinct groups, as shown below. This grouping is somewhat arbitrary, and is provided merely as a device to organise the large number of variables in SPSD/M, so that users can locate variables of interest.

- 2.1 Demographic
- 2.2 Education
- 2.3 Labour Force
- 2.4 Family Structure

Household

**Economic Family** 

Census Family

Nuclear Family

Individual

- 2.5 Housing Characteristics
- 2.6 Market Income
- 2.7 Transfers

**Demogrants** 

Income Support

Tax Credits

Other

2.8 Taxes

Federal Commodity

**Provincial Commodity** 

Payroll & Income

2.9 Memo

Household Balance

Federal Balance

Provincial Balance

2.10 Expenditure

- 2.11 Intermediate Variables

Commodity Tax

Federal Income Tax

Provincial Income Tax

Family Allowance

OAS/GIS

Unemployment Insurance

- 2.12 Miscellaneous
- 2.13 Unit Count Variables
- 2.14 User-Defined Variables

#### 2.1 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 Province hdprov Size of urban area hdurb idimmi Years since immigration idmarst Marital status idcluflg Common-Law union flag iddisab Disability status

#### 2.2 Education

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

idedlevidestatidestatidschtpEducational statusSchool type

#### 2.3 Labour Force

The labour force variables come directly from the Labour Force Survey. 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.

idind Industry idocc Occupation idlfst Labour force status Weeks worked idlyww Last year full/part time idlyfp Weeks unemployed idlyun Last year stretches unemployed idlystr Major non-LF activity idnonlf

#### 2.4 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.

# 2.4.1 Family Structure: Household

hdseqhh Household sequence number

hdseqhv FAMEX record sequence number

hdtype Household type

hdspoflg Household contains married couple

Age of eldest in household hdageeld 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 Number of census families in household hhncf hhnef Number of economic families in household hhnin Number of individuals in household hhnnf Number of nuclear families in household hdlastfx Last household in FAMEX group flag hdunits Unit count hdwgtfx Sum of household weight for FAMEX group hdwathh Household weight hdwathhs Sub-sample adjusted household weight

# 2.4.2 Family Structure: Economic Family

eftype Economic family type efspoflg Economic family contains married couple efageeld Age of eldest in economic family Sex of eldest in economic family efsexeld efnadult Number of adults in economic family efnearn Number of earners in economic family efneld Number of elderly in economic family efnkids Number of children in economic family efnpers Number of persons in economic family efin First person in economic family [pointer]

#### 2.4.3 Family Structure: Census Family

cftype Census family type cfspoflg Census family contains married couple cfageeld Age of eldest in census family cfsexeld Sex of eldest in census family Number of adults in census family cfnadult cfnchild Number of children (including 18+) Number of earners in census family cfnearn cfneld Number of elderly in census family cfnkids Number of children in census family cfnpers Number of persons in census family 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]

## 2.4.4 Family Structure: Nuclear Family

nftype	Nuclear family type
nfspoflg	Nuclear family contains married couple
nfageeld	Age of eldest in nuclear family
nfsexeld	Sex of eldest in nuclear family
nfnadult	Number of adults in nuclear family
nfnearn	Number of earners in nuclear family
nfneld	Number of elderly in nuclear family
nfnkids	Number of children in nuclear family
nfnpers	Number of persons in nuclear family
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]

# 2.4.5 Family Structure: Individual

idefseq	Economic family sub-sequence number
idcfseq	Census family sub-sequence number
idinseq	Individual sub-sequence number
idspoflg	Person has spouse
idhhrh	Relationship to head of household
idefrh	Relationship to economic family head
idcfrh	Relationship to census family head
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]

# 2.5 Housing Characteristics

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.

hdtenur	Tenure
hdroom	Number of rooms
hdbdrms	Number of bedrooms

#### 2.6 Market Income

The following income variables are taken directly from the Survey of Consumer Finance. These variables exclude transfers or tax credits received from government.

idiemp	Earnings from employment
idisefm	Farming net income
idisenf	Self-employed income - non-farming
idiroom	Net income from roomers and boarders
iditoth	Other taxable income
idinoth	Non-taxable other money income
idiint	Interest income

ididiv	Actual amount of Canadian dividends
idicapg	Imputed actual capital gains
idioinv	Other investment income with net rental
idipens	Pension income

#### 2.7 Transfers

Transfers represent non-earned income received from government through a variety of delivery mechanisms. Non cash transfers (such as income-based subsidies for health care, or subsidized housing) are not accounted for in SPSD/M.

# 2.7.1 Transfers: Demogrants

A demogrant is a government transfer given to all individuals or families purely as a function of demographic status (eg. age). Demogrants are generally taxable, and are not income tested. imiotg is provided to allow the 'glass box' user to integrate a new demogrant into the tax/transfer system.

imfa	Federal and provincial family allowances
imioas	OAS benefits
imiotg	Other taxable demogrants

# 2.7.2 Transfers: Income Support

Income support transfers provide supplementary income to low-income individuals or families, or to those currently lacking employment. *idisa* is the amount of social assistance received through the Canada Assistance Plan. *imisa* usually contains the same value as *idisa*, but the 'glass box' user can replace this value if he or she wishes to simulate some form of social assistance reform.

idisa	Social assistance income
imisa	Social assistance (or replacement program)
imfsa	Federal social assistance
impsa	Provincial social assistance
imiuib	Unemployment insurance benefits
imigis	GIS benefits
imispa	Spouse's allowance
imigist	GIS provincial top-up

#### 2.7.3 Transfers: Tax Credits

Only refundable tax credits, (i.e. those that can result in a cheque being issued) are listed in this section.

imctc	Child tax credit
imfstc	Federal sales tax credit
idptc	Calculated provincial tax credits
imptc	Provincial tax credits
imiosa	Other SA or guarantees

#### 2.7.4 Transfers: Other

idicqp	CPP/QPP received
iditogv	Other government income (taxable)
idinogv	Other government income (non-taxable)

#### 2.8 Taxes

Federal and Provincial commodity and income taxes are listed in this section. Business taxes are not included in SPSD/M. Municipal taxes (from the FAMEX survey) are given in fxptax, and are listed in section 2.10 under expenditure.

#### 2.8.1 Taxes: Federal Commodity

These variables give federal commodity taxes for households by type of tax and by expenditure category. Forty distinct expenditure categories are given in the variables ctfct0-ctfct39. Although there is at present no federal sales tax, the variable ctfrst is provided to allow the user to simulate such a tax. imtxfc, an individual level variable, is created by apportioning household level taxes to individuals in proportion to their share of household income. Note that these variables represent commodity taxes associated, directly or indirectly, with household consumption only. Commodity taxes associated with other categories of final expenditure, such as exports, are not included.

ctfcid	Federal custom import duties
ctfexd	Federal excise duties
ctfext	Federal excise taxes
ctfmfg	Federal manufacturer's sales tax
ctfoen	Federal other energy taxes
ctfrst	Federal retail sales tax
ctfct	Federal commodity taxes [array]
cttxfc	Federal total commodity taxes
imtxfc	Federal commodity taxes

# 2.8.2 Taxes: Provincial Commodity

These variables give provincial commodity taxes for households by type of tax and by expenditure category. Forty distinct expenditure categories are given in the variables ctfct0-ctfct39. imtxpc, an individual level variable, is created by apportioning household level taxes to individuals in proportion to their share of household income. Note that these variables represent commodity taxes associated, directly or indirectly, with household consumption only. Commodity taxes associated with other categories of final expenditure, such as exports, are not included.

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
ctpct	Provincial commodity taxes [array]
cttxpc	Provincial total commodity taxes
imtxpc	Provincial commodity taxes

# 2.8.3 Taxes: Payroll & Income

These taxes include federal and provincial income taxes (net of non-refundable tax credits) and money collected by government by means of payroll deductions. Only the employee portion of contributions is accounted for in SPSD/M.

imcqppc	CPP/QPP contributions
imuic	UIC contributions
imtxf	Net federal tax payable
imtxp	Provincial tax payable

#### 2.9 Memo

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 particularily 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.

#### 2.9.1 Memo: Household Balance

These 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
imminv	Investment income
immmkt	Market income
immoth	Other income
immtran	All transfer income
immtot	Total income
immdisp	Disposable income
immicons	Consumable income
immtax	All taxes
imnettr	Net transfers to person

#### 2.9.2 Memo: Federal Balance

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

imfoth	Federal other government income
imftax	Federal taxes
imftran	Federal transfer income
imfedbal	Federal taxes less transfers

#### 2.9.3 Memo: Provincial Balance

These variables summarise 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

# 2.10 Expenditure

These variables come directly from the Family Expenditure Survey. Each FAMEX record, corresponding to a spending unit, has been associated with an SPSD household using a categorical matching technique in the database creation process. These variables are always represented in the dollars of the survey base year, and are inclusive of base year commodity taxes. Forty distinct categories of expenditure, corresponding to the categories used in the System of National Accounts, are given in the variables fxio0-fxio39. The remaining fx variables complete a cash balance for the spending unit.

fxio I/O expenditure categories [array] fxnes Unallocated FAMEX items fxintpl Interest on personal loans Other money receipts fxfomr fxfabd Account balancing difference fxsaldur Sale of durables fxncal Net change in assets and liabilities fxnsave Negative savings fxpsave Positive savings fxuic UI contributions fxrrspt RRSP contributions Retirement pension contributions fxretpen fxtaxf Income taxes paid fxptax Property taxes

#### 2.11 Intermediate Variables

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

# 2.11.1 Intermediate Variables: Commodity Tax

ctishrh cttotexp Shared income concept (FAMEX)
Total household expenditures

#### 2.11.2 Intermediate Variables: Federal Income Tax

idalexp Other allowable employment expenses idcarry Carrying charges idccea Child care exemption allowed idccet Child care expenses associated with child idchara Charitable donations and gifts idcloss Allowable other years capital loss iddisex Disability deduction Union and professional dues iddues ideduc Education allowance for student

idfotc Federal other tax credits

idfptc Federal political contribution tax credit

idiloss
iditc
Business investment losses
Federal investment tax credits
Net medical calculated amount

idnclos Allowable other years non-capital loss idothdn Other deductions from total income Other dependent exemptions

doctipe Other dependent exemptions

idrpp Registered pension plan contributions

idrrsp RRSP calculated amount

idtuitn Tuition fees

imalexp Allowable employment expenses imamtdf Difference due to minimum tax

imamtfg Minimum tax flag imatxc Age tax credit

imatxcrt Total tax credits applied Age personal exemption

imbft Basic federal tax

imbtcBasic personal tax creditimcceaChild care expenses allowedimccetxcChild care expenses tax creditimcdedsDependent children deductionsimchartcCharitable donations tax credit

imchclm Number of dependent children claimed

imcppctc CPP contributions tax credit

imctxcrt Tax credits transferred from children

imctxcs Dependent children tax credits imdedea Employment allowance

imdedfn
imdedft
All deductions from net income
Deductions from total income

imdedt Deductions from foral income

imdedt Deductions transfered from spouse

imdisate Disability tax credit Disability exemption

imedtxc Education allowance tax credit

imeduc Education allowance

imexm Personal exemptions (Basic+Age)
imfdtxc Federal dividend tax credit

imfedtax Federal tax before tax credits

imfiler Taxable filer status
imfsur Federal surtax

imftr Federal tax reduction
imicapgt Taxable capital gains

imidivt Amount of taxable dividends

iminet Net income

imint dn Interest income deduction allowed

imishri Shared income concept (FAMEX & SPSD)

imitax Taxable income Total income

immartxc Married tax credit claimed

immedatc Medical expenses allowed tax credit

imothrep Other federal repayments

impendn Pension income deduction allowed

impentxc Pension income tax credit

impex All personal exemptions and deductions

#### 2.11.3 Intermediate Variables: Provincial Income Tax

imbpt Basic provincial tax

imqalexp Quebec allowable employment expenses

imqaxm Quebec age personal exemption imqcapgt Quebec taxable capital gains

imaccea Quebec child care expenses allowed imacdeds Quebec dependent children deduction Quebec employment allowance

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

imqdisex Quebec disability exemption Quebec dividend tax credit

imqexm Quebec personal exemptions (Basic+Age)

imqidivt Quebec taxable dividends imqinet Quebec net income

imqintan Quebec interest income deduction allowed

imqitax Quebec taxable income imqitot Quebec total income

imqmarex Quebec married exemption claimed

imapenda Quebec pension income deduction allowed Quebec personal exemptions and deductions imaget dan Quebec stand. /medical+charitable allowed

imqt a Quebec tax abatement (total)
imqt aa Quebec tax abatement (applied)
imqt ar Quebec tax abatement (refundable)
imrepay FA + OAS + UIB repayments

imstddn Standard or medical+charitable allowed imstxcrt Tax credits transfered from spouse

imtaxcr Total tax credits

imtfaimttxcrtTaxable family allowancestax credits transfered

imtutxc Tuition tax credit imuibr UI benefit recovery

imuicte UIC contributions tax credit

### 2.11.4 Intermediate Variables: Family Allowance

imnfach Number of family allowance children claimed

impfa Provincial family allowance

imffa Federal portion of family allownces

#### 2.11.5 Intermediate Variables: OAS/GIS

Partial OAS residency flag imoaspar Partial OAS fraction imoasres imoldtyp Type of GIS/SPA nuclear family imgisinc Individual's income for GIS/SPA reduction Type of GIS entitlement imgistyp Maximum amount of GIS imgismax Type of SPA entitlement imspatyp imspamax Maximum amount of SPA

