Edouard Auger, Statistics Canada

1.0 INTRODUCTION

For a number of years, the demand for subprovincial data on Canadian families and their incomes has been steadily increasing. But up to now, the only source for this information has been the quinquennial census. While the Survey of Consumer Finances (SCF) annually produces family income data, it does so only at the provincial level and with few details. Also, other data come through the Demography Division's work on annual postcensal provincial estimates of families. Consequently, to rectify this situation, a project was launched in late 1983, as part of Statistics Canada's Small Area Data Program.

This project has been studying the potential of Revenue Canada's personal income tax file as a source of annual statistics on families and their incomes at the subprovincial level. Following a pilot study (Auger, 1985), a methodology has been developed and implemented.

So far, two years of tax family data (1982 and 1983) have been processed. The quality of the 1982 data has been assessed and the results indicate they are of very high quality. However, some problems still remain and further refinements are needed. So far, most of the evaluation has been concentrated in the assessment of the demographic characteristics.

In this paper, three areas of this work are discussed. The methodology for constructing families from individual tax returns is briefly described. Definitions associated with the tax family data are presented and compared to those of other sources of family data inside Statistics Canada. Comparisons of 1982 Tax Family data to other sources are presented. Finally, the research agenda is also briefly outlined.

2.0 METHODOLOGY AND DEFINITIONS

In this section, the methodology used to construct families from individual tax returns will be described and the relationship between the definitions associated with this method and those of other data sources will be examined.

The type of families constructed from the tax returns is very close to the definition of a census (or nuclear) family [1].

2.1 Families as Reconstructed From the Individual Tax Returns

The method used to construct family units from income tax returns can be divided into six main steps.

2.1.1 First Matching of Spouses

Since a married person's tax record may contain his or her spouse's social insurance number (SIN), the two members of a married couple can be matched [2]. Since each person has a unique SIN, a successful match of two persons who state that they are married has a very good chance of being valid.

However, reporting the SIN of a spouse is not compulsory. Thus, some married couples, in which both members file a tax return, can not be matched in this step. A second matching is necessary.

2.1.2 Second Matching of Spouses

Tax record information, such as surname, given names [3], age, tax exemptions and mailing address, is used to match married persons (not matched in the first step) who did not report their spouse's SIN.

2.1.3 Matching of Children

Children who live in the parental home and file a tax return are linked to their parents by comparing surnames, mailing addresses and the mother's age with the child's age. However, for processing reasons, only children under 30 years old are identified.

2.1.4 Identification of Family Types and Non-Family Persons

On the basis of the marital status, the results from the previous steps and amounts of tax exemptions, child tax credits, family allowances [4] and tax deductions for child care expenses, families are classified as follows:

- married couples with both spouses filing,
- married couples with one spouse filing,
- ~ single parent families,
- non-family persons.

However, this classification is temporary for many individuals, since common-law couples will be identified from the last two categories (see Section 2.1.6).

2.1.5 Estimating the Number of Non-Taxfiling Family Members

Children who do not file tax returns are estimated for each family unit, primarily by means of tax exemptions for dependent children and the child tax credit. Amounts of family allowances and tax deductions for child care expenses are also used. These estimated children can belong to one of two groups: under 18 years and 18 and over.

For married couples with only one taxfiling spouse, the age of the missing spouse is estimated at random using distributions of the age difference between spouses for married couples with both spouses filing [5].

2.1.6 Matching of Common-Law Spouses

Single parents and non-family persons (as in Section 2.1.4) are tentatively matched in order

to find the common-law couples within these groups. The mailing address is the main matching tool, although the age difference between spouses and the surname (they must be different) are also used.

There are now five different family types:

- husband-wife families (two spouses filing),
- husband-wife families (one spouse filing),
- single parent families,
- non-family persons,
- common-law couples families.

Families in the first two and the last family types will always be grouped under the heading: husband-wife families.

2.2 Universe

Census data and postcensal estimates relating to population correspond to the total Canadian population in private and collective households. The family data from these sources exclude individuals in collective households (e.g., jails, hospitals, Hutterite colonies).

