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DIFFERENCES IN INCOME ESTIMATES FOR FAMILIES

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EXECUTIVE SUMMARY

This report compares income estimates obtained from a number of different surveys. Comparisons are made of the income distributions and for average and median income for various groupings of individuals living within private households. These include persons living in Census and Economic families, and persons not living in these two types of families. Comparisons are also made on a private household basis.

The primary sources for family income statistics, are the Census, the Survey of Consumer Finances, and the family data file prepared by SAAD from Revenue Canada data. Statistics from the Survey of Labour and Income Dynamics have not been included, but it is also a primary source.

This paper focuses on *income estimates for families*. (Differences in income estimates for persons is considered in ILDS Working Paper 97-02.) Essentially we need to look at what happens to the differences in incomes when **individuals** are grouped into **families** and persons not in families.

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1. INTRODUCTION

This report compares income estimates obtained from a number of different surveys. Comparisons are made of the income distributions and for average and median income for various groupings of individuals living within private households. These include persons living in Census and Economic families, and persons not living in these two types of families. Comparisons are also made on a private household basis.

The primary sources for family income statistics, are the Census, the Survey of Consumer Finances, and the family data file prepared by SAAD from Revenue Canada data. Statistics from the Survey of Labour and Income Dynamics have not been included, but it is also a primary source.

The full range of family income statistics to be compared, comprise:

- ▶ Census families
- ▶ Persons not in Census families
- ▶ Economic families
- ▶ Unattached individuals - that is persons not in economic families

Only the Census and SCF cover the full range of these.

The Census average incomes are based on either the published series, or a series where the Census coverage has been adjusted to closely match that of the SCF, or both. The SCF average incomes include the originally published series, and those which are from the latest revised series. Since the **original** and **revised** series give, in some cases, non-trivial differences when comparing the Census and SCF estimates, both sets of differences are shown.

For **individuals** the overall average income from the Census was higher than that from the SCF, and the differences for 1985 and 1990 appear to be statistically significant. For **family units, however**, the results are less clear-cut. For the **Census and economic families**, average incomes from the Census were higher in 1985 and 1990, but lower for 1980. For the two types of **persons not in families** the reverse is observed. Most of these differences, however, are not significant.

The more detailed comparisons based on the income distributions (Tables 3 to 10) show the Census as having a higher proportion of its family units in lowest income group. There is also a tendency, but less clear cut than for *individuals*, for the Census to have a higher proportion of *families* and *persons not in families* in the highest income group, and also to have a larger average income for that group. Of the averages by province (Tables 11 to 18), few if any show significant differences.

Whether there are some sub-groups which show more significant differences is not easily determined given the paucity of published income data from the Census. For 1985, Census families by size did not show any significant differences, but for persons not in Census families, those in the 15-24 age group from the Census are shown to have a significantly lower average income, for both sexes. For 1980, however, the differences were not significant.

Moving now to comparisons with the T1 Family File, these are made mainly with respect to the SCF, and just for Census family units. They are also primarily made in terms of medians, although for 1990 some averages have been estimated from aggregate incomes. Medians estimated from the T1 Family File for both 1990 and 1993 are mostly 5 to 7% lower than those estimated from the SCF. Average 1990 incomes, however, are much closer. A similar comparison for 1993 (not shown,

but available) also shows that the differences for the averages are much smaller than for the medians.

Within Census families, medians and average incomes for lone parent families estimated from the T1 Family File are much lower than those from the Census and SCF for 1990, and even lower compared with the SCF for 1993. It appears also that the number of lone parent families on the T1 Family File is much higher than those from the Census, SCF and also the demographic estimates made by Demography.

The differences in the incidence of low income obtained from the Census and SCF appear to be hardly if at all significant. Comparisons made between the SCF and the T1 Family File for 1993, however, even with SCF estimates based on the Census family, show generally a much higher incidence for the T1 Family File. It is a separate issue as to whether basing low income incidences on the Census family is appropriate. There is perhaps a distinction to be made between on the one hand a *low income measure (or LIM)* which may be simply a characteristic of an income distribution, and could thus be applied to the individuals or any groupings of individuals, and a *low income cut-off (LICO)* which is supposed to have an economic meaning in a poverty context.

The other part of this study on income differences, *Differences in Income Estimates for Persons*, compared the income estimates derived from the different primary data sources. It also compared the aggregate income estimates with those on Personal Income which are part of the National Accounts, with *Taxation Statistics*, and with program statistics for various government transfer payments which are published by Human Resources in *Social Security Statistics*. These aggregate comparisons are not repeated for the second part of the study, because

the *family* estimates with corresponding estimates for *persons not in families* aggregate (more or less) to the same aggregate income as those shown for *individuals*. This can be clearly seen in Table 1. It should be noted that the Survey of Consumer Finances has the same universe for all three basis, namely persons living in private households in Canada excluding those living in the Yukon, the NWT and on Indian reserves. Whereas for the Census the family basis corresponds to that of private households, although the individual basis had also included the non-institutional population living in collective households. The latter, however, results in a difference in aggregate income of only about 0.8%.

Table 1: Aggregate Income Estimates Obtained From Difference Groupings of Individuals for 1990

	Persons in Families	Persons not in families	All persons
	\$mn	\$mn	\$mn
Survey of Consumer Finances			
Census Family Basis	359,182	87,128	446,310
Economic Family Basis	371,796	74,491	446,287
Individual Basis			446,507
Census			
Census Family Basis	373,354	83,782	457,136
Economic Family Basis	385,236	71,895	457,131
Individual Basis			460,691

Source: SCF data for Census Family Basis Tables 13 & 22 of *Family Incomes: Census Families 1990 (13-208)*; and for Economic Family & Individual basis Tables 22, 32 & 54 of *Income Distributions by Size in Canada, 1990 (13-207)*. The Census data is from unpublished tables which for the two family basis refers to private households in Canada excluding Yukon, NWT & Indian reserves, and for individuals a similar geographic coverage, but also includes individual other than inmates living in collective households.

2. GROUPS OF INDIVIDUALS

Table 1 shows aggregate income for two of the three groups into which individuals are usually placed for the production of income statistics. The three groups are:

- ▶ Private households
- ▶ Census families and persons not in Census families
- ▶ Economic families and unattached individuals

*A **household** refers to a person or group of persons who occupy the same private dwelling, and do not have a usual place of residence elsewhere in Canada.*

*A **Census family** refers to a now-married couple (with or without never-married sons and/or daughters of either or both spouses), a couple living common-law (again with or without never-married sons and/or daughters of either or both partners), or a lone parent of any marital status, with at least one never-married son or daughter living in the same dwelling.*

*An **Economic family** refers to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption.*

3. SOURCES OF INCOME STATISTICS FOR FAMILIES IN CANADA

3.1 Primary Sources

If we define a *primary source* of income as one used to produce an “official” income series, then the following list is appropriate:

- ▶ The Census
- ▶ The Survey of Consumer Finances (SCF)
- ▶ Survey of Labour and Income Dynamics (SLID)
- ▶ The Revenue Canada Individual Income Returns

The first three sources provide income statistics with respect to *families living in private households*, whereas the last one might also include families living in collective households.

The Census & Survey of Consumer Finances provide income series obtained from household surveys, which can be used to provide aggregate income, average income, median income, and the distribution of income by size for Census and Economic families, and for persons not in either the Census or Economic families, as well as households. Both sources only provide income data for families and non-family persons living in private households, but the data from the Survey of Consumer Finances, also exclude those living in the Yukon and Northwest Territories and on Indian Reserves.

The Survey of Labour and Income Dynamics (SLID) Family income data from SLID was not available at the time of writing. It should, however, provide income statistics for families and non-family persons on a similar basis as the Survey of Consumer Finances.

The Revenue Canada series is mostly restricted to individuals who submit tax returns. This series can be used to provide aggregate income, average income, median income, and the distribution of income by size for individuals on the 'tax required' income concept. Producing data for families on the same basis as for the Census and Survey of Consumer Finances, is not as easily done as for those

sources, although some estimates for Census families, and persons not in Census families are produced as part of the Small Area and Administrative Data program.