# 2.11.6 Intermediate Variables: Unemployment Insurance

ucstat Claim status flag ucbtyp Claim type Insurable weekly earnings ucern uceff Effective weekly rate ucprvwk Weeks on UI in 52 weeks before claim Penalty for voluntary quit ucquitp Repeat claim flag ucrpeat ucstart Week claim established Type change flag uctpcng Weeks of benefits ucweeks ucwwork Weeks of work prior to claim ubcalpd Benefits paid in calendar year ubcalwk Weeks on claim in calendar year ubclmpd Benefits paid on claim ubclmwk Weeks on claim ubern Modelled insurable weekly earnings ubp1 Week # of first payment Week # of first payment (windowed) ubp1c Week # of start of second phase ubp2 Week # of start of second phase (windowed) ubp2c 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)

#### 2.12 Miscellaneous

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.

immaramtAdjustment to income sourceimmarexMarried exemption claimedimmartaxChange in consumable income after adjustmentimnincNo income flagidieflagInstitutionalized elderly flagidinoflgInterest not converted

idninco No income flag (SPSD variables)
idsaoflg SA not converted
iduioflg UI benefit not converted

#### 2.13 Unit Count Variables

There are a number of variables which can be used to count up various entities, or which can be used to produce means in user cross tabulation expressions. These are described below.

units This variable always contains the value 1, independent of the family level of analysis. As a result it contains a count of the number of family units at the specified family level of analysis. This variable contains a count of the number of selected persons in the family persons unit implied by the current family level of analysis. This variable gives an unduplicated count of the number of FAMEX fxvrecs expenditure vector records represented by the current household. This variable gives an unduplicated count of the number of SCF scfrecs demographic/income records represented by the current household. spsdrecs 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.

#### 2.14 User-defined Variables

There are a number of variables (and corresponding parameters) which allow the user to create new analysis or classificatory variables. They are described in more detail in the SPSD/M User's Guide.

These variables are user-specified analysis variables. Their values are specified through expressions given in the corresponding parameters EX0 to EX19.

These variables are user-specified class variables. Their values are generated by specifying an analysis variable, and a set of break points, using the parameters CL0 to CL9 and CL0BRK to CL9BRK.

# 3 Alphabetic Reference

# cf: Census family data [array]

#### · 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 Cf 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.

# 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 Clanguage 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 initialise a working pointer used to process each person of a census family in turn.

#### Tax/Transfer Function Cross-reference:

txcalc

(i) Calculate federal income tax

sa

(i) Compute social assistance or guarantees

#### · 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 Clanguage 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 initialise 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.

#### Tax/Transfer Function Cross-reference:

txhstr

(i) Apply tax transfers between head and spouse

txqhstr

(i) Apply tax transfers between head and spouse (Quebec)

# 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 Clanguage 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.

#### Tax/Transfer Function Cross-reference:

txccea

(i) Compute child care expense allowance

txhstr

(i) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax

txqccea

(i) Compute child care expense allowance (Quebec)

txqhstr

(i) Apply tax transfers between head and spouse (Ouebec)

# 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 Clanguage 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 <code>cfspoflg</code> can be used to determine if there is a spouse in the census family.

### Tax/Transfer Function Cross-reference:

txccea (i) Compute child care expense allowance
txhstr (i) Apply tax transfers between head and spouse
txcalc (i) Calculate federal income tax
txqccea (i) Compute child care expense allowance (Quebec)
txqhstr (i) Apply tax transfers between head and spouse (Quebec)

# 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.

#### Tax/Transfer Function Cross-reference:

txhstr (i) Apply tax transfers between head and spouse (Quebec)

txqhstr (i) Apply tax transfers between head and spouse (Quebec)

#### 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.

# cfnpers: Number of persons in census family

# · Description:

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.

#### Tax/Transfer Function Cross-reference:

txcalc

(i) Calculate federal income tax

sa

(i) Compute social assistance or guarantees

## 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.

#### Levels:

0 Male

Female 1

# 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.

#### Levels:

- 0 No spouse present
- 1 Spouse present

#### Tax/Transfer Function Cross-reference:

txccea

(i) Compute child care expense allowance

txhstr

(i) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax

txqccea txqhstr

(i) Compute child care expense allowance (Quebec)

(i) Apply tax transfers between head and spouse (Quebec)

# 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.

#### Levels:

- 0 With Kids, 1 Adult
- With Kids, 2+ Adult 1
- With Elderly, 1 Adult 2
- 3 With Elderly, 2+ Adult
- 4 Other, 1 Adult
- 5 Other, 2+ Adult

# c1: Individual user classificatory variables [array]

# Description:

This member of the *in* structure is an array of integers which holds values for class variables defined through the parameters CL0 through CL9 together with the parameters CL0BRK through CL9BRK. The values held by these variables are referenced in the SPSM 'black box' variable facilities by using the names cl0 through cl9. The cl variables, like the ex variables, are computed at the same family level of analysis as they are used. For more details, please see the SPSM User's Guide and the SPSM Parameter Guide.

# 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 model 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.

# · 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.

# Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

# ctfct: Federal commodity taxes [array]

#### · Description:

This array of analysis variables contains, for each consumption category, all federal commodity taxes associated with the household's consumption of that category. The federal commodity taxes for each of the forty categories of consumption (see the fxio section of this guide) are referenced in the SPSM 'black box' facilities using the names ctfct0 through ctfct39. It is true that the sum of these forty variables will equal the sum of the six variables ctfcid, ctfexd, ctfext, ctfmfg, ctfoen, and ctfrst. The forty variables provide consumption category detail on federal taxes, while the six provide detail by federal tax type. This variable is only computed if the CTDFLAG parameter is set to 1.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) 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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

#### ctfext: Federal excise taxes

#### Description:

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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

#### ctfmfg: Federal manufacturer's sales tax

# · Description:

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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

#### ct foen: 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; Petrolium Compensation Levy. This variable is only computed if the CTDFLAG parameter is set to 1.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

#### ctfrst: Federal retail sales tax

### · 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 CTFRST) have been provided to allow the simulation of a national sales tax, even though there is no federal retail sales tax at the present time. This variable is only computed if the CTDFLAG parameter is set to 1.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

# ctishrh: Shared income concept (FAMEX)

#### Description:

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 idishri.

#### Tax/Transfer Function Cross-reference:

ctmod

### · 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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

# ctpct: Provincial commodity taxes [array]

### Description:

This array of analysis variables contains, for each consumption category, all provincial commodity taxes associated with the household's consumption of that category. The provincial commodity taxes for each of the forty categories of consumption (see the fxio section of this guide) are referenced in the SPSM 'black box' facilities using the names ctpct0 through ctpct39. It is true that the sum of these forty variables will equal the sum of the six variables ctpamu, ctpgas, ctplgl, ctpplq, ctprst, and ctptob. The forty variables provide consumption category detail on provincial taxes, while the six provide detail by provincial tax type. This variable is only computed if the CTDFLAG parameter is set to 1.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) 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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) 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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

# ctpp1q: 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.

#### Tax/Transfer Function Cross-reference:

ctmod

# 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 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.

#### Levels:

- 0 Newfoundland
- 1 P.E.I.
- 2 Nova Scotia
- 3 New Brunswick
- 4 Quebec
- 5 Ontario
- 6 Manitoba
- 7 Saskatchewan
- 8 Alberta
- 9 B.C.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) 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.

#### Tax/Transfer Function Cross-reference:

ctmod

# 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 bt cigarette or gram of cut tobacco. This variable is only computed if the CTDFLAG parameter is set to 1.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) 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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

#### cttotexp: Total household expenditures

#### Description:

This analysis variable records the total expenditure of the household on the forty categories of goods and services, including any imbedded commodity taxes.

# Tax/Transfer Function Cross-reference:

ctmod

### Description:

This analysis variable records the total federal commodity taxes associated with the disposable income and expenditure pattern of each household. It can be considered either as the sum of ctfct0 through ctfct39 or as the sum of ctfcid, ctfexd, ctfext, ctfmfg, ctfoen and ctfrst.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

### cttxpc: Provincial total commodity taxes

# Description:

This analysis variable records the total provincial commodity taxes associated with the disposable income and expenditure pattern of each household. It can be considered either as the sum of ctpct0 through ctpct39 or as the sum of ctpamu, ctpgas, ctplgl, ctpplq, ctprst and ctptob.

#### Tax/Transfer Function Cross-reference:

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.

# efageeld: Age of eldest in economic family

### Description:

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 Clanguage 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 initialise a working pointer used to process each person of an economic family in turn.

# 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.

# efneld: Number of elderly in economic family

# Description:

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.

# 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.

#### Levels:

- 0 Male
- 1 Female

# efspoflg: Economic family contains married couple

### Description:

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

#### · Levels:

- 0 No spouse present
- 1 Spouse present

# 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.

#### · Levels:

- 0 With Kids, 1 Adult
- 1 With Kids, 2+ Adult
- 2 With Elderly, 1 Adult
- 3 With Elderly, 2+ Adult
- 4 Other, 1 Adult
- 5 Other, 2+ Adult

# ex: Individual user expressions variables [array]

#### · Description:

This member of the in structure is an array of floating point numbers which hold values for analysis variables defined through the parameters EX0 through EX19. The values held by these variables are referenced in the SPSM 'black box' variable facilities by using the names ex0 through ex19. The ex variables, like the ex1 variables, are computed at the same family level of analysis as they are used. For more details, please see the and the SPSM User's Guide or the SPSM Parameter Guide.

### 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 Vecture Stochastic Match process.

# 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:

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

# 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.

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

# 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.

# 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 is the case for the ct variables. The detailed constitution of each of the 40 categories follows in the description of the individual components fxio0 through fxio39. These categories, defined as aggregates of more detailed FAMEX variables, have been 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.

### · Source:

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

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

## fxio0: Food and Non-alcoholic Beverages

## Description:

This variable includes expenditures on food purchased from stores for home use. It does not include board for roomers.

## fxio1: Alcoholic Beverages

## Description:

This variable includes expenditures on alcoholic beverages purchased from stores or served on licensed premises. The service portion of alcohol purchased on licensed premises appears below in the expenditure in restaurants & hotels category.

### fxio2: Tobacco

## Description:

This variable includes expenditures on tobacco, cigarettes, cigars and similar products. It does not include smokers supplis such as matches etc.

# fxio3: Men's & Boy's Clothing

# Description:

The variable includes apparel items for men and boys as well as wallets and belts. It does not include footwear, jewelery, watches and the like.

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

### · Description:

This variable includes apparel items for women and girls and infants as well as handbags etc. It does not include footwaer, jewelry, watches, and the like.

## fxio5: Footwear and Shoe Repair

### Description:

This variable includes all expenditures on footwear for household members as well as footwear maintenance and repair costs.

# fxio6: Gross Imputed Rent

## · Description:

This variable includes expenditures on the following items.

- Water
- · Property and Transfer Taxes
- Condominium Charges
- Labour (Repairs and Maintenance)
- Contract Cost (Repairs and Maintenance)
- First Mortgage, Second Mortgage, and Mortgage Interest
- Mortgage Insurance Premiums
- · Penalties Associated with Mortgage
- · Expenses for Survey Appraisals
- Adjustments Paid on Home Purchases
- · Maintenance, Repairs and Replacement Vacation Homes
- Property Taxes Vacation Homes
- Mortgage Interest Vacation Homes
- · Water Vacation Homes
- · Outdoor Patios, Fences and Driveways
- · Exterior Walls
- · Painting
- · Wall Papering
- Other Interior Walls and Ceilings
- Carpentry
- Electrical Systems
- · Plumbing
- · Other Replacement and Repairs

## fxio7: Gross Paid Rent

## Description:

This variable includes expenditures on rent, tenants' maintenance, repairs and alterations, and rented vacation homes.

## fxio8: Other Lodging

### Description:

Expenditures on other accommodation away from home.

### fxi09: Electricity

### Description:

This variable includes expenditures on electricity in a spending unit's principal home or vacation home(s).

### fxio10: Natural Gas

## Description:

This variable includes expenditures on piped gas used in both the household's principal home and vacation home(s), if any.

### fxio11: Other Fuels

## • Description:

This variable includes expenditures on fuel oil, other liquid fuel and other fuels (including fuelwood) used in the household's principal home or vacation home(s).

## fxio12: Furniture, Carpets and Floor Covering

# · Description:

This variable includes expenditures on the following items.