The SCF covers virtually all private households in Canada, with the exception of the Yukon, the Northwest Territories and Indian reserves. Also excluded are families and non-family persons whose income largely originates in military pay and allowances.

The major differences between census and SCF family data are the non-inclusion by SCF of the northern territories, Indian reserves and persons receiving military pay or allowances and not living in a military camp [6].

For the present application, only taxfilers with a Canadian address are used. Overall, the exclusions in census family data do not apply for tax, where persons in collective households [7] are covered by the tax family data. However, census data on population comprise all those individuals included in the tax family data.

2.3 Census Family

The census, postcensal estimates and the SCF use the same basic definition of the census family:

"A husband and a wife (with or without children who have never married, regardless of age), or a single parent of any marital status, with one or more children who have never married, regardless of age, living in the same dwelling" [8].

However, a difference emerges in their definitions of a child. Natural and adopted children and stepchildren of any age who have never married and are living with their parents are considered to be children by all three sources. The only difference is that persons under 21 years, and under guardianship, are considered children by the SCF and non-family persons by the census.

The definition of a family constructed from individual tax returns is basically the same as those used by other sources. However, there are some differences.

- Persons under guardianship, since they can be exempted, are considered children (as they are by the SCF). - In the first step of the Tax Family system, spouses are matched with the use of their SINs. Two spouses who file as married and are matched are considered a married couple, even if their mailing address information does not agree [9]. This means that some spouses not presently living in the same household could be considered as part of a husband-wife relationship. This is different from the census and the SCF, where spouses have to be living in the same household to be considered husband-wife families.

- In the tax family data, children over 29 years old (unless disabled or in school full-time with a net income under a specified limit) cannot be identified. The other sources do not have an age limit.

2.4 Reference Dates For Families and Population

The 1981 Census reference date is June 3, 1981. The postcensal estimates refer to June 1, 1982 and June 1, 1983. The SCF data refer to April 1983 (survey month).

The case of the tax data is not as straightforward, since there are two reference dates that are used for different purposes: the filing date and December 31, 1982. The filing date [10] is the reference date for the mailing address. The reference date for the other information on the tax return is December 31, 1982 . In summary, the filing date is the reference date for the geographical information of taxfiling family members, while December 31 refers to the presence of non-taxfiling family members and the demographic information of filing members. However, except for very few cases [11], there exists at least a point in time between December 31 and the filing date where every family existed. (It can be different for different families.) However, as a rule, December 31, 1982, will be considered to be the reference date for the tax family data.

3.0 COMPARISONS WITH OTHER SOURCES

Even if intrinsic differences exist between the different sources of family and population data, they are not important enough to reject the use of comparisons for the evaluation of tax family data; they should help in revealing the major discrepancies. However, the 20-month period that separates 1982 Tax data from the 1981 Census is a major disadvantage, since census is the only other source of detailed family data also available at the subprovincial level [12].

3.1 Population

Population estimates by age group and sex for Canada are shown in Table 1. To obtain population estimates comparable to the tax population estimates of December 31, 1982, an interpolation of the two postcensal estimates was done. The results indicate that:

tax family data cover 95.3% of the population;

- the coverage of the population by the tax

Age	Sex	Census	Interpol.#	Tax *	Interpol./	Tax/
Group		(3-VI-81)	(1-I-83)	(31-XII-82)	Census	Inter.
17 &-	Total	6,845,180	6,701,800	6,972,690	0.98	1.04
18 - 34	Total	7,510,790	7,654,100	7,473,830	1.02	0.98
35 - 44	Male	1,496,965	1,619,600	1,557,490	1.08	0.96
	Female	1,471,190	1,597,200	1,576,290	1.09	0.99
	Total	2,968,155	3,216,800	3,133,780	1.08	0.97
45 - 54	Male	1,256,370	1,259,800	1,206,390	1.00	0.96
	Female	1,242,460	1,245,900	1,206,010	1.00	0.97
	Total	2,498,830	2,505,700	2,412,400	1.00	0.96
55 - 64	Male	1,030,770	1,069,300	991,450	1.04	0.93
	Female	1,128,460	1,166,900	994,800	1.03	0.85
	Total	2,159,230	2,236,200	1,996,250	1.04	0.89
65 & +	Male	1,010,860	1,049,700	779,840	1.04	0.74
	Female	1,350,125	1,418,100	852,350	1.05	0.60
	Total	2,360,985	2,467,800	1,632,190	1.05	0.66
Total		24,343,175	24,782,300	23,611,140	1.02	0.953