3.2 Secondary Sources

For this study a *secondary income* source is one in which the income data has been collected mainly to facilitate the analysis and presentation of *other data*. Its income component is subordinated to a secondary role, and it would not normally be regarded as an official source for income statistics. As was noted in study on income differences for individuals, generally the method of data collection, its timing, and/or its edit and imputation would in itself justify regarding such income data as being of lesser quality, or at least justifiably a 'non-official' source. In the study on individuals, it was noted that some of these *secondary* sources also tried to obtain estimates on household income, and some comparisons were made with SCF income data on that basis. No further consideration of the secondary sources will not be considered here.

4. ACCOUNTING FOR DIFFERENCES IN INCOME ESTIMATES

Differences in income estimates may be due to one or more factors indicated in Section 2 of *Differences in Income Estimates for Individuals*. One of those was the *method and data used for weighting the sample data, including calibration estimators to provide family estimates*. Of the primary sources this factor is very important for the SCF, and more especially in the context of family (and household) estimates. Although the SCF can reweight its data once Census or revised demographic estimates are available, there is a delay. For example, the SCF did not move to the 1991 Census base until it published its 1994 income estimates, and a table which showed the series of annual estimates covering 1980-

1994 was also included to reflect this move. Intercensal estimates for families are confined to the Census family. The size and composition of households and families have shown some considerable changes over time, as can be seen from the tables in Appendix A, and estimating these changes in advance is not an easy exercise. Another factor which may account for differences in income estimates which is specific to family data, is the manner in which family memberships are identified within the household.

5. DIFFERENCES IN INCOME ESTIMATES FOR FAMILIES AND PERSONS NOT IN FAMILIES: CENSUS AND THE SURVEY OF CONSUMER FINANCES

This section deals with differences in income estimates obtained from the Census compared with those from the SCF. Both sources have their families and persons not in families series based on the coverage of private households in Canada, but the coverage for SCF excludes persons living in the Yukon and NWT, and on Indian reserves. For this study income comparisons are shown for four series:

- ▶ Census families
- ▶ Persons not in Census families
- ▶ Economic families
- ▶ Unattached individuals (i.e. persons not in economic families.)

Some income data from the Census is available based on the same geographic coverage as SCF. For 1990, the published Census data for these series was restricted to Census families, but a set of Census tables showing 1990 incomes were produced for this study based on SCF geographic coverage. The SCF income data shown, includes the published *original* series, and a *revised* series some of which were partly published in either *Family Incomes Census Families 1994 (Cat. 13-*

208) or *Income Distributions by Size in Canada 1994 (Cat. 13-207)*, but which mostly exist only as unpublished data. The *revised* SCF series reflects the move to the 1991 Census base, the adjustment of population estimates for net Census undercoverage, and the inclusion of non-permanent residents. They also reflect a move from the use of controls on both the individual and family levels, to one base on individuals. The Census data is not adjusted for the undercoverage.

5.1 Summary of Income Differences - Census & SCF

Table 2 gives an overview of the differences in average income at the Canada level. For families (both on Census and economic family basis) the *Census estimates are higher* for both 1985 and 1990 by 1% to 2%, and a bit higher for 1990 using the revised SCF estimates. For 1980 the Census estimates are slightly lower. **Only some of these differences appear to be statistically significant.**

For persons not in families (again on both basis) the *Census estimates are lower* for 1985 and 1990, and a bit higher for 1980, but again only some of these differences appear to be statistically significant.

**Table 2: Summary of Average Income & Differences in the Average Income
Estimates For Families and Persons Not In Families - Census & SCF 1980-1990**

	1980	1985	1990
Census Families			
Average income			
[1]. Census as published	\$26,748	\$37,827	\$51,342
[2]. Census estimate adjusted to SCF			\$51,458
[3]. SCF Original estimates	\$26,913	\$37,368	\$50,468
[4]. SCF Revised estimates (1994)	\$27,040	\$37,771	\$50,099
Differences in income estimates			
[5] (Census - SCF Original) %	-0.6%	1.2%	1.9%
[6] (Census - SCF Revised) %	-1.1%	0.3%	2.7%
[7] Coefficient of variation SCF	0.7%	0.7%	0.7%
Persons Not In Census Families			
Average income			
[1]. Census as published	\$10,985	\$15,495	
[2]. Census estimate adjusted to SCF			\$21,024
[3]. SCF Original estimates	\$10,681	\$15,762	\$21,530
[4]. SCF Revised estimates (1994)	\$10,962	\$16,044	\$21,895
Differences in income estimates			
[5] (Census - SCF Original) %	2.8%	-1.7%	-2.4%
[6] (Census - SCF Revised) %	0.2%	-3.5%	-4.1%
[7] Coefficient of variation SCF	1.5%	1.1%	1.2%
Economic Families			
Average income			
[1]. Census as published	\$27,328	\$38,652	
[2]. Census estimate adjusted to SCF		\$38,733	\$52,614
[3]. SCF Original estimates	\$27,398	\$38,059	\$51,633
[4]. SCF Revised estimates (1994)	\$27,686	\$38,471	\$51,122
Differences in income estimates			
[5] (Census - SCF Original) %	-0.3%	1.8%	1.9%
[6] (Census - SCF Revised) %	-1.3%	0.7%	2.9%
[7] Coefficient of variation SCF	0.7%	0.7%	0.7%
Unattached Individuals			
Average income			
[1]. Census as published	\$11,838	\$16,587	
[2]. Census estimate adjusted to SCF		\$16,602	\$22,180
[3]. SCF Original estimates	\$11,403	\$16,729	\$22,615
[4]. SCF Revised estimates (1994)	\$11,574	\$17,013	\$22,778
Differences in income estimates			
[5] (Census - SCF Original) %	3.7%	-0.8%	-1.9%
[6] (Census - SCF Revised) %	2.3%	-2.4%	-2.7%
[7] Coefficient of variation SCF	1.7%	1.2%	1.3%

5.2 Comparison of the Income Distributions - Census & SCF

Differences in the distribution of income for the two sources, are, in Tables 3 to 10.

The income distributions for families (both kinds) show similar differences for 1985 and 1990 as for those of individuals. The SCF income estimates showing:

- ▶ proportionately fewer families in the lowest and highest income groups
- ▶ average incomes which are slightly lower than those obtained from the Census, some of which appear to be statistically significant;
- ▶ medians which are very close to those obtained from the Census;
- ▶ average incomes, in the open-ended highest income groups which are much lower than those for the Census.

For persons not in families, however, the experience is different. Here the SCF income estimates show:

- ▶ proportionately fewer persons in the lowest income group;
- ▶ average incomes and medians which are higher than those estimated from the Census, although not all appear to be statistically significant;
- ▶ average incomes in the open-ended highest income groups which are lower than those for the Census.