- Furniture
- Room Size and Area Rugs and Mats
- Furnishings (Repair and Maintenance)

# fxio13: Durable Household Appliances

# Description:

This variable includes the following FAMEX expenditure items.

- · Household Appliances
- Power Driven Hand Tools
- Other Power Tools and Equipment
- Lawn, Garden and Snow Removal Tools and Equipment
- Attachments and Accessories
- Parts Purchased Separately
- · Purchase of Tools and Equipment for Work
- Home Security Equipment
- · Clocks, Timers, Kitchen Scales, etc.
- · Miscellaneous Household Equipment
- Equipment (Maintenance and Repairs) Major Household Appliances
- Major Household Appliances (Parts, Accessories and Attachments)

### fxio14: Semi-durables

### · Description:

This variable includes expenditures on the following items.

- Portable Electric Lamps
- Non-Electric Kitchen and Cooking Equipment

- · Tableware and Flatware
- Small Electrical Appliances (Parts and Accessories)
- · Curtains, Draperies, Curtain Rods, Tracks, etc.
- · Mirror and Picture Frames
- · Other Household Equipment (Parts and Accessories)
- Other Equipment (Maintenance and Repair)
- · Other Tools and Equipment
- Other Lawn and Garden Tools and Equipment
- · Charcoal BBQ and Miscellaneous Cooking Equipment
- Brooms, Brushes and Mops
- Luggage
- Stationery
- · Purchase of Pets and Related Goods
- · Veterinarian and Other Services
- Material
- Bedding
- · Tablecloths, Napkins, etc.
- · Towels, Washcloths, Bath mats, etc.
- · Other Household Textiles
- · Art Goods and Decorative Ware
- Original Works of Art
- Antiques
- Glass Mirrors
- · Non-Electric Laundry Equipment
- Clothing Material
- Notions
- Electric Light Bulbs and Tubes
- · Dry-Cell Batteries
- Stationery and Office-Type Supplies Not Elsewhere Stated
- · Electric Hair-Styling Equipment
- Other Electric Equipment

### fxio15: Non-durables

### Description:

This variable includes expenditures on the following items:

- Pet Food
- Household Cleaning Supplies
- Paper Towels
- · Facial and Bathroom Tissue
- · Other Paper Supplies
- Plastic Garbage Bags
- · Other Plastic Supplies
- Foil Supplies
- Horticultural Goods and Services
- Other Supplies
- Disposable Diapers

## fxio16: Laundry and Dry Cleaning

## · Description:

Expenditures on all laundry and dry cleaning services including diaper service as well as expenditures on coin operated washers and dryers and self-service dry cleaning.

### fxio17: Domestic Services

## · Description:

This variable includes expenditures on week-day child care in the home, other child care in the home, and domestic and other custodial services.

### fxio18: Other Household Services

# · Description:

This variable includes expenditures on the following items.

- Tenants' Insurance Premiums
- Homeowner's Insurance Premiums
- Insurance Premiums (Vacation Homes)
- Rental of Furnishings and Equipment
- · Dressmaking, Tailoring, and other Clothing Services
- Insurance Premiums, Registration Fees(Recreation Vehicles)
- Home Security Services
- Other Household Services (e.g., making draperies)

### fxio19: Medical Care

### Description:

This variable includes expenditures on physician's care, dental care, nursing care, and other health care services. This includes only personal contributions to public health insurance schemes where applicable.

### fxio20: Hospital Care

### Description:

All expenditures on direct pay charges included in hospital bills.

### fxio21: Other Medical Care

### Description:

Workman's Compensation etc.

## fxio22: Drugs and Sundries

## · Description:

This variable includes expenditures on medical supplies, medicinal and pharmaceutical products, eye care goods and services, and other health care goods. If these items are covered under insurance schemes then the reported expenditure consists of only peronal payments beyond the coverage.

### fxio23: New and Used Automobiles

## Description:

This variable includes the net value of expenditures on the purchase of automobiles and trucks as well as the proceeds received from the separate sale of automobiles and trucks.

## fxio24: Auto Repairs and Parts

## Description:

This variable includes the following FAMEX expenditure items.

- Tires
- · Batteries
- Maintenance and Repair Jobs
- Other Maintenance and Repair Supplies
- Automobile Radios and Tape Players
- Other Accessories and Attachments

## fxio25: Gasoline, Oil and Grease

## Description:

This variable includes expenditures on automotive fuels and fuels used for recreation vehicles.

### fxio26: Other Auto Related Services

### Description:

This variable includes expenditures on the following items:

- Rented and Leased Automobiles and Trucks
- Parking
- Driving Lessons
- · Drivers' Licences
- · Private and Public Insurance Premiums
- Registration Fees
- Other Operation Services (Towing, Tolls, Auto Association Fees)
- · Repairs to Other Parties' Vehicles

## fxio27: Local and Inter-city Transportation

## · Description:

This item includes expenditures on local and commuter purchased transportation, purchased inter-city transportation, as well as moving & storage costs.

## fxio28: Telephone & Other Communications

## Description:

This variable includes expenditures on the purchase and rental of telephone equipment, as well as installation and service charges. It also include postal services.

# fxio29: Recreation, Sports and Camping Equipment

# · Description:

This variable includes expenditures on the following items.

- · Sporting and Athletic Equipment
- Playground Equipment
- · Toys, Games and Hobby Equipment
- Photographic Goods and Services
- Calculators
- Typewriters
- · Musical Instruments, Accessories and Parts
- · Collectors' Items
- Camping and Picnic Equipment
- Supplies and Parts for Recreational Equipment
- Rental, Maintenance and Repairs
- Net Value of Purchase/Sale of Recreation Vehicles
- Bicycle Repairs, Parts and Accessories
- Maintenance and Repair Supplies and Parts
- Maintenance and Repair Jobs
- Other Vehicle Operation Services (e.g., rentals, storage)
- Matches and Other Smokers' Supplies
- Home Entertainment Equipment and Services

### fxio30: Books, Magazines and Stationary

# Description:

This variable includes expenditures on greeting cards and postcards, gift wrap paper, reading materials and other printed matter, and education related textbooks and supplies.

### fxio31: Recreational Services

### Description:

This variable includes expenditures on recreation services such as admissions to sporting events, cablevision subcsriptions, and admission charges to recreational facilities. It also include expenditures paid on other recreational services, contributions and dues for social clubs, and lottery tickets.

### fxio32: Education and Cultural Services

## · Description:

This category includes expenditures on tuition fees on all educational services.

# fxio33: Jewellery, Watches and Repairs

## Description:

This variable includes expenditures on jewelry, watches, and their repairs.

### fxio34: Toilet Articles, Cosmetics, Etc.

## Description:

This variable includes expenditures on the following items:

- Toilet Preparation and Cosmetics
- · Oral Hygiene Products
- · Toilet and Other Personal Soap
- · Razors and Razor Blades
- · Other Personal Care Supplies and Equipment

### fxio35: Personal Care

### · Description:

This variable includes expenditures on hairstyling for men and women and funeral services.

### fxio36: Expenditure in Hotels and Restaurants

### Description:

This variable includes expenditures on food purchased from restaurants, traveller accommodation, board paid to private households, and tourist packages.

# fxio37: Personal Business

## Description:

This variable includes the following FAMEX expenditure items.

- Interest on Personal Loans
- Expenses on Other Property
- · Legal Fees not elsewhere stated
- Financial Services: Banks, Tax Advice, etc.
- Forfeit of Deposits: Fines, Money Lost, etc.
- Life Insurance Premiums
- · Legal Fees Related to Accommodation

# fxio38: Contributions to Non-profit Orgs.

## · Description:

This variable includes gifts and contributions to religious organizations, other charitable organizations, and union or professional associations.

## fxio39: Net Expenditures Abroad (=0)

## Description:

Since there is no commodity taxes associated with expenditures abroad we have set this variable to zero.

# 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.

### fxnes: Unallocated FAMEX items

## 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:

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

### Tax/Transfer Function Cross-reference:

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).

#### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

# 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.

# Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

## fxptax: Property taxes

# Description:

This variable includes property taxes paid on the household's principle accommodation and/or owned vacation home.

### · Source:

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

# fxretpen: Retirement pension contributions

## Description:

Retirement and pension fund payments for CPP/QPP, government pension plans and other retirement or pension funds excluding RRSPs.

### Source:

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

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

# fxrrspt: RRSP contributions

# · Description:

Total RRSP contributions.

### Source:

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

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

### 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.

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

# 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. See also hdseqhv.

### · Source:

Calculated during SPSD Sub-sample Stratification Process.

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

## fxtaxf: Income taxes paid

### Description:

This variable includes income tax paid during the survey year on income received during or prior to the survey year, as well as gift and foreign taxes.

### · Source:

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

### fxuic: UI contributions

## Description:

Expenditures on unemployment insurance premiums.

### Source:

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

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

## 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.

### Tax/Transfer Function Cross-reference:

oas

(i) Compute OAS for elderly

gist

(i) Compute Provincial GIS top-ups for elderly

### hdbdrms: Number of bedrooms

## · 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.

### · Levels:

## hdclohh: Number of SCF clones

## Description:

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.

## 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 facility, this variable could be used to process each FAMEX record exactly once.

### · Levels:

- 0 True
- 1 False

### hdnadult: Number of adults in household

## · Description:

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

## 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.

## Description:

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.

### hankids: 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.

# 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.

### 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.

## 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:

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

### · Levels:

- 0 Newfoundland
- 1 P.E.I.
- 2 Nova Scotia
- 3 New Brunswick
- 4 Ouebec
- 5 Ontario
- 6 Manitoba

- 7 Saskatchewan
- 8 Alberta
- 9 B.C.

## Tax/Transfer Function Cross-reference:

ui (i) Compute UI benefits
fa (i) Compute family allowance
txcalc (i) Calculate federal income tax
txprov (i) Compute provincial taxes

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

ctmod (i) Compute commodity taxes for individuals and households

### 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

### Levels:

7 8 8 >8

# hdseqhh: Household sequence number

# Description:

Sequence number indicating the order of households.

### Source:

SPSD systemics. Re-ordering of file sequence

# hdseqhv: 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. See also fxseqhv.

### · Source:

Calculated during SPSD Sub-sample Stratification Process.

### 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.

### Levels:

- 0 Male
- 1 Female

# hdspoflg: Household contains married couple

# · Description:

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

## Levels:

- 0 No spouse present
- 1 Spouse present

### 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

### · Levels:

- 0 Rented
- 1 Owned with Mtge.
- 2 Owned w/o Mtge.

# 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.

### Source:

#### · Levels:

- 0 With Kids, 1 Adult
- 1 With Kids, 2+ Adult
- 2 With Elderly, 1 Adult
- 3 With Elderly, 2+ Adult
- 4 Other, 1 Adult
- 5 Other, 2+ Adult

## · 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

## Description:

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 haprov.

#### Source:

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

### Levels:

- 0 >500,000
- 1 100,000-499,999
- 2 30,000-99,999
- 3 <30,000
- 4 Rural

### Tax/Transfer Function Cross-reference:

- ui
- (i) Compute UI benefits

# 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.

## hdwgthh: Household weight

# Description:

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.

# 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.

### 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.

### • Tax/Transfer Function Cross-reference:

txccea	(1)	Compute child care expense allowance
txhstr	(i)	Apply tax transfers between head and spouse
txcalc	(i)	Calculate federal income tax
txqccea	(i)	Compute child care expense allowance (Quebec)
txqhstr	(i)	Apply tax transfers between head and spouse (Quebec)
sa	(i)	Compute social assistance or guarantees

### hhnef: Number of economic families in household

### Description:

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

# Tax/Transfer Function Cross-reference:

dem	(1)	Compute new taxable demogrants
adj	(i)	Perform SPSD database adjustment
ui	(i)	Compute UI benefits
oas	(i)	Compute OAS for elderly
txinet	(i)	Compute net income
txitax	(i)	Compute taxable income
txprov	(i)	Compute provincial taxes
txqinet	(i)	Compute net income (Quebec)
txqitax	(i)	Compute taxable income (Quebec)
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.

### hhnnf: Number of nuclear families in household

# · Description:

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.

## Tax/Transfer Function Cross-reference:

fa	(i)	Compute family allowance
txinet	(i)	Compute net income
gis	(i)	Compute GIS/SPA for elderly
txctc	(i)	Compute child tax credit
txfstc	(i)	Compute federal sales tax credit

# 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.

# icmaramt: Amount of SPSD income 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.

## icmarinc: Income after 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.

# 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.

# icrefper: Reference person flag

## Description:

This variable is not directly accessible to the user, but is documented here for completeness. It is not used at the present time, but is intended to be used in the future implementation of a user-defined reference person 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.

### 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.

# Description:

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

### Source:

SPSD randomization process. Ages reported on the SCF are grouped by five year intervals (i.e. ages 5-9, 10-14, etc.). Within each age group, a new age is selected at random from a probability distribution derived from the 1984 distribution of population by age and sex. The complementary randomization of childrens' sex is described under idsex.