Table 1: Population Estimates by Age Group and Sex

Interpolation of postcensal estimates (June 1, 1982 and 1983)

* Estimated from a 10% sample

data is very strong for the age groups below 55 years old and still relatively strong for males between 55 and 64 years old;

- the coverage of females, 55 years old and over, is much lower;

- the coverage of males, 65 years old and over, is also low.

Many older individuals, mostly low income earners, are not covered by the tax data because they have insufficient income to have a tax liability or they rely mostly on non-taxable income sources and are not required to fill a tax return. The very strong coverage of the younger segments of the population implies that the tax family data, for these age groups, must be assessed less with respect to coverage than with respect to the capacity to identify the family status of the different individuals on the file.

Other comparisons at the provincial level showed that:

- Quebec has a slightly lower coverage of the population across all age and sex groups (total population coverage is 92%);

- the low coverage of older individuals is much more pronounced in the Atlantic provinces;

 the results for the younger (55 and under) age and sex groups vary little across Canada.

Overall, the results are very promising, since the coverage of the females under 55 and males under 65 years old is very strong. The results for the older individuals were expected.

Estimates of the population changes by age group and sex between the 1981 Census and January 1, 1983, are also available from Table 1. They will be very useful in the direct comparisons between census and tax data.

3.2 Children

Estimates of the number of children for the two age groups of children (17 and under and 18 and over) are presented in Table 2. Counts of children under 18 years old who were eligible under the Family Allowance program on June 1, 1981, and January 1, 1983, are also presented.

The 1981 Census and Family Allowance estimates of the total number of children under 18 years old are quite different. This is explained by the exclusion of persons under guardianship from the census estimate.

The tax estimate of children under 18 years

Table 2: Estimates of Number of Childrenby Age Group

Estimate	Age						
Sources	17 and Under	18 and Older					
Census@							
(3-VI-81)	6,596,995	2,072,065					
Family Allow-		, ,					
ance (FA):							
(1-VI-81)	6,839,145	N/A					
(1-I-83)	6,715,860	N/A					
Tax#							
(31-XII-82)	6,919,560	1,852,200					
Difference	+ 203,700*	- 219,865**					
Ratio	1.03*	0.89**					

e Estimated from a 20% sample

Estimated from a 10% sample

* Tax compared to FA (1-I-83)

** Tax compared to Census

old is about 3% higher than the Family Allowance program estimate (January 1, 1983). The overestimation is experienced across Canada. However, children (mostly between 15 and 17 years old) are not eligible under the Family Allowance program if they receive more than a certain limit of income. Analysis showed that these missed children could explain about 20% of that 3% overestimation. A small part of the overestimation could also be explained by the estimation procedure (Section 2.1.5), whereby children turning 18 during 1982 may sometimes be identified as 17 years old.

The tax total estimate of children 18 years old and over is 89% of the census one. This underestimation was found to be concentrated mostly in Quebec and in the Atlantic provinces (with ratios around 0.8, compared to ratios around 0.95 elsewhere).

Population comparisons indicated that young individuals are well covered by the tax family data. Therefore, if older children are underestimated then young non-family persons should be overestimated. Also, children over 29 years old, apart from a few exceptions, are not identified in the tax data. This can only produce an underestimation of the older children (18 and over) in all regions. Finally, this underestimation of older children should influence some characteristics of older parents (e.g., family size, number of single parents).

Apart from older children in Quebec and the Atlantic provinces, children seem to be well estimated by the tax data.

3.3 Family Type

The five estimates of the total number of families are very close.(See Table 3.) They indicate increases from June 3, 1981, of 1% (June 1, 1982), 3% (April 1983) and 4% (June 1, 1983). The tax estimate (December 31, 1982) is almost equal to that of the census. Therefore, tax probably underestimates, by a few percentage points, the total number of families.