Table 3: Census Families: Comparison of the Income Distributions for Census and SCF in 1990

	[1]	[2]	[3]	[4]
	Census as published	Census data adjusted to SCF coverage	SCF original	SCF revised
Under \$10,000	5.0%	4.9%	3.1%	3.2%
\$10,000-\$19,999	10.8%	10.8%	11.4%	11.7%
\$20,000-\$29,999	13.0%	13.0%	13.7%	13.8%
\$30,000-\$39,999	14.2%	14.2%	14.3%	14.3%
\$40,000-\$49,999	14.0%	14.0%	14.4%	14.4%
\$50,000-\$59,999	12.3%	12.2%	12.7%	12.7%
\$60,000-\$69,999	9.4%	9.5%	9.6%	9.6%
\$70,000-\$79,999	6.7%	6.7%	6.8%	6.7%
\$80,000-\$89,999	4.5%	4.5%	4.8%	4.7%
\$90,000-\$99,999	3.0%	3.0%	3.0%	3.0%
\$100,000 & over	7.2%	7.2%	6.3%	6.1%
Total	100.0%	100.0%	100.0%	100.0%
Number of families	7,355,730	7,255,570	7,117,000	7,529,000
Average income	\$51,342	\$51,458	\$50,468	\$50,099
Median (1)	\$44,891	n.a.	\$45,129	\$44,783
Standard error	\$33	\$34	\$350	\$361
Coefficient of variation	0.0%	0.0%	0.7%	0.7%
Median (2)	\$45,037	\$45,071	\$45,208	\$44,861
\$75,000 & over				
Average income		\$110,762	\$104,248	
\$100,000 & over				
Average income		\$147,530	\$136,658	

Source: Census as published *Selected Income Statistics (Cat. 93-331 - 1991)* Table 6. Census adjusted to SCF coverage unpublished data. SCF original and revised respectively from *Family Incomes: Census Families 1990 and 1994 (Cat. 13-207)* Table 1. Median (1) is as estimated by Census or SCF. Median (2) is as estimated by HEC based on the distribution as presented in this table.

Table 4: Census Families: Comparison of the Income Distributions for Census and SCF in 1985

	[1]	[2]	[3]	[4]
	Census as published	Census data adjusted to SCF coverage	SCF original	SCF revised
Under \$10,000	8.4%		6.6%	6.2%
\$10,000-\$14,999	8.1%		8.9%	8.7%
\$15,000-\$19,999	9.1%		9.8%	9.6%
\$20,000-\$24,999	8.7%		8.9%	8.8%
\$25,000-\$29,999	9.0%		9.3%	9.4%
\$30,000-\$34,999	9.5%		9.7%	9.8%
\$35,000-\$39,999	8.8%		9.0%	9.0%
\$40,000-\$44,999	8.0%		7.9%	8.0%
\$45,000-\$49,999	6.5%		6.6%	6.6%
\$50,000-\$59,999	9.5%		9.8%	10.0%
\$60,000 & over	14.2%		13.7%	14.1%
Total	100.0%		100.0%	100.0%
Number of families				
Average income	\$37,827		\$37,368	\$37,771
Median	\$33,434		\$33,384	\$33,766
Standard error	\$25		\$260	\$251
Coefficient of variation	0.07%		0.70%	0.66%
\$60,000 & over				
Average income	\$86,719		\$82,550	

Source: Census *Family Income: Census Families (Cat. 93-117 1986)* Table 1A, SCF *Family Incomes: Census Families 1985 and 1990* Table 1 for original and revised estimates respectively.

Table 5: Persons Not In Census Families: Comparison of the Income Distributions for Census and SCF in 1990

	[1]	[2]	[3]	[4]
	Census as published	Census adjusted to SCF coverage	SCF Original	SCF Revised
Under \$5,000		11.1%	6.3%	6.1%
\$5,000-\$9,999		15.5%	16.8%	16.3%
\$10,000-\$14,999		21.3%	23.3%	22.8%
\$15,000-\$19,999		11.0%	11.8%	11.8%
\$20,000-\$24,999		9.8%	10.4%	10.4%
\$25,000-\$29,999		7.9%	8.2%	8.4%
\$30,000-\$39,999		11.2%	11.4%	11.8%
\$40,000-\$49,999		5.9%	5.9%	6.2%
\$50,000 & over		6.1%	5.8%	6.1%
Total		100.0%	100.0%	100.0%
Number of persons		3,985,100	4,047,000	4,122,000
Average income		\$21,024	\$21,530	\$21,895
Median (1)		n.a.	\$16,413	\$16,845
Standard error		\$25	\$253	\$261
Coefficient of variation		0.1%	1.2%	1.2%
Median (2)		\$15,923	\$16,525	\$17,034
\$50,000 or more		6.1%	5.8%	
Average income		\$73,257	\$70,758	

Source: Census from unpublished table. SCF from *Family Incomes: Census Families 1990 (Cat. 13-208)* Tables 14 & 19 for original, and for revised Table 14 of 1994 version of 13-208.

Table 6: Persons Not In Census Families: Comparison of the Income Distributions for Census and SCF in 1985

	[1]	[2]	[3]	[4]
	Census as published	Census data adjusted to SCF coverage	SCF original	SCF revised
Under \$5,000	16.8%		12.3%	12.4%
\$5,000-\$8,999	23.9%		24.9%	
\$5,000-\$9,999			31.4%	30.4%
\$9,000-\$11,999	12.4%		15.0%	
\$10,000-\$14,999			16.7%	16.6%
\$12,000-\$14,999	7.8%		8.2%	
\$15,000-\$19,999	11.0%		11.6%	11.7%
\$20,000-\$24,999	8.7%		9.5%	9.7%
\$25,000-\$29,999	6.4%		6.4%	6.7%
\$30,000 & over	12.9%		12.0%	12.5%
Total	100.0%		100.0%	100.0%
Number of persons	3,471,955		3,521,000	3,611,000
Average income	\$15,495		\$15,762	\$16,044
Median (1)	\$10,984		\$11,465	\$11,786
Standard error	\$19		\$179	\$185
Coefficient of variation	0.1%		1.1%	1.2%
\$30,000 & over				
Average income	\$43,346		\$43,014	

Source: Census data from *Family Income: Census Families (93-117 1986)* Table 1B & 2B, SCF data for original from *Family Incomes: Census Families 1985 (Cat. 13-208)* Tables 14 & 19, revised from *Family Incomes: Census Families 1994* Table 14.

Table 7: Economic Families: Comparison of the Income Distributions for Census and SCF in 1990

	[1]	[2]	[3]	[4]
	Census as published	Census data adjusted to SCF coverage	SCF original	SCF revised
Under \$10,000		4.5%	2.6%	2.7%
\$10,000-\$19,999		10.3%	10.8%	11.1%
\$20,000-\$29,999		12.7%	13.4%	13.5%
\$30,000-\$39,999		14.0%	14.3%	14.3%
\$40,000-\$44,999		7.1%	7.4%	7.5%
\$45,000-\$49,999		6.8%	7.0%	6.9%
\$50,000-\$59,999		12.4%	12.8%	12.8%
\$60,000-\$74,999		13.4%	13.6%	13.6%
\$75,000-\$99,999		11.0%	11.4%	11.1%
\$100,000 & over		7.8%	6.8%	6.6%
Total		100.0%	100.0%	100.0%
Number families		7,321,880	7,201,000	7,577,000
Average income		\$52,614	\$51,633	\$51,122
Median (1)		n.a.	\$46,069	\$45,618
Standard error		\$34	\$347	\$355
Coefficient of variation		0.0%	0.7%	0.7%
Median (2)		\$46,041	\$46,071	\$45,652
\$75,000 & over				
Average income		\$110,690	\$104,363	
\$100,000 & over				
Average income		\$146,784	\$135,764	

Source: Census unpublished data. SCF from *Income Distributions By Size in Canada 1990 (Cat. 13-207)* Tables 1 & 22 for original, and *Income Distributions By Size in Canada 1994* Table 1 for revised.

Table 8: Economic Families: Comparison of the Income Distributions for Census and SCF in 1985

	[1]	[2]	[3]	[4]
	Census as published	Census data adjusted to SCF coverage	SCF original	SCF revised
Under \$10,000	7.8%		5.8%	5.5%
\$10,000-\$14,999	7.8%		8.7%	8.4%
\$15,000-\$19,999	8.9%		9.5%	9.3%
\$20,000-\$24,999	8.7%		8.9%	8.8%
\$25,000-\$29,999	9.0%		9.3%	9.3%
\$30,000-\$34,999	9.4%		9.6%	9.7%
\$35,000-\$39,999	8.9%		9.1%	9.3%
\$40,000-\$44,999	8.1%		7.9%	8.0%
\$45,000-\$49,999	6.7%		6.8%	6.8%
\$50,000-\$59,999	9.8%		10.0%	10.2%
\$60,000 & over	15.0%		14.3%	14.6%
Total	100.0%		100.0%	100.0%
Number of families	6,813,835		6,848,000	7,049,000
Average income	\$38,652		\$38,059	\$38,471
Median	\$34,168		\$34,076	\$34,451
Standard error	\$25		\$258	\$251
Coefficient of variation	0.0%		0.7%	0.7%
\$60,000 & over				
Average income	\$86,564		\$82,332	

Source: Census from *Family Income: Economic Families (Cat. 93-118 Census 1986)* Tables 1A & 3A. SCF data is from *Income Distributions By Size in Canada 1985 (Cat. 13-207)* Table 1 & 27 for the original, and *Income Distributions By Size in Canada 1994* Table 1 for the revised.