## Tax/Transfer Function Cross-reference:

fa	(i)	Compute family allowance
oas	(i)	Compute OAS for elderly
txitax	(i)	Compute taxable income
txhstr	(i)	Apply tax transfers between head and spouse
txprov	(i)	Compute provincial taxes
txqitax	(i)	Compute taxable income (Quebec)
txqhstr	(i)	Apply tax transfers between head and spouse (Quebec)
gis	(i)	Compute GIS/SPA for elderly
gist	(i)	Compute Provincial GIS top-ups for elderly
sa	(i)	Compute social assistance or guarantees

# idalexp: Other allowable employment expenses

# Description:

This variable corresponds to Line 109, 1984 General Tax Guide. Certain special employment expenses not claimable elsewhere are allowed. According to the 1984 definition, these expenses 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 \$80,000) and all other filers.

### Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)

# idcarry: Carrying charges

# Description:

Interest on money borrowed for investment. Corresponds to Line 222, 1984 General Tax Guide.

### · Source:

Imputed separately from the Green Book for High Income filers (Total income, excluding Capital Gains over \$80,000) and all other filers.

## Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txitax

(i) Compute taxable income

txqinet

(i) Compute net income (Quebec)

txqitax (i) Compute taxable income (Quebec)

# idccea: Child care exemption allowed

## Description:

Claimable portion of amounts paid for child care services required to enable an individual to earn income from employment. This variable contains the amounts allowed in taxation year 1984 according to the definition in that year. Corresponds to Schedule 5, 1984 General Tax Guide (amount allowed).

### Source:

Imputed from the Green Book to individuals identified as eligible: spouse with lower income with one or more children under the age of 14.

### Tax/Transfer Function Cross-reference:

txccea

(i) Compute child care expense allowance

txqccea

(i) Compute child care expense allowance (Quebec)

# 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.

### · Source:

Please see the SPSD Database Creation Guide for more information.

# 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.

# 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.

- · Levels:
  - 0 Head
  - 1 Spouse
  - 2 Child
- Tax/Transfer Function Cross-reference:

txcalc

(i) Calculate federal income tax

# 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

# idchara: Charitable donations and gifts

### Description:

This is the sum of allowed charitable donations and gifts to Canada or a province. Corresponds to Lines 243 and 245, 1984 General Tax Guide. Note that the charitable donations component of this value is capped at 20% of 1984 net income.

#### Source:

Imputed from the Green Book file for all filers.

### Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

txqitax

(i) Compute taxable income (Quebec)

# idcloss: Allowable other years capital loss

# Description:

Capital losses of other years (1972-1983) are a deduction from net income. Corresponds to Line 253, 1984 General Tax Guide. In 1986 this is incorporated into Allowable Business Investment Losses.

### Source:

Imputed from the Green Book file separately for High Income filers (Total income excluding Capital Gain over \$80,000) and all other filers.

# Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

txqitax

(i) Compute taxable income (Quebec)

# idcluflg: Common-Law union flag

## Description:

See source and codes below.

### · Source:

1981 Census of Canada, Statistics Canada. Randomly imputed based on Age of the spouse, family income and number and age of children.

### · Levels:

0 Married

1 Common Law

### 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.

## 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.

## iddisex: Disability deduction

## · Description:

Deductions for blind persons or persons confined to a bed or wheelchair. Applies to filer, spouse or dependant. This is the amount claimed for all persons in 1984. Corresponds to Line 246, 1984 General Tax Guide.

### Source:

Imputed from the Green Book based on income, province, sex, age, and tax status. Although actual values are imputed, the model substitutes the maximum allowable deduction MAXDX if *iddisex* is greater than zero. This was done to allow scaling the deduction up or down. The value resulting from this substitution is *imdisex*.

## Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

txqitax

(i) Compute taxable income (Quebec)

## iddues: Union and professional dues

## · Description:

Union and professional dues claimed. This item corresponds to Line 212, 1984 General Tax Guide.

#### Source:

Imputed from the Green Book for all filers.

### Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)

## idedlev: Educational level

### · Description:

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

### · Source:

SCF, Derived.

### · Levels:

- 0 None or Elementary
- 1 9 or 10 Years
- 2 11 Years
- 3 12 Years
- 4 13 Years
- 5 Some Post-Secondary
- 6 Certif. or Diploma
- 7 University Degree

### ideduc: Education allowance for student

### Description:

This represents the amount of Education Deduction Allowed in 1984 including any amounts transferred from the spouse or dependants. This item corresponds to Line 247, 1984 General Tax Guide.

### Source:

Imputed form the Green Book for all filers based on income, province, age, sex, tax status and eligibility. Eligibility is defined as being over 18 and attending school full-time, or being the spouse or parent of a non-taxable dependant who is over 18 and attending school full-time.

### Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

# idef: Person's economic 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 ef structure of the economic family containing the individual, and can be used to easily reference information about the containing economic family.

## 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.

#### · Levels:

- 0 Head
- 1 Spouse
- 2 Child(-in-Law)
- 3 Other

## 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

### 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

### · Levels:

- 0 Not in School
- 1 School Full-Time
- 2 School Part-Time

### Tax/Transfer Function Cross-reference:

txhstr

(i) Apply tax transfers between head and spouse

txqhstr

(i) Apply tax transfers between head and spouse (Quebec)

### idfotc: Federal other tax credits

### Description:

Federal tax credits not otherwise imputed or modeled in the SPSM.

#### Source:

Derived and imputed from the 1984 Green Book for all filers as the sum of Federal Foreign Tax Credits (Line 507 in the 1984 General Tax Guide), Share Purchase Tax Credit (Line 411), Employment Tax Credit (Line 413) and Scientific Research Tax Credit (Line 503).

### Tax/Transfer Function Cross-reference:

txcalc

(i) Calculate federal income tax

# idfptc: Federal political contribution tax credit

# Description:

This is a deduction for contributions made to registered federal political parties or candidates for election to the House of Commons. This item corresponds to Line 410, 1984 General Tax Guide.

# Source:

Imputed from the Green Book for all filers.

### Tax/Transfer Function Cross-reference:

txcalc

(i) Calculate federal income tax

# 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 infromation 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

### Levels:

- 0 Head EF#1
- 1 Spouse EF#1
- 2 Other EF#1
- 3 Head EF#>1
- 4 Spouse EF#>1
- 5 Other EF#>1
- 6 Unattached

### Tax/Transfer Function Cross-reference:

ctmod

(i) Compute commodity taxes for individuals and households

# idicapg: Imputed actual capital gains

# Description:

This variable represents the actual amount of capital gains or actual capital losses (taxable capital gains or allowable capital losses multiplied by 2) since, in 1984, 50% of Capital Gains are taxable. Corresponds to Line 127, 1984 General Tax Guide.

### Source:

This item is imputed from the Green Book separately for high income filers (over \$80,000 in total income excluding Capital Gains) and all other filers.

### Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txcalc

(i) Calculate federal income tax

txqinet

(i) Compute net income (Quebec)

memo1

(i) Compute memo items for reporting

# idicap: CPP/QPP received

# · Description:

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

### Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)(i) Compute GIS/SPA for elderly

memo1

(i) Compute memo items for reporting

# ididiv: Actual amount of Canadian dividends

# **Description:**

The SPSD Value of Dividends is composed of two slightly different concepts of Dividends. For persons with incomes below \$80,000 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 \$80,000 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 \$80,000 the original SCF value is used. Individuals with total income of \$80,000 or over, the value is imputed from the Green Book.

### Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txcalc

(i) Calculate federal income tax

txginet

(i) Compute net income (Quebec)

memo1

(i) Compute memo items for reporting

# idieflag: Institutionalized elderly flag

# 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.

### Levels:

0 Non-Institutional

1 Institutional

# idiemp: Earnings from employment

### Description:

For persons having total income below \$80,000 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 \$80,000 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 \$80,000, the SCF value is used. For thos with a total income of \$80,000 or more, the value is imputed from the Green Book.

#### Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)

gis

(i) Compute GIS/SPA for elderly

memo1

(i) Compute memo items for reporting

### idiint: Interest income

# Description:

The SCF value of interest is attributed to individuals with income below \$80,000 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 \$80,000 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 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 *idinoflg* variable.

### Source:

For individuals with income under \$80,000, the SCF value is used. For thos with a total income of \$80,000 or more, the value is imputed from the Green Book.

### Tax/Transfer Function Cross-reference:

### idiloss: Business investment losses

### 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 and 218, 1984 General Tax Guide.

### Source:

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

# Tax/Transfer Function Cross-reference:

txinet	(i)	Compute net income
txitax	(i)	Compute taxable income
txqinet	(i)	Compute net income (Quebec)

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.

### Tax/Transfer Function Cross-reference:

oas

(i) Compute OAS for elderly

# 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.

### Levels:

- 0 Never Worked
- 1 Agriculture
- 2 Other Primary
- 3 Manufacturing, Non-durables
- 4 Manufacturing, Durables
- 5 Construction
- 6 Transportation & Communication
- 7 Wholesale Trade
- 8 Retail Trade
- 9 Finance, Insce., Real Estate
- 10 Education & Related
- 11 Health, Welfare, Religious
- 12 Recreation, Accomodation, Food
- 13 Business & Misc. Services
- 14 Public Administration
- 15 Worked >5 Years Ago

## idinoflg: Interest not converted

# Description:

This class variable indicates whether or not the interest income variable read from the SPSD database (idint) was an observed value from the SCF or was converted from a zero observation as part of the data base creation process. Please see the SPSD Database Creation Guide for more information.

### · Levels:

- 0 Observed
- 1 Converted

# idinogy: Other government income (non-taxable)

# · Description:

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.

## Tax/Transfer Function Cross-reference:

memo1

(i) Compute memo items for reporting

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.

### Tax/Transfer Function Cross-reference:

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

# 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.

### Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

gist

(i) Compute Provincial GIS top-ups for elderly

## idioiny: Other investment income with net rental

### **Description:**

The SCF value of Other Investment Income is attributed to individuals with income below \$80,000 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 \$80,000 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 \$80,000, the SCF value is used. For individuals with a total income (excluding Capital Gains) of \$80,000 or over the value is imputed from the Green

### Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)

qis

(i) Compute GIS/SPA for elderly

memo1

(i) Compute memo items for reporting

# idipens: Pension income

# 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.

### Tax/Transfer Function Cross-reference:

txinet (i) Compute net income
txitax (i) Compute taxable income
txqinet (i) Compute net income (Quebec)
txqitax (i) Compute taxable income (Quebec)
gis (i) Compute GIS/SPA for elderly
gist (i) Compute Provincial GIS top-ups for elderly
memo1 (i) Compute memo items for reporting

### idiroom: Net income from roomers and boarders

### Description:

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

#### Source:

SCF.

## Tax/Transfer Function Cross-reference:

txinet (i) Compute net income
txqinet (i) Compute net income (Quebec)
gis (i) Compute GIS/SPA for elderly
memol (i) Compute memo items for reporting

This variable is as stated on the SCF for all Individuals with the exception of modeled GIS supplement recipients whose reported value is replaced with the modeled value. This may cause underestimation for those elderly who had income from more than one provincial supplement program.

### Source:

SCF.

### Tax/Transfer Function Cross-reference:

(i) Compute social assistance or guarantees

# idisefm: Farming net income

# 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 \$80,000 the value is as reported on the SCF and for persons with income of \$80,000 and over, the value is imputed from the Green Book file.

### Tax/Transfer Function Cross-reference:

(i) Compute net income

txqinet

(i) Compute net income (Quebec)(i) Compute GIS/SPA for elderly

gis

memo1

(i) Compute memo items for reporting

# 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 \$80,000 the value is as reported on the SCF and for persons with income of \$80,000 and over, the value is imputed from the Green Book file.

# Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet gis

(i) Compute net income (Quebec)(i) Compute GIS/SPA for elderly

memo1

(i) Compute memo items for reporting

# iditc: Federal investment tax credits

### Description:

The Federal Investment Tax Credit (also referred to as the Business Investment Tax Credit) corresponds to Line 412, 1984 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.

# Tax/Transfer Function Cross-reference:

txcalc

(i) Calculate federal income tax

# 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:

SCF.

# Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)(i) Compute GIS/SPA for elderly

memo1

(i) Compute memo items for reporting

### iditoth: Other taxable income

# · Description:

The SCF value of Other Money Income is attributed to individuals with income below \$80,000 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,

• U.S.A. Social Security,

· sale of purebred dogs,

medical equalization payments,

• indemnity payments,

· past service gratuities.

For filers with income over \$80,000 the SCF value is replaced by a value imputed from the Green Book. This represents other other income as defined by Line 130 in the 1984 General Tax Guide:

- · 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 \$80,000 the value is as reported on the SCF and for persons with income of \$80,000 and over, the value is imputed from the Green Book file.

## · Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)(i) Compute GIS/SPA for elderly

gis memol

(i) Compute memo items for reporting

idlfst: Labour force status

# Description:

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.