Husband-wife families seem to have experienced a 2% increase from Census day to June 1, 1982 (postcensal estimate), and little change until April 1983 (SCF). On the other hand, tax indicates a 2% decrease from Census day to December 31, 1982. Again, this indicates a slight underestimation of husband-wife families by the tax data [13].

From Census day to June 1, 1982, the total number of single parents decreased by 5%, according to the postcensal estimate. According to SCF, on the other hand, this number increased by 10% from Census day to April 1983. There seems to be problem with at least one of these two а estimates. The large increase in husband-wife families and the very unlikely decrease in the number of single parents in one year tend to indicate that the postcensal estimates have certain problems. The 10% increase, indicated by SCF, may high but nonetheless closer to reality be (population increases in the 35 to 44 year olds could explain most of that increase since a lot of single parents with young children are found in that age group). Also, SCF considers persons under 21 years old and under guardianship as children (unlike the census). This must increase the single parent families population in the SCF. Concerning the tax estimate of single parents, it seems quite improbable that single parents have experienced a 15% increase between Census day and December 31, 1982. Tax must be overestimating the single parent population. However, it is difficult to clearly assess the importance of that overestimation at this point since SCF does indicate a sharp increase in the number of single parents. Also, tax, like the SCF, considers persons under guardianship as children.

The SCF and census estimates of the total number of non-family persons indicate a sharp increase of 6% between June 3, 1981, and April 1983. However, the tax estimate indicates a decrease of 6% between the 1981 Census day and December 31, 1982. Tax seems to underestimate the number of non-family persons by about 10%.

Examination of estimates by province indicated that:

results for the total number of census families do not vary much across Canada;
 the underestimation of husband-wife

Table 3: Families by Type for Tax (10%), Census (20%), SCF, and Postcensal Estimates--Total of the 10 Provinces

Source of Estimate	Husband-Wife	Single Parent	All Families	Non-Family
	Families (1)	Families (2)	(1) + (2)	Persons
Census (3-VI-81)	5,598,310	711,850	6,310,160	3,184,370
Postcensal 1 (1-VI-82)	5,712,100	674,100	6,424,800*	N/A
Tax (31-XII-82)	5,496,450	817,440	6,313,890	2,991,820
SCF (IV-83)	5,688,000	785,000	6,474,000	3,385,000
Postcensal 2 (1-VI-83)	N/A	N/A	6,531,100	N/A
	Other Est	imate / Census	Estimate	
Postcensal 1 (1-VI-82)	1.02	0.95	1.01	N/A
Tax (31-XII-82)	0.98	1.15	1.00	0.94
SCF (IV-83)	1.02	1.10	1.03	1.06
Postcensal 2 (1-VI-83)	N/A	N/A	1.04	N/A

* (1) + (2) for Postcensal 1 does not equal the sum of (1) and (2) because (1) and (2) are preliminary estimates and (1) + (2) is a final one.

Item	24 &-	25-34	35-44	45-54	55-64	65 &+	Total				
Census Tax Diff. Ratio	591,335 497,790 -93,545 0.84	1,592,875 1,581,240 -11,635 0.99	1,191,955 1,282,800 +90,845 1.08	971,365 984,720 +13,355 1.01	776,885 737,950 -38,935 0.95	487,085 424,390 -62,695 0.87	5,611,495 5,508,890 -102,605 0.98				

Table 4: Husband-Wife Families by Age Group of the Wife: Comparison of Tax (10% Sample) and Census (20% Sample)

families is more pronounced in Quebec and the Atlantic provinces;

the overestimation of single parents is lowest in Quebec (tax/census = 1.04); and
tax underestimates the total number of non-family persons in all provinces except Manitoba and Newfoundland.

3.4 Husband-Wife Families

The underestimation of husband-wife families by tax seems to be concentrated in the youngest (24 and under) and oldest (65 and over) age (of the wife) groups (See Table 4.) Tax indicates an increase, compared to census, in the 35-44 age group. This is consistent with the population increase that this age group experienced in the period separating the two estimates. The estimates for the three other age groups are very close.