Table 9: Unattached Individuals: Comparison of the Income Distributions for Census and SCF in 1990

	[1]	[2]	[3]	[4]
	Census as published	Census data adjusted to SCF coverage	SCF original	SCF revised
Under \$5,000		9.4%	4.8%	4.8%
\$5,000-\$9,999		14.9%	15.7%	15.6%
\$10,000-\$14,999		20.8%	23.4%	22.9%
\$15,000-\$19,999		11.1%	11.7%	11.7%
\$20,000-\$24,999		10.0%	10.5%	10.5%
\$25,000-\$29,999		8.3%	8.4%	8.6%
\$30,000-\$39,999		12.0%	12.2%	12.5%
\$40,000-\$49,999		6.5%	6.7%	6.8%
\$50,000 & over		6.9%	6.5%	6.6%
Total		100.0%	100.0%	100.0%
Number of persons		3,241,397	3,294,000	3515000
Average income		\$22,180	\$22,615	\$22,778
Median income (1)		n.a.	\$17,458	\$17,740
Standard error		\$29	\$287	\$287
Coefficient of variation		0.1%	1.3%	1.3%
Median (2)		\$17,190	\$17,607	\$17,863
\$50,000 & over				
Average income		\$73,536	\$70,729	

Source: Census unpublished data. SCF from *Income Distributions By Size in Canada 1990 (Cat. 13-207)* Tables 23 & 32 for original, and *Income Distributions By Size in Canada 1994* Table 23 for revised.

Table 10: Unattached Individuals: Comparison of the Income Distributions for Census and SCF in 1985

	[1]	[2]	[3]	[4]
	Census as published	Census data adjusted to SCF coverage	SCF original	SCF revised
Under \$5,000	14.0%		10.1%	10.0%
\$5,000-\$8,999	23.0%		23.9%	
\$5,000-\$9,999			30.1%	29.2%
\$9,000-\$11,999	12.6%		14.6%	
\$10,000-\$14,999			17.0%	16.8%
\$12,000-\$14,999	8.0%		8.6%	
\$15,000-\$19,999	11.5%		12.1%	12.2%
\$20,000-\$24,999	9.3%		10.2%	10.4%
\$25,000-\$29,999	7.1%		7.0%	7.3%
\$30,000 & over	14.6%		13.5%	14.1%
Total	100.0%		100.0%	100.0%
Number of persons	2,700,995		2,743,000	2,978,000
Average income	\$16,587		\$16,729	\$17,013
Median income	\$12,143		\$12,485	\$12,728
Standard error	\$22		\$204	\$214
Coefficient of variation	0.2%		1.2%	1.3%
\$30,000 or more				
Average income	\$43,518		\$43,121	

Source: Census *Family Income: Economic Families (Cat. 93-118 Census 1986)* Tables 1B & 3B. SCF *Income Distributions By Size in Canada 1985 (Cat. 13-207)* Tables 28 & 38 for the original, and *Income Distributions By Size in Canada 1994* for the revised.

5.3 Comparisons of Average Income By Province - Census & SCF

Differences in average income by province for the two sources, are shown in Tables 11 to 18.

For families, most provinces show SCF average incomes which are *lower* than those estimated by the Census. Generally, however, these differences are not statistically significant, so that it just the preponderance of *lower* estimates from the SCF for both 1985 and 1990 which appears as a significant feature.

For persons not in families, most provinces show SCF average incomes which are *higher* than those estimated by the Census. Again these differences are not statistically significant, but the preponderance of *higher* estimates from the SCF for both years, appears to be a significant feature.

Table 11: Census Families: Comparisons of Average Income By Province for Census and SCF in 1990

	[1]	[2]	[3]	[4]
	Census as	Census data	SCF original	SCF revised
Average Income				
Canada	\$51,342	\$51,458	\$50,468	\$50,099
Newfoundland	\$40,942	\$40,882	\$39,359	\$38,518
Prince Edward Island	\$43,295	\$43,262	\$39,661	\$38,985
Nova Scotia	\$44,001	\$43,834	\$43,581	\$43,446
New Brunswick	\$42,148	\$42,146	\$41,172	\$40,849
Quebec	\$46,593	\$46,621	\$46,688	\$45,905
Ontario	\$57,227	\$57,283	\$55,293	\$55,377
Manitoba	\$46,091	\$46,636	\$46,311	\$45,236
Saskatchewan	\$44,174	\$44,703	\$43,716	\$42,683
Alberta	\$52,346	\$52,544	\$50,827	\$50,881
British Columbia	\$52,403	\$52,705	\$53,023	\$52,060
	[5]	[6]	[7]	
	([2]-[3])/	([2]-[4])/	SCF	
Income Differences				
Canada	1.9%	2.7%	0.7%	
Newfoundland	3.8%	6.0%	1.7%	
Prince Edward Island	8.7%	10.4%	1.9%	
Nova Scotia	0.6%	0.9%	2.1%	
New Brunswick	2.3%	3.1%	1.7%	
Quebec	-0.1%	1.5%	1.6%	
Ontario	3.5%	3.4%	1.3%	
Manitoba	0.7%	3.0%	2.0%	
Saskatchewan	2.2%	4.6%	1.9%	
Alberta	3.3%	3.2%	1.5%	
British Columbia	-0.6%	1.2%	1.9%	

Source: Census as published *Selected Income Statistics (Cat. 93-331 - 1991)* Table 6. Census adjusted to SCF coverage unpublished data. SCF original from *Family Incomes: Census Families 1990 (Cat. 13-208)* Table 2, the revised estimates from unpublished data.

Table 12: Census Families: Comparisons of Average Income By Province for Census and SCF in 1985

	[1]	[2]	[3]	[4]
	Census as	Census data	SCF original	SCF revised
Average Income				
Canada	\$37,888		\$37,368	\$37,771
Newfoundland	\$28,880		\$27,746	\$28,333
Prince Edward Island	\$30,451		\$29,738	\$30,281
Nova Scotia	\$32,938		\$33,376	\$33,798
New Brunswick	\$30,527		\$30,710	\$31,103
Quebec	\$34,582		\$34,582	\$35,023
Ontario	\$41,692		\$40,949	\$41,284
Manitoba	\$35,486		\$34,319	\$34,590
Saskatchewan	\$34,666		\$34,558	\$34,839
Alberta	\$40,740		\$40,384	\$40,946
British Columbia	\$37,655		\$36,980	\$37,400
	[5]	[6]	[7]	
	([1]-[3])/	([1]-[4])/	SCF coefficient	
Income differences				
Canada	1.4%	0.3%	0.7%	
Newfoundland	4.0%	1.9%	2.4%	
Prince Edward Island	2.4%	0.6%	2.6%	
Nova Scotia	-1.3%	-2.6%	2.9%	
New Brunswick	-0.6%	-1.9%	1.6%	
Quebec	0.0%	-1.3%	1.4%	
Ontario	1.8%	1.0%	1.3%	
Manitoba	3.3%	2.6%	2.0%	
Saskatchewan	0.3%	-0.5%	1.4%	
Alberta	0.9%	-0.5%	1.6%	
British Columbia	1.8%	0.7%	1.6%	

Source: Census *Family Income: Census Families (Cat. 93-117 1986)* Table 1A, SCF *Family Incomes: Census Families 1985* Table 2 for original, and revised estimates is based on an unpublished table.