### · Levels:

0 N/A

1 Employed

2 Unemployed

3 Not in LF

## 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.

#### Levels:

- 0 Did Not Work
- 1 Full-time
- 2 Part-time

# idlystr: Last year stretches unemployed

# · Description:

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.

### · Levels:

- 0 None
- 1 One
- 2 Two
- 3 Three+

# 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.

# idlyww: Weeks worked

## Description:

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

- Tax/Transfer Function Cross-reference:
  - txinet
- (i) Compute net income

## idmarst: Marital status

Description:

See codes below.

Source:

SCF.

- · Levels:
  - 0 Married or CLU
  - 1 Single (never married)
  - 2 Widow(er)
  - 3 Divorced
- Tax/Transfer Function Cross-reference:
  - gis
- (i) Compute GIS/SPA for elderly
- gist
- (i) Compute Provincial GIS top-ups for elderly

### idmeda: Net medical calculated amount

# Description:

Allowed deduction for medical expenses on behalf of the filer, spouse or dependants. Corresponds to Line 242, 1984 General Tax Guide. This is the 1984 definition of the deduction for medical expenses which is defined as the eligible medical expenses exceeding 3% of Net Income.

### · Source:

Imputed for all filers from the Green Book.

## Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

txqitax

(i) Compute taxable income (Quebec)

# 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.

# idnclos: Allowable other years non-capital loss

# Description:

Non-capital losses of other years. Corresponds to Line 252, 1984 General Tax Guide. Includes Allowable Business Investment Loss and Indexed Security Investment Plan (ISIP) Allowable Capital Loss from years 1979 through 1983.

### Source:

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

### Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

txcalc

(i) Calculate federal income tax

txqitax

(i) Compute taxable income (Quebec)

# 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.

# idninco: No income flag (SPSD variables)

# Description:

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 initialise the mdninc variable when appropriate. It's value should not be used or set by the user.

# idnonlf: Major non-LF activity

# Description:

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

#### Source:

SCF.

### · Levels:

- 0 N/A
- 1 Unable To Work
- 2 Kept House

- 3 At School
- 4 Retired/Idle
- 5 Other

# idocc: Occupation

# Description:

See codes below.

#### · Source:

SCF. Recoded reported occupation.

### Levels:

- 0 Never worked
- 1 Managerial
- 2 Professional
- 3 Teaching
- 4 Clerical
- 5 Sales
- 6 Services
- 7 Agricultural
- 8 Mining, Processing
- 9 Fabrication, Assembly
- 10 Construction
- 11 Transport, Handling
- 12 Last worked > 5 years

### idothdn: Other deductions from total income

### · Description:

The sum of moving expenses, alimony paid, and "Other deductions" (Includes purchase of owner-occupied home, repayment of income amounts, petroleum exploration ventures and capital cost allowances due to losses on investments in Canadian motion picture films and video tapes). This is the remainder of Line 222 (Other deductions from Total Income) after Carrying Charges have been subtracted.

### Source:

The value is imputed from the Green Book separately for filers with under \$80,000 in total income and for those with a total income of \$80,000 or more.

# Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txcalc

(i) Calculate federal income tax

txqinet

(i) Compute net income (Quebec)

# idothpe: Other dependant exemptions

# 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, 1984 General Tax Guide. Imputed from the Green Book for all filers.

### Tax/Transfer Function Cross-reference:

txitax

(i) Compute taxable income

# idptc: Calculated provincial tax credits

# · Description:

Provincial tax credits not otherwise imputed or modeled by the SPSM. The item is the sum of the following items:

- provincial foreign tax credit
- royalty tax credit
- provincial royalty tax credit
- Calculated provincial property tax credit
- · Ontario student residence claim
- · Manitoba resident homeowner advance
- provincial political contribution tax credit
- · Saskatchewan venture capital tax credit allowed
- Saskatchewan livestock investment tax credit allowed.

### · Source:

This item is derived from the Green Book and imputed separately for filers with under \$80,000 in total income and those with a total income of \$80,000 or more.

### Tax/Transfer Function Cross-reference:

txprov

(i) Compute provincial taxes

### idrand0-19: Random numbers

## · 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.

# idrpp: Registered pension plan contributions

### Description:

This item is the allowed Registered Pension Plan Contribution including lump-sum payments corresponding to Line 207, 1984 General Tax Guide.

### · Source:

Imputed from the Green Book separately for filers with less than \$80,000 in total income and for those with a total income of \$80,000 or more.

### Tax/Transfer Function Cross-reference:

adj

(i) Perform SPSD database adjustment

txinet

(i) Compute net income

txcalc

(i) Calculate federal income tax

txqinet

(i) Compute net income (Quebec)

# idrrsp: RRSP calculated amount

# • Description:

This is the allowed deduction for Registered Retirement Savings Plan Premiums corresponding to Line 208, 1984 General Tax Guide.

### Source:

Imputed from the Green Book separately for filers with less than \$80,000 in total income and for those with a total income of \$80,000 or more.

# • Tax/Transfer Function Cross-reference:

adj

(o) Perform SPSD database adjustment

txinet

(i) Compute net income

txcalc

(i) Calculate federal income tax

txqinet (i) Compute net income (Quebec)

# idsaoflg: SA not converted

# · Description:

This class variable indicates whether or not the social assistance variable read from the SPSD database (idisa) was an observed value from the SCF or was converted from a zero observation as part of the data base creation process. Please see the SPSD Database Creation Guide for more information.

### · Levels:

0 Observed

1 Converted

# idschtp: School type

# · Description:

See codes below.

### Source:

SCF/LFS.

- · Levels:
  - 0 Primary or Secondary
  - 1 University
  - 2 College
  - 3 Not in School

### idsex: Sex

# · Description:

No description necessary.

### · 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*.

- · Levels:
  - 0 Male
  - 1 Female
- Tax/Transfer Function Cross-reference:
  - Ia
- (i) Compute family allowance
- txccea
- (i) Compute child care expense allowance
- txqccea
- (i) Compute child care expense allowance (Quebec)
- gis
- (i) Compute GIS/SPA for elderly
- txctc
- (i) Compute child tax credit

# idspoflg: Person has spouse

### Description:

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

- Levels:
  - 0 No spouse present
  - 1 Spouse present

### Tax/Transfer Function Cross-reference:

gist

(i) Compute Provincial GIS top-ups for elderly

## idtuitn: Tuition fees

# Description:

This item represents the allowable deduction for tuition fees which is claimable by student only. It corresponds to Line 213, 1984 General Tax Guide.

### · Source:

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

# • Tax/Transfer Function Cross-reference:

txinet

(i) Compute net income

txqinet

(i) Compute net income (Quebec)

# iduioflg: UI benefit not converted

### Description:

This class variable indicates whether or not the unemployment insurance information (uc variables) read from the SPSD database was derived from an observed value on the SCF or resulted from conversion of a zero observation as part of the data base creation process. Please see the SPSD Database Creation Guide for more information.

### · Levels:

- 0 Observed
- 1 Converted

# im: Individual modelled 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: Modelled allowable employment expenses

# Description:

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.

### Tax/Transfer Function Cross-reference:

txinet (o) Compute net income

## imamt df: 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.

# Tax/Transfer Function Cross-reference:

txcalc

(o) Calculate federal income tax

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 Algorithm Guide.

## Tax/Transfer Function Cross-reference:

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 amount of the Age Tax Credit is specified by parameter ATC.

# Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txcalc

(i) Calculate federal income tax

# 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.

### Tax/Transfer Function Cross-reference:

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 Page 2, 1984 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.

### Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txhstr

(i) Apply tax transfers between head and spouse

# imbase: Individual base run modelled 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 the Dividend Tax Credit. For a complete definition, see Line 505, 1984 General Tax Guide.

In reform scenarios, basic federal tax has been reduced by the subtraction of tax credits. 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.

### Tax/Transfer Function Cross-reference:

txcalc

(o) Calculate federal income tax

txprov

(i) Compute provincial taxes

memo1

(i) Compute memo items for reporting

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.

## Tax/Transfer Function Cross-reference:

txprov

(o) Compute provincial taxes

# 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.

# Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txcalc

(i) Calculate federal income tax

# imccea: Child care expenses allowed

# Description:

The model reassigns the imputed Child Care Exemptions (idccea) to the spouse with the lower income based on modelled net income (i.e., after Family Allowances, OAS and UI Benefits have been modeled).

### Tax/Transfer Function Cross-reference:

txccea

(o) Compute child care expense allowance

The Child Care Expenses Tax Credit is an alternative to the Child Care Expenses Deduction. It is calculated if the parameter CCEOPT is set to 2.

The 1984 value for the Child Care Expense Deduction (idccea) is imputed for all eligible filers from the Green Book. imccetxc is a proportion (CCETR) of the imputed value and is applied as a non-refundable non-transferrable tax credit. The tax credit may be assigned either to the spouse with the lower income (by setting the parameter CCEROPT to 1) or to the spouse, if present (by setting CCEROPT to 0).

Note that the imputed value for Child Care Expense Deduction imputed (idccea) is based on the 1984 definition (i.e., a limit of \$2,000 per child and up to 2/3 of the income of the claiming filer).

### Tax/Transfer Function Cross-reference:

txccea

(o) Compute child care expense allowance

txcalc

(i) Calculate federal income tax

# 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 231 of the 1984 General Tax Guide.

### Tax/Transfer Function Cross-reference:

txhstr

(o) Apply tax transfers between head and spouse

## imchartc: Charitable donations tax credit

## Description:

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

An amount for the Charitable Donations Deduction in imputed from the Green Book. If parameter MEDCROPT 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 (idchara) corresponds to the definition of Charitable Donations Deduction Allowed in 1984, 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.

### Tax/Transfer Function Cross-reference:

(o) Compute taxable income

txcalc

(i) Calculate federal income tax

# 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.

### Tax/Transfer Function Cross-reference:

txhstr

(o) Apply tax transfers between head and spouse

# imcppctc: CPP contributions tax credit

### Description:

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 (imcappc) are multiplied by the CPP/OPP Contribution Tax Credit Rate (parameter CPPCTR). The result is reported in the variable imcpptc.

### Tax/Transfer Function Cross-reference:

txinet (o) Compute net income

(i) Calculate federal income tax

# imcappe: 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.

### Tax/Transfer Function Cross-reference:

txinet

(o) Compute net income

txqinet memo1 (i) Compute net income (Quebec)

(i) Compute memo items for reporting

### imctc: Child tax credit

# Description:

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, 1984 General Tax Guide.

### Tax/Transfer Function Cross-reference:

txctc

(o) Compute child tax credit

memo1

(i) 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 amounts to the sum of the disability tax credit (imdisatc), education tax credit (imedtxc), and tuition tax credit (imtutxc). There is a limit to the total amount of education and tuition tax credit transferred (parameter MAXET).

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

# Tax/Transfer Function Cross-reference:

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 maximum Tax Credit for Dependent Children is set in parameter YCTC, the turndown level (i.e., the level of Net Income at which the tax credit begins to be reduced) is set in parameter YCTCT, and the reduction rate is in parameter YCTCR.

## Tax/Transfer Function Cross-reference:

txhstr

(o) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax

# imdedea: Employment allowance

## • Description:

This 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, 1984 General Tax Guide.

### Tax/Transfer Function Cross-reference:

txinet

(o) Compute net income

#### imdedfn: All deductions from net income

## Description:

The sum of all deductions from net income:

- Interest Income Deduction (imint dn)
- Pension Income Deduction (impendn)
- Medical Expense Deduction, Charitable Donations and Gifts to Canada (imstddn)
- Disability Deduction (imdisex)
- Education Deduction (imeduc)
- Unemployment Insurance Benefit Repayment Payable (imuibr)
- Deductions Transferred from Spouse (imdedt)
- Non-capital Losses of Other Years (idnclos)
- Capital Losses of Other Years (idcloss)

The definition corresponds to Line 255, 1984 General Tax Guide.

- Tax/Transfer Function Cross-reference:
  - txitax
- (o) Compute taxable income
- txhstr
- (o) Apply tax transfers between head and spouse

# imdedft: Deductions from total income

# Description:

The sum of all deductions from total income:

- CPP/QPP Contributions (imcqppc)
- UI Premiums (imuic)
- RPP Contributions (idrpp)
- RRSP Contributions (idrrsp)
- Union and Professional Dues (iddues)
- Tuition Fees (idtuitn)
- Child Care Expenses allowed (idccea)
- Allowable Business Investment Losses and Indexed Security Investment Plan allowable capital losses (idiloss)
- Other Deductions from total income (idothdn)
- · carrying charges (idcarry).

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

### Tax/Transfer Function Cross-reference:

- txinet
- (o) Compute net income
- txccea
- (o) Compute child care expense allowance

The Investment Income Deduction (imint dn), 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, 1984 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.