According to census, common-law spouses are, on average, much younger than married spouses. Also, tax data estimate approximately 60% of the common-law couples. This should explain most of underestimation of young husband-wife the families. As a matter of fact, Quebec and British Columbia are the provinces with the highest proportion of common-law couples in husband-wife families (according to census) and they experienced the most pronounced underestimation of young husband-wife families. Concerning the older husband-wife families, the Atlantic Provinces experience the largest underestimation. It is consistent with their low older coverage of individuals.

Tax and census distributions of husband-wife families by size (Table 5) display a very high level of consistency. Further investigation indicated that young childless couples are underestimated by tax, a fact which could be related to the underestimation of common-law couples (distributions by region confirmed this assumption). For older couples (wife over 64 years old), the underestimation is concentrated in families with only older children (18 years and over).

3.5 Single Parent Families

The comparison of SCF and census data makes it possible to assess some of the changes that have occurred between Census day and April, 1983.(See Table 6.) Apparently, female single parents experienced a 14% increase, while the number of male single parents remained quite stable. Nost of the increase in female single parent families was concentrated in the age groups under 45 years old (28% for 34 and under and 25% for 35 to 44).

Female single parents under 35 seem to be overestimated by tax, while those 55 and over seem to be greatly underestimated. Male single parent families (tax/SCF ratio = 1.44) experience a large overestimation concentrated in the younger age groups (under 45 years old). Also, male single parents of 55 years old and over are underestimated by tax, but to a lesser extent than the corresponding female single parents.

The overestimation in the younger age groups can be at least partially explained by the underestimation of the common-law couples population by the tax data.

The underestimation of the older single parents (55 years old and over) can be explained by:

- the underestimation of older (18 and over) children (including the exclusion of children over 29 years old) and

- the lower coverage of older individuals.

This means that some taxfiling children not matched to their single parent will be considered non-family persons and some parents with older

Item	2	3	4	5	6&+	Total
Census	2,012,635	1,190,680	1,448,840	649,110	310,230	5,611,500
Tax	1,958,840	1,142,980	1,437,300	656,910	312,860	5,508,890
Difference	-53,795	-47,700	-11,540	+7,800	+2,630	-102,610
Ratio	0.97	0.96	0.99	1.01	1.01	0.98

Table 5: Husband-Wife Families by Family Size: Comparison of
Tax (10% Sample) and Census (20% Sample)

Age Group	Sex	Census * (C)	Tax # (T)	SCF (S)	T/C	S/C	T/S
34 & -	F	184,030	301,140	236,000	1.64	1.28	1.28
	M	16,850	53,930	N/A	3.20	N/A	N/A
35 - 44	F	139,820	174,460	175,000	1.25	1.25	1.00
	M	31,720	48,710	N/A	1.54	N/A	N/A
45 - 54	F	115,435	106,250	121,000	0.92	1.05	0.88
	M	35,005	38,560	N/A	1.10	N/A	N/A
55 & +	F	148,775	67,560	135,000	0.45	0.91	0.50
	M	40,220	26,830	N/A	0.67	N/A	N/A
Total	F	588,055	649,410	668,000	1.10	1.14	0.97
	M	123,795	168,030	117,000	1.36	0.95	1.44

Table 6: Single Parent Families by Age and Sex of the Parent--Total of the 10 Provinces

* Estimated from a 20% sample

Estimated from a 10% sample

(not matched) children will be considered non-family persons.

Distributions by province showed that older single parents are more severely underestimated in Quebec and the Atlantic provinces.

3.6 Non-Family Persons

Since non-family persons are a residual category in the Tax Family system (e.g., non-matched taxfiling children, non-matched common-law spouses and children over 29 years old will be classified as non-family persons), estimates for this category should be of lesser quality.