**Table 13: Persons Not In Census Families: Comparisons of Average Income
By Province for Census and SCF in 1990**

	[1] Census as	[2] Census data	[3] SCF original	[4] SCF revised
Average Income				
Canada		\$21,024	\$21,530	\$21,895
Newfoundland		\$15,416	\$16,758	\$17,562
Prince Edward Island		\$17,061	\$17,265	\$17,112
Nova Scotia		\$17,991	\$18,859	\$18,832
New Brunswick		\$16,829	\$16,685	\$17,049
Quebec		\$19,015	\$19,331	\$19,750
Ontario		\$23,230	\$23,524	\$23,870
Manitoba		\$19,047	\$19,578	\$19,679
Saskatchewan		\$19,204	\$19,443	\$19,428
Alberta		\$21,592	\$22,688	\$23,291
British Columbia		\$21,610	\$22,959	\$23,201
	[5] ([2]-[3])/	[6] ([2]-[4])/	[7] SCF	
Income differences				
Canada	-2.4%	-4.1%	1.2%	
Newfoundland	-8.3%	-13.0%	5.2%	
Prince Edward Island	-1.2%	-0.3%	3.1%	
Nova Scotia	-4.7%	-4.6%	3.5%	
New Brunswick	0.9%	-1.3%	3.1%	
Quebec	-1.6%	-3.8%	2.5%	
Ontario	-1.3%	-2.7%	2.2%	
Manitoba	-2.7%	-3.3%	2.8%	
Saskatchewan	-1.2%	-1.2%	2.6%	
Alberta	-5.0%	-7.6%	2.8%	
British Columbia	-6.1%	-7.1%	3.1%	

Source: Census from unpublished table. SCF from *Family Incomes: Census Families 1990 (Cat. 13-208)* Tables 15 for original, and for revised an unpublished version of Table 15.

**Table 14: Persons Not In Census Families: Comparisons of Average Income
By Province for Census and SCF in 1985**

	[1]	[2]	[3]	[4]
	Census as	Census data	SCF original	SCF revised
Average Income				
Canada	\$15,495		\$15,762	\$16,044
Newfoundland	\$11,379		\$10,929	\$11,188
Prince Edward Island	\$12,284		\$10,648	\$10,703
Nova Scotia	\$13,359		\$13,215	\$13,582
New Brunswick	\$12,196		\$13,035	\$13,215
Quebec	\$13,971		\$13,830	\$14,082
Ontario	\$16,919		\$17,221	\$17,515
Manitoba	\$14,321		\$15,361	\$15,591
Saskatchewan	\$14,726		\$14,900	\$14,870
Alberta	\$16,994		\$17,644	\$17,656
British Columbia	\$15,733		\$16,501	\$16,664
	[5]	[6]	[7]	
	([1]-[3])/	([1]-[4])/	SCF	
Income differences				
Canada	-1.7%	-3.5%	1.1%	
Newfoundland	4.0%	1.7%	4.4%	
Prince Edward Island	14.3%	13.8%	4.5%	
Nova Scotia	1.1%	-1.7%	3.4%	
New Brunswick	-6.7%	-8.0%	3.3%	
Quebec	1.0%	-0.8%	2.7%	
Ontario	-1.8%	-3.5%	1.9%	
Manitoba	-7.0%	-8.5%	2.7%	
Saskatchewan	-1.2%	-1.0%	2.5%	
Alberta	-3.8%	-3.8%	2.4%	
British Columbia	-4.8%	-5.7%	3.6%	

Source: Census data from *Family Income: Census Families (93-117 1986)* Table 1B, SCF data for original from *Family Incomes: Census Families 1985 (Cat. 13-208)* Tables 15, revised from an unpublished version of Table 15.

Table 15: Economic Families: Comparisons of Average Income By Province for Census and SCF in 1990

	[1]	[2]	[3]	[4]
	Census as	Census data	SCF original	SCF revised
Average income				
Canada		\$52,614	\$51,633	\$51,122
Newfoundland		\$42,342	\$40,770	\$40,262
Prince Edward Island		\$43,852	\$39,701	\$40,125
Nova Scotia		\$44,757	\$44,385	\$44,410
New Brunswick		\$42,963	\$42,356	\$41,800
Quebec		\$47,218	\$47,158	\$46,395
Ontario		\$58,991	\$57,027	\$56,708
Manitoba		\$47,240	\$47,178	\$46,119
Saskatchewan		\$45,065	\$44,234	\$43,200
Alberta		\$53,467	\$51,985	\$51,747
British Columbia		\$54,303	\$54,448	\$53,505
	[5]	[6]	[7]	
	([2]-[3])/	([2]-[4])/	SCF	
Income differences				
Canada	1.9%	2.9%	0.7%	
Newfoundland	3.8%	5.0%	1.6%	
Prince Edward Island	9.9%	8.9%	1.9%	
Nova Scotia	0.8%	0.8%	2.0%	
New Brunswick	1.4%	2.7%	1.7%	
Quebec	0.1%	1.8%	1.5%	
Ontario	3.4%	3.9%	1.2%	
Manitoba	0.1%	2.4%	1.9%	
Saskatchewan	1.9%	4.2%	1.9%	
Alberta	2.8%	3.3%	1.5%	
British Columbia	-0.3%	1.5%	1.9%	

Source: Census unpublished data. SCF from *Income Distributions By Size in Canada 1990 (Cat. 13-207)* Tables 2 for original, and published version for revised.

Table 16: Economic Families: Comparisons of Average Income By Province for Census and SCF in 1985

	[1]	[2]	[3]	[4]
	Census as	Census data	SCF original	SCF revised
Average income				
Canada	\$38,652	\$38,733	\$38,059	\$38,471
Newfoundland	\$30,315	\$30,315	\$29,629	\$30,129
Prince Edward Island	\$31,249	\$31,279	\$30,943	\$31,462
Nova Scotia	\$33,811	\$33,890	\$34,349	\$34,716
New Brunswick	\$31,389	\$31,449	\$31,473	\$31,818
Quebec	\$35,146	\$35,168	\$35,068	\$35,501
Ontario	\$42,787	\$42,841	\$41,775	\$42,099
Manitoba	\$36,048	\$36,367	\$34,829	\$35,202
Saskatchewan	\$35,051	\$35,361	\$34,866	\$35,170
Alberta	\$41,392	\$41,500	\$40,736	\$41,305
British Columbia	\$38,555	\$38,740	\$37,968	\$38,363
	[5]	[6]	[7]	
	([2]-[3])/	([2]-[4])/	SCF	
Income differences				
Canada	1.8%	0.7%	0.7%	
Newfoundland	2.3%	0.6%	2.4%	
Prince Edward Island	1.1%	-0.6%	2.3%	
Nova Scotia	-1.3%	-2.4%	2.8%	
New Brunswick	-0.0%	-1.2%	1.5%	
Quebec	0.3%	-0.9%	1.4%	
Ontario	2.5%	1.7%	1.3%	
Manitoba	4.3%	3.3%	2.0%	
Saskatchewan	1.4%	0.5%	1.4%	
Alberta	1.9%	0.5%	1.6%	
British Columbia	2.0%	1.0%	1.6%	

Source: Census from *Family Income: Economic Families (Cat. 93-118 Census 1986)* Tables 1A & 7A. (Table 7A shows average incomes separately for low income and other families, for SCF coverage areas, and column [2] is a weighted average these.) SCF data is from *Income Distributions By Size in Canada 1985 (Cat. 13-207)* Table 2 for the original, and an unpublished version of Table 2 for the revised.