## Tax/Transfer Function Cross-reference:

txhstr

(o) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax

# imdisate: 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.

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 is determined by the value of parameter MAXDTC. If a tax credit is to be applied, individuals who have been imputed a value for Disability Deduction (iddisex) are given the maximum Disability Tax Credit which may be transferred to a spouse or parent.

## Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txcalc

(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.

If the parameter PEROPT is set to 1, the Disability deduction is calculated. Its definition corresponds to Line 246, 1984 General Tax Guide. The model substitutes the maximum allowable disability deduction (MAXDX) if iddisex is greater than zero. This allows scaling the value of the deduction up or down. The value resulting from this substitution is imdisex.

### Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txhstr

(i) Apply tax transfers between head and spouse

### 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 50 (dollars) which is the 1984 maximum Education Deduction per month. 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 transferrable is determined by parameter MAXET.

# Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txcalc

(i) Calculate federal income tax

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 ideduc.

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

## Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txhstr

(i) Apply tax transfers between head and spouse

# imexm: Personal exemptions (Basic+Age)

## Description:

Sum of Basic Exemption imbxm and the Age Exemption imaxm.

## Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

## imfa: Federal and provincial family allowances

# Description:

This is the sum of Federal Family Allowances (imffa) and Quebec Provincial Family Allowances (impfa).

### Tax/Transfer Function Cross-reference:

fa

(o) Compute family allowance

### imfdtxc: Federal dividend tax credit

### Description:

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

### Tax/Transfer Function Cross-reference:

txcalc

(o) 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 trasnfers received.

#### Tax/Transfer Function Cross-reference:

memo2

(o) Compute consumable income, etc.

### imfedtax: Federal tax before tax credits

## · Description:

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

### Tax/Transfer Function Cross-reference:

txcalc

(o) Calculate federal income tax

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.

#### Tax/Transfer Function Cross-reference:

fa

(o) Compute family allowance

txqinet

(i) Compute net income (Quebec)

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.

#### Levels:

- 0 Non Filer
- 1 Non-Taxable Filer
- 2 Taxable Filer

#### Tax/Transfer Function Cross-reference:

memo1

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.

# imfoth: Federal other government income

### Description:

This is the sum of Taxable Other Government Income (*iditogv*) and Non-taxable Other Government Income (*idinogv*) and is used in the calculation of Total Federal Transfers (*imftran*) and Modeled Total Income (*immtot*). This item is used only for reporting purposes.

#### Tax/Transfer Function Cross-reference:

memol

(o) Compute memo items for reporting

#### imfsa: Federal social assistance

# · Description:

imfsa is simply half of modelled Social Assistance income (imisa), representing the Federal contribution under the Canada Assistance Plan.

#### Tax/Transfer Function Cross-reference:

memo1

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*).

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

#### Tax/Transfer Function Cross-reference:

txfstc

(o) Compute federal sales tax credit

memo1

(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 calculated as a proportion of the adjusted minimum tax (amtbft).

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

# Tax/Transfer Function Cross-reference:

txcalc

(o) 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 (imcqpp), UI Contributions (imuic) and repayments including UI Benefits Repaid (imuibr); plus federal commodity taxes (imtxfd + imtxfi).

txcalc

(o) Calculate federal income tax

memo1

(o) Compute memo items for reporting

memo2

(o) 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 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.

#### Tax/Transfer Function Cross-reference:

txcalc

(o) Calculate federal income tax

txprov

(i) Compute provincial taxes

### imftran: 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), the Child Tax Credit (imctc), 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 + imqtaa), and other transfers (imfoth).

## Tax/Transfer Function Cross-reference:

memo1

(o) Compute memo items for reporting

memo2

(i) Compute consumable income, etc.

# 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).

# Tax/Transfer Function Cross-reference:

gis

(o) Compute GIS/SPA for elderly

gist

(i) Compute Provincial GIS top-ups for elderly

# imgismax: Maximum amount of GIS

## · Description:

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

### Tax/Transfer Function Cross-reference:

gis

(o) Compute GIS/SPA for elderly

gist

(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.

#### · Levels:

0 N/A

1 Single

- 2 One pensioner couple
- Two pensioner couple
- GIS recipient in SPA couple 4
- Tax/Transfer Function Cross-reference:
- (o) Compute GIS/SPA for elderly
- (i) Compute Provincial GIS top-ups for elderly

# imicapgt: Taxable capital gains

Description:

imicapgt reports the taxable portion of capital gains after multiplying by the Capital Gains Inclusion Rate (parameter CAPGIR).

- Tax/Transfer Function Cross-reference:
  - txinet
- (o) Compute net income
- txitax (i) Compute taxable income
- gis
- (i) Compute GIS/SPA for elderly

# imicqp: CPP/QPP payable

**Description:** 

This is a copy of the original SCF value for CPP/QPP benefits (idicqp) used for reporting purposes.

Tax/Transfer Function Cross-reference:

This represents the taxable amount of dividends from taxable Canadian Corporations. The definition corresponds precisely to that of Line 120 of the 1984 General Tax Guide. It is calculated by multiplying the actual amount of dividends (*ididiv*) by the Federal Dividend Gross-up Rate (FDGUR).

#### • Tax/Transfer Function Cross-reference:

txinet (o) Compute net income
txitax (i) Compute taxable income
txcalc (i) Calculate federal income tax
gis (i) Compute GIS/SPA for elderly

## imiemp: Income from earnings

### Description:

This is a copy of the value for Income from Earnings (idiemp) on the SPSD for reporting purposes.

## Tax/Transfer Function Cross-reference:

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.

#### Tax/Transfer Function Cross-reference:

gis (o) Compute GIS/SPA for elderly
gist (i) Compute Provincial GIS top-ups for elderly
txctc (i) Compute child tax credit
txfstc (i) Compute federal sales tax credit
memol (i) Compute memo items for reporting

# imigist: GIS provincial top-up

# Description:

This variable contains all amounts received by the individual under provincial income-tested elderly programs.

### Tax/Transfer Function Cross-reference:

(o) Compute Provincial GIS top-ups for elderly

sa

(i) Compute social assistance or guarantees

memo1

(i) Compute memo items for reporting

### iminet: Net income

# Description:

This corresponds to Revenue Canada's definition of Net Income:

- Total income imitot, minus
- deductions from total income (imdedft).

The only exception in this definition is that RHOSP contributions for 1984 are not deducted.

#### Tax/Transfer Function Cross-reference:

txinet

(o) Compute net income

txccea

(o) Compute child care expense allowance

txitax

(i) Compute taxable income

txhstr

(i) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax(i) Compute provincial taxes

txprov

txctc

(i) Compute child tax credit

txfstc

(i) Compute federal sales tax credit

memo1

This is calculated as the smaller of the Maximum Interest Income Deduction (parameter YINDL) and the sum of:

- Interest Income (idiint),
- Taxable Dividends (ididiv \* FDGUR idcarry), and
- Optionally, Taxable Capital Gains (idicapg \* CAPGIR).

Taxable Capital Gains are included only if the parameter CGIFLAG has been set to 1.

### Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txhstr

(i) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax

#### imioas: OAS benefits

## Description:

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.

#### Tax/Transfer Function Cross-reference:

(o) Compute OAS for elderly

txinet

(i) Compute net income

txitax txginet (i) Compute taxable income

gis

(i) Compute net income (Ouebec) Compute GIS/SPA for elderly (i)

memo1

(i) Compute memo items for reporting

# imiosa: Modelled 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.

gai

(o) Compute new refundable credits or guarantees

(i) Compute memo items for reporting

## imiotg: Other taxable demogrants

# Description:

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.

## Tax/Transfer Function Cross-reference:

(o) Compute new taxable demogrants

txinet

txqinet memo1

(i) Compute net income(i) Compute net income (Quebec)

(i) Compute memo items for reporting

## imisa: Social assistance (or replacement program)

### Description:

This variable contains that amount of social assistance received by the individual.

### Tax/Transfer Function Cross-reference:

sa

(o) Compute social assistance or guarantees

txctc

(i) Compute child tax credit

txfstc

(i) Compute federal sales tax credit

memo1

(i) Compute memo items for reporting

# imishri: Shared income concept (FAMEX and 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 <code>imishri</code> (summed over the household) to <code>ctishrh</code>, and are then apportioned among household members according to <code>imishri</code>. Conceptually, <code>imishri</code> is equal to disposable income plus other money receipts, negative savings, and proceeds from the sale of assets.

### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

## imispa: Spouse's allowance

# Description:

This variable indicates the dollar amount of provincial GIS Supplement program benefits received.

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.

# Tax/Transfer Function Cross-reference:

gis

(o) Compute GIS/SPA for elderly

gist

(i) Compute Provincial GIS top-ups for elderly

txctc

(i) Compute child tax credit

txfstc

(i) Compute federal sales tax credit

memo1

(i) Compute memo items for reporting

# 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, 1984 General Tax Guide) except that forward averaging is not applied by the model and exceptions in the calculation of Net Income (See *iminet* above).

#### Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txhstr

(o) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax

txprov

(i) Compute provincial taxes

txfstc (i) Compute federal sales tax credit

#### imit ot: 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
- idisenf: Self-employment Earnings (Non-farm), scaled by the parameter FACTISENF (normally set to 1.0.
- idisefm: Self-employment Earnings (Farm)
- idiroom: Net Income From Roomers and Boarders
- idiint: Interest Income
- idioiny: Other Investment Income
- idicap: CPP/QPP Benefits Received
- iditogv. Other Taxable Government Income
- idipens: Pension Income
- iditoth: Other Taxable Income
- imiuib: Modelled Unemployment Insurance Benefits Received
- imiotg: Modelled New Taxable Demogrants
- imioas: Modelled OAS Benefits
- imidivt: Modelled Taxable Amount of Dividends
- imicapgt: Modelled Taxable Capital Gains and Losses

From this total, the two deductions from employment income are subtracted:

- imalexp: Modelled Other Allowable Employment Expenses
- imdedea: Modelled Employment Allowance

# Tax/Transfer Function Cross-reference:

txinet (o) Compute net income

The model allows for scaling UI Benefits up or down by some constant amount (parameter UIBOUT). This item stores the value of UI Benefits actually used by the model in the calculation of Taxable Income, UI Benefits Repaid, Federal Transfers etc.

### Tax/Transfer Function Cross-reference:

ui	(o)	Compute UI benefits
txinet	(i)	Compute net income
txitax	(i)	Compute taxable income
txqinet	(i)	Compute net income (Quebec)
gis	(i)	Compute GIS/SPA for elderly
memo1	(i)	Compute memo items for reporting

# 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 (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 represents the Married or Equivalent Exemption used by the filer. See Schedule 6, 1984 General Tax Guide. 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 a proportion (MXMR) of 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 a proportion (MXMR) of 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.

### Tax/Transfer Function Cross-reference:

txhstr (o) Apply tax transfers between head and spouse

# 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 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 parameter PEROPT determines whether Personal Exemptions (PEROPT=1) or Personal Tax Credits (PEROPT=2) are calculated. If PEROPT is set to 2, the Married Tax Credit is calculated by reducing the maximum Married Tax Credit (parameter STC) by a proportion (parameter STCR) of Net Income exceeding a turndown level (parameter STCT). In the case of a single parent family, the Married Tax Credit may be attributed on behalf of an eligible dependant.

# Tax/Transfer Function Cross-reference:

(o) Apply tax transfers between head and spouse

txcalc (i) Calculate federal income tax

# immdisp: Disposable income

## Description:

Disposable income is total income (immtot) minus total income taxes (immtax).

### Tax/Transfer Function Cross-reference:

memo1

(o) Compute memo items for reporting

ctmod

(i) Compute commodity taxes for individuals and households

memo2

(i) Compute consumable income, etc.

## immedate: 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.

### Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txcalc

(i) Calculate federal income tax

# immemp: All employment income

## · Description:

The sum of all employment and self-employment income (idiemp, idisenf, idisefm).

#### Tax/Transfer Function Cross-reference:

memo1

#### immicons: Consumable income

## · Description:

This represents disposable income (immdisp) minus modeled Commodity Taxes (imtxfc+ imtxpc).

### Tax/Transfer Function Cross-reference:

memo1

(o) Compute memo items for reporting

memo2

(o) Compute consumable income, etc.

#### imminy: Investment income

# · Description:

The sum of all investment income:

- idiroom, income from roomers and boarders
- · idiint, interest income
- · ididiv, dividend income received
- · idicapg, capital gains received
- · idioinv, other investment income.

#### Tax/Transfer Function Cross-reference:

memo1

(o) Compute memo items for reporting

### immmkt: Market income

# Description:

The sum of all Market Income: immemp, imminv, immoth.

### Tax/Transfer Function Cross-reference:

memo1

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*).

# Tax/Transfer Function Cross-reference:

memo1

(o) 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.

# Tax/Transfer Function Cross-reference:

memo1

(o) Compute memo items for reporting

memo2

(o) Compute consumable income, etc.

### immtot: Total income

### Description:

All income received by individuals. The sum of Market Income (immmkt) and Transfer Income (immtran).