Estimates of non-family persons by age group and sex from census and SCF are compared in order to get an idea of the changes between June 3, 1981, and April, 1983.(See Table 7.) The results indicate a lot of variations between the two dates. Overall, SCF indicates a 2% increase of the number of male non-family persons and a 10% increase (in less than two years) of the number of female non-family persons (bearing in mind the difference in classification for persons under guardianship). The results by age group are also

Table 7:	Non-Family	Persons	by	Age	and	Sex	for	Tax,	SCF	and	Census
		Tot	tal e	of th	e 10	Prov	vince	es			

Age Group	Sex	Census * (C)	Tax # (T)	SCF (S)	T/C	S/C	T/S
24 &-	M F	405,000 368,400	441,530 348,950	338,000 332,000	1.09 0.95	0.83	1.31
25 - 34	M	383,250	460,680	426,000	1.20	1.11	1.08
	F	260,460	284,960	311,000	1.09	1.19	0.92
35 - 44	M	158,745	204,120	197,000	1.29	1.24	1.04
	F	103,525	118,140	119,000	1.14	1.15	0.99
45 - 54	M	138,610	137,480	134,000	0.99	0.97	1.03
	F	124,640	114,620	148,000	0.92	1.19	0.77
55 - 64	M	137,640	118,570	148,000	0.86	1.08	0.80
	F	244,365	200,320	255,000	0.82	1.04	0.79
65 & +	N	215,120	144,670	229,000	0.67	1.06	0.63
	F	644,605	417,780	750,000	0.65	1.16	0.56
Total	M	1,438,355	1,507,050	1,471,000	1.05	1.02	1.02
	F	1,746,010	1,484,770	1,914,000	0.85	1.10	0.78

* Estimated from a 20% sample

Estimated from a 10% sample

very variable:

- 24 years old and under: The SCF number is only 83% of the census number for males and 90% for females. This is probably related to persons under guardianship that increase census estimates.

- 25 years old and over: Except for the number of males 45 to 54 years old who decreased from the 1981 Census to April 1983, all other groups increased in size--from 4% (females, 55 to 64 years old) to 24% (males, 35 to 44 years old).

The tax estimates were compared to corresponding census and SCF estimates. Some of the results were:

- 24 years old and under: Tax estimates for both sexes are much higher than those of census and SCF. This can probably be explained by non-matched common-law spouses and non-matched taxfiling children classified as non-family persons.

- 25 to 44 years old: Tax estimates are close to those of SCF. However, there seems to be a tendency toward higher counts of males in the tax data. Both sources indicate similar very large increases between the 1981 Census and December 31, 1982.

- 45 years old and over: Except for male non-family persons 45 to 54 years old, where estimates from the three sources are very close, the tax estimates, compared to the other two sources, indicate a decrease in estimation more pronounced as age increases. Also, older non-family persons seem to be better estimated than older single parents. This can be explained by the exclusion of children over 29 years old and the underestimation of children over 17 years old in the tax data.

The excessively large increases in young non-family persons and single parents indicated by the SCF could be related to a possible underestimation of common-law couples from that source. This eventuality would indicate, misleadingly, a less important overestimation of young non-family persons and single parents by the tax data.

Distributions by province revealed considerable variability in the results for non-family persons under 24 years old. Results varied little for the median age groups (25 to 64 years old). As usual, the Atlantic provinces showed the greatest underestimation of older individuals.

3.7 Income

Distributions of families and non-family persons by income interval were examined. The most important result from these comparisons was that low income individuals or families, especially in older age groups, explain most of the underestimation. As a matter of fact, older families or individuals with an income in 1980 over 10,000 Canadian dollars were usually very well estimated by the tax data.

3.8 Subprovincial Estimates

Estimates at the subprovincial level were also examined and showed large differences in the efficiency of the Tax Family model between rural and urban regions. Estimation and coverage problems seemed significantly less pronounced in urban regions. Also, for all family types except non-family persons, results for subprovincial areas were very similar to those of their respective provinces (taking into account the rural-urban differences).

3.9 Conclusion

The comparisons have focussed on the identification of discrepancies between the tax family data and similar data from other sources. These discrepancies have been documented and show that the tax family data are certainly not error-free. However, the results also show the high level of consistency that exists between tax family data and other sources (e.g., data on husband-wife families, children under 18 years old, population under 55 years old).

4.0 RESEARCH AGENDA

Tax family data cannot perfectly duplicate the census family data because of the shortcomings in the tax data and in the model used to create family data from the individual tax returns. However, certain series within the tax data are very strong and can probably be used on their own or with the use of minor adjustments.