Table 17: Unattached Individuals: Comparisons of Average Income By Province for Census and SCF in 1990

	[1]	[2]	[3]	[4]
	Census as	Census data	SCF original	SCF revised
Average Income				
Canada		\$22,180	\$22,615	\$22,778
Newfoundland		\$17,361	\$19,194	\$19,928
Prince Edward Island		\$18,120	\$17,669	\$17,830
Nova Scotia		\$19,120	\$20,047	\$19,937
New Brunswick		\$18,001	\$18,417	\$18,640
Quebec		\$19,946	\$20,305	\$20,464
Ontario		\$24,733	\$24,822	\$24,885
Manitoba		\$19,885	\$20,246	\$20,320
Saskatchewan		\$19,887	\$19,839	\$19,802
Alberta		\$22,626	\$23,772	\$24,123
British Columbia		\$22,569	\$23,916	\$24,150
	[5]	[6]	[7]	
	([2]-[3])/	([2]-[4])/	SCF	
Income differences				
Canada	-1.9%	-2.7%	1.3%	
Newfoundland	-10.0%	-13.8%	6.3%	
Prince Edward Island	2.5%	1.6%	3.1%	
Nova Scotia	-4.7%	-4.2%	3.8%	
New Brunswick	-2.3%	-3.5%	3.4%	
Quebec	-1.8%	-2.6%	2.6%	
Ontario	-0.4%	-0.6%	2.3%	
Manitoba	-1.8%	-2.2%	2.9%	
Saskatchewan	0.2%	0.4%	2.6%	
Alberta	-4.9%	-6.4%	3.0%	
British Columbia	-5.8%	-6.8%	3.3%	

Source: Census unpublished data. SCF from *Income Distributions By Size in Canada 1990 (Cat. 13-207)* Table 24 for original, and unpublished version of Table 24 for the revised.

Table 18: Unattached Individuals: Comparisons of Average Income By Province for Census and SCF in 1985.

	[1]	[2]	[3]	[4]
	Census as	Census data	SCF original	SCF revised
Average Income				
Canada	\$16,587	\$16,602	\$16,729	\$17,013
Newfoundland	\$13,694	\$13,694	\$12,698	\$13,012
Prince Edward Island	\$13,319	\$13,331	\$11,690	\$11,637
Nova Scotia	\$14,683	\$14,714	\$14,465	\$14,932
New Brunswick	\$13,294	\$13,320	\$14,140	\$14,276
Quebec	\$14,800	\$14,807	\$14,647	\$14,889
Ontario	\$18,220	\$18,240	\$18,236	\$18,561
Manitoba	\$15,177	\$15,230	\$16,051	\$16,266
Saskatchewan	\$15,491	\$15,574	\$15,427	\$15,387
Alberta	\$18,019	\$18,047	\$18,581	\$18,596
British Columbia	\$16,602	\$16,645	\$17,298	\$17,503
	[5]	[6]	[7]	
	([2]-[3])/	([2]-[4])/	SCF	
Income differences				
Canada	-0.8%	-2.4%	1.2%	
Newfoundland	7.5%	5.1%	5.6%	
Prince Edward Island	13.1%	13.6%	4.7%	
Nova Scotia	1.7%	-1.5%	3.6%	
New Brunswick	-6.0%	-6.9%	3.9%	
Quebec	1.1%	-0.6%	2.9%	
Ontario	0.0%	-1.7%	2.2%	
Manitoba	-5.2%	-6.6%	3.0%	
Saskatchewan	0.9%	1.2%	2.7%	
Alberta	-2.9%	-3.0%	2.4%	
British Columbia	-3.8%	-5.0%	3.9%	

Source: Census *Family Income: Economic Families (Cat. 93-118 Census 1986)* Tables 1B & 7B. (Table 7B shows average incomes separately for low income and other families, for SCF coverage areas, and column [2] is a weighted average these.). *SCF Income Distributions By Size in Canada 1985 (Cat. 13-207)* Table 29 for the original, and an unpublished table for the revised.

6. DIFFERENCES IN INCOME ESTIMATES FOR FAMILIES AND PERSONS NOT IN FAMILIES: REVENUE CANADA TAX FILER (SAAD) AND THE SURVEY OF CONSUMER FINANCES

In this section a comparison is made for 1990 and 1993 between the family and *persons not in families* income estimates from the SCF, and the T1 Family File produced by SAAD from the Revenue Canada tax filer data source. These comparisons are made only on the Census family basis. The estimates provided by SAAD for this paper were medians, and a comparison of these with the SCF are shown in Tables 19, 20, 22 and 23. However, since the SAAD also included some aggregate income estimates for 1990, these were used to estimate the average income used in the comparisons for 1990 shown in Tables 21 and 24.

For both Census families and persons not in Census families, the median incomes estimated from the *T1 Family File are much lower* than those estimated from the SCF for Canada and most of the provinces. This is true for both 1990 and 1993 and the differences appear to be significant, at least at the Canada level.

Interestingly, however, the average incomes estimated for Census families in 1990 from the T1 Family File are very close to those obtained from the SCF. It would appear that the T1 Family File has missing income recipients, which results in lower family income at least up to the median, and which thus tends to drag it down, but has a better reporting and/or better representation of higher income families than the SCF, which tends to pull up its overall average income.

Tables 19 to 23 also show that for lone parent families, the T1 Family File estimates of median and average income are much lower than those obtained from the SCF, of the order of 7% to 8% for both median and average income at the

Canada level for 1990, and even larger for 1993. Also whereas the estimated number of husband-wife families from T1 Family File is lower than in the SCF (and Census), for lone parent families the T1 Family File shows a much higher number. Making precise statements on these differences is complicated by defects in the number estimated from the Census and SCF. The Census data excludes the undercount, the SCF (original) numbers are not adjusted to the 1991 Census base, and the SCF (revised) is subject to the vagaries of the LFS weighting system, at least for 1993. A more detailed presentation of the differences in the number of families, and their median, and average incomes obtained from the T1 Family File, the Census, and SCF is shown in Appendix B: Table (I) for 1990, and Table (ii) for 1993. For both years the number of families estimated by the Demography Division has also been presented. Their estimates for 1990 (as at July 1, 1991) give the Census estimates adjusted for the undercoverage. A possible explanation for differences in the number of families from the T1 Family File versus the rest, may lie in how common law couples report themselves.

Table 19: Comparison of Median Incomes for Census Families from T1 Family File (SAAD) & the Survey of Consumer Finances (SCF) in 1993.

	[1]	[2]	[3]
	T1 Family File	SCF Original	SCF Revised
Number of families	7,832,990	7,513,000	7,959,000
Median income			
Canada	\$43,000	\$45,783	\$45,583
Husband-wife families	\$47,400	\$49,694	\$49,761
Lone parent families	\$20,200	\$24,201	\$24,207
Newfoundland	\$34,000	\$36,031	\$34,769
Prince Edward Island	\$37,900	\$38,417	\$38,315
Nova Scotia	\$38,800	\$39,967	\$39,493
New Brunswick	\$37,400	\$41,152	\$40,880
Quebec	\$40,000	\$42,214	\$41,498
Ontario	\$46,800	\$49,883	\$50,238
Manitoba	\$39,900	\$44,096	\$42,663
Saskatchewan	\$38,200	\$42,247	\$41,252
Alberta	\$45,400	\$47,577	\$48,098
British Columbia	\$44,400	\$47,663	\$47,494
	[4]	[5]	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	
Differences in medians			
Canada	-6.3%	-5.8%	
Husband-wife families	-4.7%	-4.9%	
Lone parent families	-18.0%	-18.0%	
Newfoundland	-5.8%	-2.2%	
Prince Edward Island	-1.4%	-1.1%	
Nova Scotia	-3.0%	-1.8%	
New Brunswick	-9.6%	-8.9%	
Quebec	-5.4%	-3.7%	
Ontario	-6.4%	-7.1%	
Manitoba	-10.0%	-6.7%	
Saskatchewan	-10.1%	-7.7%	
Alberta	-4.7%	-5.8%	
British Columbia	-7.1%	-6.7%	

Table 20: Comparison of Median Incomes for Census Families from T1 Family File (SAAD) & the Survey of Consumer Finances (SCF) in 1990.