### Tax/Transfer Function Cross-reference:

memo1

### immtran: All transfer income

### Description:

The sum of all transfers from the government to individuals: imptran plus imftran.

#### Tax/Transfer Function Cross-reference:

- memol
- (o) Compute memo items for reporting
- memo2
- (i) Compute consumable income, etc.

# imnettr: Net transfers to person

## · Description:

This variable contains the difference between all government transfers received by an individual, less all taxes (including commodity taxes) payed by that individual.

### Tax/Transfer Function Cross-reference:

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.

#### Tax/Transfer Function Cross-reference:

fa

(o) Compute family allowance

txinet

(o) Compute net income

txprov

(i) Compute provincial taxes

This flag is used to indicate whether the individual has no income of any kind, including transfers. 'Glass box' users should note that *imninc* must be set to false (0) if any income is assigned to an individual. *imninc* allows efficiency improvements in various parts of SPSM.

# Tax/Transfer Function Cross-reference:

ui	(o)	Compute UI benefits
fa	(o)	Compute family allowance
oas	(o)	Compute OAS for elderly
txinet	(o)	Compute net income
txccea	(o)	Compute child care expense allowance
txitax	(i)	Compute taxable income
txqinet	(i)	Compute net income (Quebec)
txqccea	(o)	Compute child care expense allowance (Quebec)
txqitax	(i)	Compute taxable income (Quebec)
gis	(0)	Compute GIS/SPA for elderly
gist	(o)	Compute Provincial GIS top-ups for elderly
sa	(0)	Compute social assistance or guarantees
txctc	(0)	Compute child tax credit
txfstc	(o)	Compute federal sales tax credit
memo1	(i)	Compute memo items for reporting
ctmod	(o)	Compute commodity taxes for individuals and households
memo2	(i)	Compute consumable income, etc.

# imoaspar: Partial OAS residency flag

### Description:

This flag indicates if the individual had the full amount of OAS reduced due to limited Canadian residence.

#### · Levels:

- 0 Full OAS 1 Partial OAS
- Tax/Transfer Function Cross-reference:
  - oas (o) Compute OAS for elderly gis (i) Compute GIS/SPA for elderly

# imoasres: Partial OAS fraction

## · Description:

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.

## Tax/Transfer Function Cross-reference:

oas

(o) Compute OAS for elderly

gis

(i) Compute GIS/SPA for elderly

# imoldtyp: Type of GIS/SPA nuclear family

# Description:

This class variable indicates what type of elderly support program the individual may be eligible for.

#### Levels:

0 N/A

1 single, with OAS

2 widow(er) aged 60-64

3 couple, both have OAS

4 couple, elder has OAS, younger 60-64

5 couple, only younger has OAS

6 couple, only elder has OAS

#### Tax/Transfer Function Cross-reference:

gis

(o) Compute GIS/SPA for elderly

## imothrep: Other federal repayments

# Description:

The SPSM includes optional algorithms which allow the analysis of the effects of the de-universalization 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).

memo2

(o) Compute consumable income, etc.

# 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).

### • Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txhstr

(i) Apply tax transfers between head and spouse

txcalc

(i) Calculate federal income tax

# 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 income (idipens) up to a maximum set by parameter YPNTL.

#### Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txcalc

(i) Calculate federal income tax

# 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).

### Tax/Transfer Function Cross-reference:

(o) Compute taxable income

txhstr (o) Apply tax transfers between head and spouse

## 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.

### Tax/Transfer Function Cross-reference:

(o) Compute family allowance

(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.

# Tax/Transfer Function Cross-reference:

memo1

### imprvbal: Provincial taxes less transfers

# Description:

This variable contains all provincial taxes (including commdodity taxes) collected from an individual, less provincial transfers received by that individual.

# Tax/Transfer Function Cross-reference:

memo2

(o) Compute consumable income, etc.

# impsa: Provincial social assistance

### Description:

impsa is simply half of modelled Social Assistance income (imisa), representing the provincial contribution under the Canada Assistance Plan.

# Tax/Transfer Function Cross-reference:

memo1

(o) Compute memo items for reporting

# imptax: Provincial taxes

### 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 (imtxpd + imtxpi).

## Tax/Transfer Function Cross-reference:

memo1

(o) Compute memo items for reporting

memo2

(o) Compute consumable income, etc.

### imptc: Provincial tax credits

### Description:

This is a copy of the imputed value for provincial tax credits (idptc).

txprov

(o) Compute provincial taxes

memo1

(i) Compute memo items for reporting

# 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 Allowances (*impfa*: valid for Quebec only), GIS Top-ups (*imigist*), Provincial Tax Credits (*imptc*) and Provincial Social Assistance (*impsa*).

#### Tax/Transfer Function Cross-reference:

memol

(o) Compute memo items for reporting

memo2

(i) Compute consumable income, etc.

# 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 *imqalexp*.

#### Tax/Transfer Function Cross-reference:

txqinet

(o) Compute net income (Quebec)

# imqaxm: Quebec age personal exemption

# Description:

Quebec filers over the age of 65 receive an additional personal exemption as specified by the parameter QAXM.

txqitax

(o) Compute taxable income (Quebec)

txqhstr

(i) Apply tax transfers between head and spouse (Quebec)

# 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).

## Tax/Transfer Function Cross-reference:

txqinet (o) Compute net income (Quebec)

# imqccea: Quebec child care expenses allowed

# · Description:

For the Quebec provincial tax calculation, the model reassigns the imputed Child Care Exemptions (idccea) to the spouse with the lower modelled net income for Quebec tax (imqinet).

#### Tax/Transfer Function Cross-reference:

txqccea

(o) Compute child care expense allowance (Quebec)

# imacdeds: 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 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.

txqhstr (o) Apply tax transfers between head and spouse (Quebec)

# imqdedea: Quebec employment allowance

### Description:

The Quebec employment allowance is calculated as the minimum of a base amount (parameter QEAMAX) and a percentage (parameter QEAP) of employment income (idiemp).

## Tax/Transfer Function Cross-reference:

txqinet (o) Compute net income (Quebec)

# imqdedfn: Quebec all deductions from net income

### Description:

This variable represents the sum of all deductions from net income (imqinet) for the calculation of Quebec provincial taxes: Interest Income Deduction, Pension Income Deduction, Medical Expense Deduction, Charitable Donations, Gifts to Canada, Disability Deduction, Education Deduction, Unemployment Insurance Benefit Repayment Payable, Deductions Transferred from Spouse, Non-capital Losses of Other Years, and Capital Losses of Other Years.

#### Tax/Transfer Function Cross-reference:

txqitax (o) Compute taxable income (Quebec)

txqhstr (o) Apply tax transfers between head and spouse (Quebec)

# imqdedft: Quebec deductions from total income

#### Description:

For Quebec filers, this item is the sum of all deductions from total income:

- CPP/QPP Contributions (imcqppc)
- UI Premiums (imuic)
- RPP Contributions (idrpp)
- RRSP Contributions (idrrsp)

- Union and Professional Dues (iddues)
- Tuition Fees (idtuitn)

• Child Care Expenses allowed (imaccea)

- Allowable Business Investment Losses, Indexed Security Investment Plan allowable capital losses (idiloss)
- Other Deductions from total income (idothdn)
- Carrying charges (idcarry).

#### Tax/Transfer Function Cross-reference:

txqinet

(o) Compute net income (Quebec)

txqccea

(o) Compute child care expense allowance (Quebec)

# 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 required to reduce one spouse's taxable income to zero may be transferred to the other spouse. imqdedt represents the amount actually transferred.

### Tax/Transfer Function Cross-reference:

txqhstr

(o) Apply tax transfers between head and spouse (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 imqdisex.

### Tax/Transfer Function Cross-reference:

txqitax

(o) Compute taxable income (Quebec)

txqhstr

(i) Apply tax transfers between head and spouse (Quebec)

# 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 (imgidivt).

### Tax/Transfer Function Cross-reference:

txprov

(o) Compute provincial taxes

# 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.

#### Tax/Transfer Function Cross-reference:

txqitax

(o) Compute taxable income (Quebec)

# imqidivt: Quebec taxable dividends

### Description:

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).

### Tax/Transfer Function Cross-reference:

txprov

(i) Compute provincial taxes

txqinet

(o) Compute net income (Quebec)

txqitax

(i) Compute taxable income (Quebec)

This corresponds to Revenue Quebec's definition of Net Income:

- Total income imqitot, minus
- deductions from total income (imqdedft).

The only exception in this definition is that RHOSP contributions for 1984 are not deducted.

#### Tax/Transfer Function Cross-reference:

txqinet

(o) Compute net income (Quebec)

txqccea

(o) Compute child care expense allowance (Quebec)

txqitax

(i) Compute taxable income (Quebec)

txqhstr (i) Apply tax transfers between head and spouse (Quebec)

# imgint dn: Quebec interest income deduction allowed

# Description:

This is calculated as the smaller of the Maximum Interest Income Deduction (parameter QYINDL) and the sum of:

- Interest Income (idiint),
- Taxable Dividends (ididiv \* QDGUR idcarry)

### Tax/Transfer Function Cross-reference:

txqitax (o) Compute taxable income (Quebec)

txqhstr

(i) Apply tax transfers between head and spouse (Quebec)

# imqitax: Quebec taxable income

# **Description:**

This is the sum of all total income for Quebec income tax purposes (imgitot) minus all deductions (imagdedft and imagdedfn) and personal exemptions (imagex).

txprov

(i) Compute provincial taxes

txqitax

(o) Compute taxable income (Quebec)

txqhstr

(o) Apply tax transfers between head and spouse (Quebec)

# imqitot: Quebec total income

# · Description:

This is similar to the federal definition of total income except that the employment expense deduction (imqdedea) and other allowable expense deduction (imqalexp) are not subtracted at this stage. These deductions are added in to deductions from total income (imqdedft).

#### Tax/Transfer Function Cross-reference:

txqinet

(o) Compute net income (Quebec)

# 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 a proportion (QMXR) of net income exceeding the Married Exemption Turndown Level (parameter QMXMT).

#### Tax/Transfer Function Cross-reference:

txqhstr

(o) Apply tax transfers between head and spouse (Quebec)

# imapendn: 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).

txqitax

(o) Compute taxable income (Quebec)

txqhstr

(i) Apply tax transfers between head and spouse (Quebec)

# imapex: Quebec personal exemptions and deductions

## · Description:

This item is the sum of all personal exemptions for the calculation of Quebec provincial taxes:

• imgexm, Basic Exemption + Age Exemption.

• imacdeds, Deductions for Wholly Dependent Children,

• imqmarex, Married or Equivalent Exemption,

· idothpe, Other Personal Exemptions.

### Tax/Transfer Function Cross-reference:

txqitax

(o) Compute taxable income (Quebec)

txqhstr

(o) Apply tax transfers between head and spouse (Quebec)

# imastddn: 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 (idmeda) and Charitable Donations (idchara). In 1984 and years following this is simply the sum of idmeda and idchara since the Standard Deduction is zero.

### Tax/Transfer Function Cross-reference:

txqitax

(o) Compute taxable income (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.

### Tax/Transfer Function Cross-reference:

memo2

(o) Compute consumable income, etc.

# imataa: Quebec tax abatement (applied)

# Description:

The Quebec Tax Abatement is a refundable tax credit which is calculated as a proportion (OTAP) 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 (imt x f: after the Federal Tax Reduction is applied) then the excess is refunded (See imgtar).

### Tax/Transfer Function Cross-reference:

(o) Calculate federal income tax

memo1 (i) Compute memo items for reporting

(i) Compute consumable income, etc.

# imqtar: Quebec tax abatement (refundable)

### Description:

The remainder (if any) of the Quebec Tax Abatement after the rest is applied to reducing Federal Taxes (imt xf) to zero.

#### Tax/Transfer Function Cross-reference:

txcalc

(o) Calculate federal income tax

memo1

(i) Compute memo items for reporting

memo2

(i) Compute consumable income, etc.

The sum of UI Benefits repaid (*imuibr*) and any simulated repayments for Family Allowance repayment and OAS repayment.

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 (OASTD) may be applied to net income exceeding a turndown level (OASTR).

# Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

memo1

(i) Compute memo items for reporting

memo2

(i) Compute consumable income, etc.

# 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.

#### Tax/Transfer Function Cross-reference:

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.

- · Levels:
  - 0 N/A
  - 1 Widow(er)
  - 2 SPA recipient in SPA couple
- Tax/Transfer Function Cross-reference:
  - gis
- (o) Compute GIS/SPA for elderly
- gist
- (i) Compute Provincial GIS top-ups for elderly

# imstddn: Standard or medical+charitable allowed

# Description:

This is the maximum of the Standard Deduction (parameter STDED) and the sum of Allowable Medical Expenses (idmeda) and Charitable Donations (idchara). If the Standard Deduction is zero, imstddn becomes the sum of idmeda and idchara.