To improve weak areas in the tax family data, different activities could be undertaken, including:

- improvement of the Tax Family Model (e.g., a matching process could be created for the purpose of identifying children over 29 years old),

- use of other administrative records (e.g., the Old Age Security [14] file could be used in order to improve the coverage of the older segments of the population) and

- use of other statistical data (e.g., census data could be used for the purpose of adjusting the distributions of families and non-family persons in the younger age groups, in order to correct for the underestimation of common-law couples).

The 20-month period separating the 1981 Census and 1982 Tax data have considerably weakened the validity of detailed comparisons. To better evaluate the tax family data, similar detailed comparisons between 1985 Tax Family data and 1986 Census data will be done.

Finally, the prospect of a major tax reform in Canada will surely impact on future research activities.

FOOTNOTES

- For a discussion of the choice of the census family as the basic family unit, see Auger (1984).
- [2] The Canadian Tax system does not allow for joint filing of returns.
- [3] There is a field on the records of married persons containing the spouse's given name.
- [4] The Family Allowance program is a quasi-universal program aimed at families with children under 18 years old. The child tax credit is based on the eligibility under the Family

Allowance program and the income of the parent(s).

- [5] Distributions vary according to the age group and sex of the taxfiling spouse. Also, the family size is used when the wife does not file and the husband is over 64 years old.
- [6] A military camp as defined by the census includes: "The barracks, base hospital, guard houses, etc., on a military base in Canada belonging to the Canadian Armed Forces, but not including permanent married guarters" (Statistics Canada, 1981 Census Dictionary). Census family data, like SCF, excludes individuals living in a military camp.
- [7] About 400,000 individuals were in collective households on June 3, 1981, according to the 1981 Census. These individuals are probably often considered non-family persons by the tax family data.
- [8] Statistics Canada, 1981 Census Dictionary. Common-law couples, with or without children, are considered census families.
- [9] The fact that address information disagrees does not necessarily imply that couples do not live together, since there could be some errors in the address fields and some individuals do not file from home. Empirical evidence has shown that matched couples with an address information disagreement seemed to fit, most of the time, these two scenarios.
- [10] For 1982 income, the deadline for filing tax returns was April 30, 1983.
- [11] E.g., A non-filing child leaves home in January and another single taxfiling child who was living elsewhere moves back with his(her) parent(s) in February. The parent(s) file in March. The family will be of 4 but never existed as such between December 31 and the filing date.
- [12] 1982 Tax data were chosen, instead of 1980, for the creation of the first year of tax family data because some very important variables were not available in 1980;
- [13] The trend indicated by the postcensal and SCF estimates is puzzling, since short term trends in the number of husband-wife families are usually smoother. The data on single parents will help clarify this result.
- [14] The Old Age Security Pension is a quasi-universal program for Canadians over 64

years old. Some younger individuals are also covered by this program.

BIBLIOGRAPHY

Statistics Canada, 1981 Census Dictionary, Supply and Services, Ottawa, May 1982, catalogue 99-901, 159 pages.

Statistics Canada, Family Income: Census Families, Supply and Services, Ottawa, June 1984, catalogue 13-208, 40 pages.

Statistics Canada, Census Families in Private Households: Selected Characteristics, Supply and Services, Ottawa, January 1984, catalogue 92-935, 323 pages.

Statistics Canada, Postcensal Annual Estimates of Population by Marital Status, Age, Sex and Components of Growth for Canada and the Provinces, June 1, 1982 and 1983, Supply and Services, Ottawa, November 1984, catalogue 91-210, 190 pages.

Statistics Canada, Census Families, Demography Division, Ottawa (unpublished).

Auger E., The potential of the Canadian Personal Income Tax File as a Source of Family Data, 1984, Statistics of Income and Related Administrative Record Research: 1984, Department of Treasury, Internal Revenue Service, October 1984, pp. 91-96 (also available in ASA Proceedings 1984, Section on Survey Research Methods).

Auger E., Statistiques sur les familles et leur revenu a partir du fichier d'impot personnel de Revenu Canada: une etude-pilote (in french), 1985, Small Area Statistics (an International Symposium '85), Laboratory for Research in Statistics and Probability, Carleton University -Ottawa University, pp. 207-230 (english version available from the author).