	[1]	[2]	[3]
	T1 Family File	SCF Original	SCF Revised
Number of families	7,286,990	7,117,000	7,529,000
Median income			
Canada	\$42,700	\$45,129	\$44,783
Husband-wife families	\$46,600	\$48,113	\$47,973
Lone parent families	\$20,700	\$22,477	\$22,500
Newfoundland	\$32,300	\$33,955	\$33,340
Prince Edward Island	\$34,700	\$34,844	\$34,150
Nova Scotia	\$37,300	\$39,133	\$39,049
New Brunswick	\$35,300	\$37,153	\$36,779
Quebec	\$39,000	\$41,934	\$41,257
Ontario	\$47,700	\$49,570	\$49,628
Manitoba	\$38,800	\$42,260	\$41,312
Saskatchewan	\$36,500	\$37,853	\$37,027
Alberta	\$44,500	\$46,467	\$46,518
British Columbia	\$44,400	\$47,858	\$47,199
	[4]	[5]	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	
Differences in Medians			
Canada	-5.5%	-4.8%	
Husband-wife families	-3.2%	-2.9%	
Lone parent families	-8.2%	-8.3%	
Newfoundland	-5.0%	-3.2%	
Prince Edward Island	-0.4%	1.6%	
Nova Scotia	-4.8%	-4.6%	
New Brunswick	-5.1%	-4.1%	
Quebec	-7.3%	-5.6%	
Ontario	-3.8%	-4.0%	
Manitoba	-8.5%	-6.3%	
Saskatchewan	-3.6%	-1.4%	
Alberta	-4.3%	-4.4%	
British Columbia	-7.5%	-6.1%	

Table 21: Comparison of Average Incomes for Census Families from T1 Family File (SAAD) & the Survey of Consumer Finances (SCF) in 1990.

	[1]	[2]	[3]
	T1 Family File	SCF Original	SCF Revised
Average income			
Canada	\$50,207	\$50,468	\$50,099
Husband-wife families	\$54,166	\$53,525	\$53,323
Lone parent families	\$26,978	\$29,115	\$28,977
Newfoundland	\$38,342	\$39,359	\$38,518
Prince Edward Island	\$40,202	\$39,661	\$38,985
Nova Scotia	\$42,916	\$43,581	\$43,446
New Brunswick	\$40,585	\$41,172	\$40,849
Quebec	\$44,960	\$46,688	\$45,905
Ontario	\$56,472	\$55,293	\$55,377
Manitoba	\$44,584	\$46,311	\$45,236
Saskatchewan	\$42,253	\$43,716	\$42,683
Alberta	\$51,770	\$50,827	\$50,881
British Columbia	\$51,701	\$53,023	\$52,060
	[4]	[5]	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	
Difference in average			
Canada	-0.5%	0.2%	
Husband-wife families	1.2%	1.6%	
Lone parent families	-7.6%	-7.1%	
Newfoundland	-2.6%	-0.5%	
Prince Edward Island	1.4%	3.1%	
Nova Scotia	-1.5%	-1.2%	
New Brunswick	-1.4%	-0.6%	
Quebec	-3.8%	-2.1%	
Ontario	2.1%	2.0%	
Manitoba	-3.8%	-1.5%	
Saskatchewan	-3.4%	-1.0%	
Alberta	1.8%	1.7%	
British Columbia	-2.5%	-0.7%	

Table 22: Comparison of Median Incomes for Persons Not In Census Families from T1 Family File (SAAD) & the Survey of Consumer Finances (SCF) in 1993.

	[1]	[2]	[3]
	T1 Family File	SCF Original	SCF Revised
Number of persons	4,379,520	4,271,000	4,441,000
Canada	\$15,400	16,414	16,841
Newfoundland	\$11,700	12,302	12,404
Prince Edward Island	\$13,200	13,193	13,093
Nova Scotia	\$13,700	15,221	15,527
New Brunswick	\$12,800	13,622	13,822
Quebec	\$13,800	14,349	14,616
Ontario	\$17,000	18,773	19,628
Manitoba	\$14,300	16,222	16,329
Saskatchewan	\$14,000	14,834	15,006
Alberta	\$16,800	16,875	17,233
British Columbia	\$17,000	17,895	17,934
	[4]	[5]	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	
Differences in medians			
Canada	-6.4%	-8.9%	
Newfoundland	-5.0%	-5.8%	
Prince Edward Island	0.0%	0.8%	
Nova Scotia	-10.5%	-12.5%	
New Brunswick	-6.2%	-7.7%	
Quebec	-3.9%	-5.7%	
Ontario	-9.9%	-14.3%	
Manitoba	-12.6%	-13.2%	
Saskatchewan	-5.8%	-6.9%	
Alberta	-0.4%	-2.5%	
British Columbia	-5.1%	-5.3%	

Table 23: Comparison of Median Incomes for Persons Not In Census Families from T1 Family File (SAAD) & the Survey of Consumer Finances (SCF) in 1990

	[1]	[2]	[3]
	T1 Family File	SCF Original	SCF Revised
Number of persons	4,205,940	4,047,000	4,122,000
Median income			
Canada	\$15,700	16,413	16,845
Newfoundland	\$10,600	12,025	12,303
Prince Edward Island	\$12,200	13,323	13,196
Nova Scotia	\$13,100	15,040	15,107
New Brunswick	\$11,900	12,450	12,725
Quebec	\$13,900	13,716	14,025
Ontario	\$18,000	18,487	19,112
Manitoba	\$13,900	15,109	15,299
Saskatchewan	\$14,000	15,024	14,982
Alberta	\$16,800	18,200	18,800
British Columbia	\$16,800	18,326	18,627
	[4]	[5]	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	
Differences in Medians			
Canada	-4.4%	-7.0%	
Newfoundland	-12.6%	-14.9%	
Prince Edward Island	-8.8%	-7.8%	
Nova Scotia	-13.8%	-14.2%	
New Brunswick	-4.5%	-6.7%	
Quebec	1.3%	-0.9%	
Ontario	-2.7%	-6.0%	
Manitoba	-8.3%	-9.6%	
Saskatchewan	-7.1%	-6.8%	
Alberta	-8.0%	-11.2%	
British Columbia	-8.7%	-10.3%	

Table 24: Comparison of Average Incomes for Persons Not In Census Families from T1 Family File (SAAD) & the Survey of Consumer Finances (SCF) in 1990

	[1]	[2]	[3]
	T1 Family File	SCF Original	SCF Revised
Average income			
Canada	\$21,107	\$21,530	\$21,895
Newfoundland	\$14,692	\$16,758	\$17,562
Prince Edward Island	\$16,184	\$17,265	\$17,112
Nova Scotia	\$17,848	\$18,859	\$18,832
New Brunswick	\$16,477	\$16,685	\$17,049
Quebec	\$19,045	\$19,335	\$19,750
Ontario	\$23,431	\$23,524	\$23,870
Manitoba	\$18,563	\$19,578	\$19,679
Saskatchewan	\$18,975	\$19,443	\$19,428
Alberta	\$21,930	\$22,688	\$23,291
British Columbia	\$22,338	\$22,959	\$23,201
	[4]	[5]	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	
Difference in average			
Canada	-2.0%	-3.7%	
Newfoundland	-13.1%	-17.8%	
Prince Edward Island	-6.5%	-5.6%	
Nova Scotia	-5.5%	-5.4%	
New Brunswick	-1.3%	-3.4%	
Quebec	-1.5%	-3.6%	
Ontario	-0.4%	-1.9%	
Manitoba	-5.3%	-5.8%	
Saskatchewan	-2.4%	-2.4%	
Alberta	-3.4%	-6.0%	
British Columbia	-2.7%	-3.8%	

7. INCIDENCE OF LOW INCOME

Statistics on the incidence of low income based on the Low Income Cut-offs (LICOs) are produced for the Census and for the Survey of Consumer Finances. For both of these income sources the statistics refer to economic families and unattached individuals. The LICOs indicate a threshold income which varies by the size of the economic family unit and the size of the community in which they live. The LICOs are *based* on the Survey of Family Expenditures, and are designed to reflect levels of income specific to family size and location, below which *income inadequacy* is deemed to be present. These LICO are periodically *rebased*. Currently SCF gives low income statistics using both the 1986 and 1992 bases. The low income statistics produced from the 1991 Census (1990 income year) used the 1986 base.