- Tax/Transfer Function Cross-reference:
  - txitax
- (o) Compute taxable income

# imstxcrt: Tax credits transfered from spouse

# · Description:

This variable represents the amount of transferable tax credits actually transferred to a spouse after reduction based on the net income of the transferring spouse. The parameter TAXCRT is the turndown level and TAXCRR is the tax credit transfer reduction rate.

- Tax/Transfer Function Cross-reference:
  - txcalc
- (o) Calculate federal income tax

This represents the total tax credits available to reduce basic federal tax (*imbft*) including non-transferrable tax credits (*imtaxcr*), transferrable credits, credits transferred from the spouse (txcrt), and credits transferred from dependants (txcrt).

### Tax/Transfer Function Cross-reference:

txcalc

(o) 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.

### Tax/Transfer Function Cross-reference:

fa

(o) Compute family allowance

txinet

(o) Compute net income

txitax (i) Compute taxable income

### imttxcrt: Total tax credits transfered

# Description:

This variable reports the sum of the Age, Disability, Education and Tuition Tax Credits which may be transferred from a dependant to a supporting parent or between spouses. In the case of a head or a spouse, this variable will also contain the Pension Income Tax Credit and Age Tax Credit.

The sum of the Education Tax Credit plus the Tuition Tax Credit transferred is limited by parameter MAXET. The total tax credits transferable between spouses is reduced by a proportion (parameter TAXCRR) of the transferring spouse's net income which exceeds a specified turn-down level (parameter TAXCRT).

#### Tax/Transfer Function Cross-reference:

txcalc

(o) Calculate federal income tax

### imtutxc: Tuition tax credit

### Description:

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 TUTCR) of tuition fees (idtuitn). The number used by the model for tuition fees (idtuitn) corresponds to the value and definition of the Tuition Deduction allowed in 1984.

### Tax/Transfer Function Cross-reference:

txinet

(o) Compute net income

txcalc

(i) Calculate federal income tax

## imtxf: Net federal tax payable

### Description:

This is calculated from Basic Federal Tax (imbft) by subtracting the Federal Tax Reduction (imftr) and Federal Tax Credits (idfotc, idfptc, and iditc). Computed federal surtaxes (imfsur) are then added to this amount.

### Tax/Transfer Function Cross-reference:

txcalc

(o) Calculate federal income tax

txprov

(i) Compute provincial taxes

memo1

(i) Compute memo items for reporting

# imtxfc: Federal commodity taxes

# · Description:

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.

### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

memo2

(i) Compute consumable income, etc.

## imtxp: Provincial tax payable

## · Description:

This is calculated from Basic Provincial Tax (imbpt) and applying any tax reductions or surtaxes:

• Quebec applies a Tax Reduction Proportion (parameter QTRP)

• Ontario, for some years, applies a tax reduction

• Manitoba applies a surtax rate (parameter MSTR) to Basic Provincial above a specified level (parameter MSTC)

• Saskatchewan applies a tax reduction for senior citizens (parameter STRSC) and to families with children (parameter STRPC).

These reductions are reduced above a certain level (parameter STRCL) by a rate specified by the parameter STRR. In 1985, a flat surtax rate (parameter SFTAX) was applied based on Net Income (iminet).

### Tax/Transfer Function Cross-reference:

txprov

(o) Compute provincial taxes

memo1

(i) Compute memo items for reporting

# imtxpc: Provincial commodity taxes

# Description:

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.

#### Tax/Transfer Function Cross-reference:

ctmod

(o) Compute commodity taxes for individuals and households

memo2

(i) Compute consumable income, etc.

# 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.

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.

## Tax/Transfer Function Cross-reference:

txitax

(o) Compute taxable income

txqitax memo2 (i) Compute taxable income (Quebec)

(i) Compute consumable income, etc.

#### imuic: UIC contributions

# · Description:

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.

### Tax/Transfer Function Cross-reference:

txinet

(o) Compute net income

txqinet

(i) Compute net income (Quebec)

memo1

(i) Compute memo items for reporting

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).

### Tax/Transfer Function Cross-reference:

txinet

(o) Compute net income

txcalc

(i) Calculate federal income tax

## 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 nf are members 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 currrent 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.

### Tax/Transfer Function Cross-reference:

gis

(i) Compute GIS/SPA for elderly

# 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 Clanguage 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 initialise 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 Clanguage 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 initialise 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.

# · Tax/Transfer Function Cross-reference:

fa

(i) Compute family allowance

This pointer variable is not accessible by the SPSM 'black box' variable facilities, but is documented here for 'glass box' users. It is a Clanguage 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.

### Tax/Transfer Function Cross-reference:

fa (o) Compute family allowance
txinet (i) Compute net income
gis (i) Compute GIS/SPA for elderly
txctc (i) Compute child tax credit
txfstc (i) Compute federal sales tax credit

# 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 Clanguage 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.

#### Tax/Transfer Function Cross-reference:

fa (i) Compute family allowance
txinet (i) Compute net income
gis (i) Compute GIS/SPA for elderly
txctc (i) Compute child tax credit
txfstc (i) Compute federal sales 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.

# Tax/Transfer Function Cross-reference:

fa (i) Compute family allowance txinet (i) Compute net income

txctc (i) Compute child tax credit

txfstc (i) Compute federal sales tax credit

# 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.

### · Levels:

- 0 Male
- 1 Female

# 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.

### · Levels:

- 0 No spouse present
- 1 Spouse present

# Tax/Transfer Function Cross-reference:

fa

(i) Compute family allowance

txinet

(i) Compute net income

gis

(i) Compute GIS/SPA for elderly

txctc

(i) Compute child tax credit

txfstc

(i) Compute federal sales tax credit

# 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.

#### · Levels:

- 0 With Kids, 1 Adult
- 1 With Kids, 2+ Adult
- 2 With Elderly, 1 Adult
- 3 With Elderly, 2+ Adult
- 4 Other, 1 Adult
- 5 Other, 2+ Adult

# 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.

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.

### Tax/Transfer Function Cross-reference:

ui

(i) Compute UI benefits

# 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).

## Tax/Transfer Function Cross-reference:

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.

### Tax/Transfer Function Cross-reference:

ui

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).

# · Tax/Transfer Function Cross-reference:

ui

(o) Compute UI benefits

# ubern: Modelled insurable weekly earnings

# Description:

Weekly insurable earnings derived by applying a ceiling (UIERNMAX) to the grown average weekly insurable earnings (ucern).

### Tax/Transfer Function Cross-reference:

ui

(o) Compute UI benefits

# ubp1: Week # of first payment

### Description:

ubpl 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, 1984 = 0.

#### Tax/Transfer Function Cross-reference:

ui

ubp1c is a number identifying the week of the first payment to a modeled claim within the calendar year. Week of January 1, 1984 = 0.

## Tax/Transfer Function Cross-reference:

ui

(o) 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, 1984 = 0.

#### Tax/Transfer Function Cross-reference:

ui

(i) 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, 1984 = 0.

## Tax/Transfer Function Cross-reference:

ui

ubp3 is a number identifying the week of the first payment within the third phase of a modelled claim. ubp3 is always greater than or equal to ubp2 (equality indicates zero weeks of second phase payments). Week of January 1, 1984 = 0.

### Tax/Transfer Function Cross-reference:

ui

(i) Compute UI benefits

## ubp3c: Week # of start of third phase (windowed)

# Description:

ubp 3c 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, 1984 = 0.

# · Tax/Transfer Function Cross-reference:

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, 1984 = 0.

### Tax/Transfer Function Cross-reference:

ui

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, 1984 = 0.

## Tax/Transfer Function Cross-reference:

ui

(o) Compute UI benefits

# 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 ucl are members of this structure. The member ucstat of ucl (denoted ucl stat) indicates if the structure contains claim data or not.

# uc2: UI claim #2 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 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.

# uchtyp: Claim type

## · Description:

Benefit type at the time the claim was established.

### · Source:

EIC Administrative Data.

### · Levels:

- 0 No Benefits
- 1 Regular
- 2 Sickness
- 3 Maternity
- 4 Retirement
- 5 Fishing

## Tax/Transfer Function Cross-reference:

uj

(i) Compute UI benefits

## 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.

# · Tax/Transfer Function Cross-reference:

ui

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.

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.

### Tax/Transfer Function Cross-reference:

ui

(i) Compute UI benefits

# ucprvwk: Weeks on UI in 52 weeks before claim

## · Description:

Claim data represents a 1% sample from UI claims active in 1984. In the event that an individual has two claims active in 1984, ucprvwk represents 1st claim weeks occurring within 52 weeks of the 2nd claim start date. In the event that an individual has only one active claim in 1984 but had an active claim within 52 weeks prior to its start (i.e. in 1983), ucprvwk is simulated. The simulation draws from bivariate random distributions of claim durations and inter-claim durations to obtain weeks on claim within the 52 week window. The random distributions are derived from the sub-sample of claimants with two claims in 1984, and are differentiated on the basis of region and sex. Applies to repeat claims only. Weeks are integral numbers from 1 to 50.

#### Source:

EIC Administrative Data.

#### Tax/Transfer Function Cross-reference:

ui

## ucquitp: Penalty for voluntary quit

# · Description:

Weeks of disqualification resulting from voluntary separation from employment (minimum - 0 weeks, maximum - 6 weeks).

### · Source:

EIC Administrative Data.

## Tax/Transfer Function Cross-reference:

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.

#### Levels:

- 0 Non Repeater
- 1 Repeater

## Tax/Transfer Function Cross-reference:

ui

Identification number for the week in which a UI claim was established. The week of Jan. 1, 1984 is coded 0.

This variable has been randomly adjusted (within narrow limits) as part of the SPSD database creation process.

#### · Source:

EIC Administrative Data.

### Tax/Transfer Function Cross-reference:

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:

EIC Administrative Data.

### · Levels:

- 0 Claim inactive
- 1 Claim active

## Tax/Transfer Function Cross-reference:

ui

# 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:

EIC Administrative Data.

- Levels:
  - 0 Type unchanged
  - 1 Type changed

### Tax/Transfer Function Cross-reference:

ui

(i) Compute UI benefits

### ucweeks: Weeks of benefits

## · Description:

Weeks of benefits paid on a given claim.

· Source:

EIC Administrative Data.

### Tax/Transfer Function Cross-reference:

ui

(i) Compute UI benefits

## 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.

# Tax/Transfer Function Cross-reference:

ui

(i) Compute UI benefits

# 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.

# 4 Description of Sources

# 4.1 SCF/LFS/HIFE - The Survey of Consumer Finance, Statistics Canada

The SCF is an annual survey administered to selected households drawn from the survey frame of the Labour Force Survey (LFS). A total of four types of form are collected. The Household Record Docket contains demographic information on each individual in the household, as well as family structure information. The LFS form contains information on the labour force status of all individuals aged 15+ in the household. The SCF form has the income, by source, of all members of the household aged 15+. The Household Income Facilities and Equipment (HIFE) form details the characteristics of the dwelling, and certain kinds of equipment contained in it. In 1984 the survey consisted of approximately 36,000 households containing 98,000 individuals.

Associated with each household in the sample is a Record Docket and a HIFE form, and associated with each individual in the household aged 15+ is an LFS form and an SCF form. Because of the great wealth of linked information that results, this database forms the starting point for the SPSD creation process.

# 4.2 Green Book - Taxation Statistics, Revenue Canada Taxation

The Greenbook file (so-called because it is the database underlying Revenue Canada's green-covered annual 'Taxation Statistics' publication) is a sample of cleaned T1 tax returns for individuals. The sample (about 500,000 in 1984) is stratified by income, income source, region, and tax status.

This file is used in the SPSD process to impute stochastically various deduction items to individuals, to correct the income distribution, and to enrich the level of detail at the higher income ranges. It is also used to validate the final SPSD product, by comparing simulated individual income taxes on the SPSD with those of the Greenbook sample.

# 4.3 EIC Administrative Files - Employment and Immigration Canada

A micro-data file based on administrative data relating to the Unemployment Insurance program was created by the Department of Employment and Immigration for the SPSD project. The file is a 1% unweighted sample (about 33,000 in 1984) of individuals having an active claim in the calendar year. It contains information on the type of claim, claim structure, and benefits received.

# 4.4 FAMEX - The Family Expenditures Survey, Statistics Canada

The Family Expenditure Survey (FAMEX) is a detailed survey of per annum household expenditures conducted periodically by Statistics Canada. The 1984 sample covered all provincial Canada and usable records for 9,700 households are employed in the stochastic matching of information to the SPSD. A description of the FAMEX survey may be found in Family Expenditures in Canada, (STC Cat. 62-555).

### 4.5 1981 Census

Tabulations from the 1981 and 1986 Census of Canada were used to adjust the database to agree with observed demographic distributions. Also, a common-law union flag was imputed onto the SPSD using special tabulations derived from the 1981 Census.

### 4.6 Miscellaneous Sources

Certain major adjustments to the SPSD are performed based upon highly aggregate data derived from a number of sources. These benchmark control totals are used to adjust weights on the SPSD. The System of National Accounts (on which GNP is based) is one such source.