7.1 Differences in the Incidence of Low Income: Census & SCF

For both 1990 and 1985, the Census shows a slightly higher incidence of low income for both economic families and unattached individuals. These differences are only barely significant, but as was noted earlier, the Census has a slightly higher proportion of economic families and unattached individuals in the lower income groups. Another factor here is the Census use of the Census *urban population size groups* in determining the size of community category, whereas the SCF uses the *size of the area of residence*. The latter is, for the larger areas, essentially a classification by size of the CMA or CA. For the former, urban areas are determined based on population density, and then urban areas which are not separated by more than two kilometres are combined to form a single urban area. Usually these urban areas would roughly correspond to CMAs or CAs, except that rural areas within CMAs or CAs at least would be excluded. The percentage

population distribution in these two types of urban groups in 1986, as indicated by the Census & SCF was:

	Census	SCF
Economic families		
All areas	100.0%	100.0%
Urban areas 100,000 or more	53.0%	56.6%
Urban areas 30,000 - 99,999	8.9%	10.5%
Urban areas under 30,000	15.1%	14.0%
Rural areas	23.1%	18.9%
Unattached individuals		
All areas	100.0%	100.0%
Urban areas 100,000 or more	64.5%	67.2%
Urban areas 30,000 - 99,999	9.0%	10.5%
Urban areas under 30,000	13.7%	12.8%
Rural areas	12.8%	9.4%

Table 25: Comparison of the Incidence of Low Income Estimated By the Census and the Survey of Consumer Finances for 1985 and 1990

	Census	SCF original	SCF Revised
1990 (1986 Base)			
Economic families	13.2%	12.1%	12.4%
<i>(Standard error)</i>		0.3%	0.3%
Unattached individuals	36.5%	34.1%	33.8%
<i>(Standard error)</i>		0.7%	0.7%
Male	31.8%	28.1%	27.6%
Female	40.6%	39.3%	39.7%
1985 (1978 Base)			
All economic families	14.3%	13.3%	n.a.
Unattached individuals	38.0%	36.8%	n.a.
Male	33.2%	30.5%	n.a.
Female	42.0%	41.9%	n.a.

7.2 Differences in the Incidence of Low Income: SCF & T1 Family File Income Data

On an experimental basis Small Area & Administrative Data Division have produced low income incidences using their T1 Family File. Now this family income data approximates that of the Census family and persons not in Census families, rather than the economic family and unattached individuals basis used to produce the Census and SCF low income incidences. Simply applying the LICOs estimated for economic families and unattached individuals to Census families and persons not in Census families, is not strictly valid, since the LICOs are supposed to reflect on economies of scale within economic family (or more strictly the household). However, ignoring how such data might be interpreted, the incidences can be examined simply as characteristics of the income distributions in a multi-dimensional sense. However, to provide a more valid comparison between the SCF and the T1 Family File, it would be best to obtain estimates of low income incidences for the same or similar type of families/persons not in families, and thus on the Census family basis. Such a comparison for 1993 is shown in Table 26, along with SCF estimates made on the economic family basis.

In particular Table 26 shows that low income incidences which are observed for the SCF (on Census family basis) are higher than those observed for the SCF (on an economic family basis) but not nearly as high as those estimated from the T1 Family File income data (approximately based on a Census family basis). This provides further evidence, that the income distributions associated with the T1 Family File are, at least in some respects, significantly different from those obtained from the SCF (and also the Census).

Table 26: Comparison of the Incidence of Low Income Estimated By the Survey of Consumer Finances and the T1 Family File for 1993 (1992 Base)

	SCF - Economic family basis original	SCF - Economic family basis revised	SCF - Census family basis revised	T1 Family File Census family basis
Families				
All families	14.5%	14.6%	15.8%	19.9%
Elderly families	9.4%	9.7%	11.0%	10.0%
Married couples only	8.3%	8.8%	10.2%	9.6%
Other elderly families	11.6%	11.8%	13.3%	11.1%
Non-elderly families	15.4%	15.5%	16.7%	21.7%
Married couples only	9.6%	9.6%	10.6%	14.9%
One earner	12.7%	13.1%	14.6%	20.1%
Two earners	3.9%	3.9%	4.3%	5.2%
Two parent families with	12.5%	12.2%	13.1%	17.3%
One earner	24.9%	24.4%	25.7%	28.7%
Two earners	7.4%	7.1%	7.8%	7.8%
Three or more earners	3.6%	3.5%	3.5%	3.3%
Two parent families with			3.6%	5.6%
Married couples with other	3.5%	3.6%	n.a.	n.a.
Lone-parent families	55.9%	55.0%	55.6%	62.2%
Male lone-parent families	31.3%	30.9%	32.9%	41.8%
Female lone-parent families	59.6%	59.0%	59.4%	64.5%
All other families	19.7%	19.9%		n.a.
Persons not in families				
All persons not in families	40.8%	40.5%	42.9%	47.0%
Elderly	51.1%	51.9%	53.4%	50.7%
Male	38.3%	39.0%	41.4%	41.7%
Female	55.8%	56.4%	57.4%	53.5%
Non-elderly	36.6%	36.2%	38.8%	45.5%
Male	33.7%	33.5%	35.6%	43.6%
Female	40.4%	40.1%	43.4%	47.8%

Among non-elderly *persons not in Census families*, those who are *not unattached individuals* have an average income of about two thirds that of *unattached individuals*. These persons thus appear to have a much higher incidence of low income, as can be seen in Table 27, which may account for why they are living with relatives, but are they strictly living in a low income situation.

Table 27: Differences in the Number of Persons Not In Census Families and Unattached Individuals As Estimated By Survey of Consumer Finances 1993

	Total persons	Low income persons	Other persons	Incidence of low income
Persons not in census families	4,440,702	1,905,697	2,535,005	42.9%
Unattached individuals	3,812,000	1,544,096	2,267,727	40.5%
Persons not unattached individuals	628,702	361,601	267,278	57.5%
Persons not unattached individuals (%)	14.2%	19.0%	10.5%	
Non-elderly				
Persons not in census families	3,186,554	1,236,005	1,950,549	38.8%
Unattached individuals	2,763,206	999,416	1,763,790	36.2%
Persons not unattached individuals	423,348	236,589	186,759	55.9%
Persons not unattached individuals (%)	13.3%	19.1%	9.6%	
Elderly				
Persons not in census families	1,254,148	669,692	584,456	53.4%
Unattached individuals	1,048,794	544,680	503,937	51.9%
Persons not unattached individuals	205,354	125,012	80,519	60.9%
Persons not unattached individuals (%)	16.4%	18.7%	13.8%	

Source: Special table from SCF using revised weights.

Appendix A: Changes in the Percentage Distributions of Households, Families, and Persons Not In Families Based on the Census 1976-1991

	1976	1981	1986	1991
All households	100.0%	100.0%	100.0%	100.0%
One person	16.8%	20.3%	21.5%	22.9%
Two persons	27.8%	29.0%	30.0%	31.4%
Three persons	17.5%	17.5%	17.8%	17.4%
Four persons	18.2%	18.6%	18.7%	17.7%
Five or more persons	19.6%	14.6%	12.0%	10.6%
Five persons	10.5%	9.1%	8.1%	7.3%
Six or more persons	9.2%	5.5%	3.9%	3.3%
Persons in households	100.0%	100.0%	100.0%	100.0%
Persons in Census families	88.3%	86.6%	85.6%	84.4%
Persons not in Census	11.7%	13.4%	14.4%	15.6%
Total number of Census	100.0%	100.0%	100.0%	100.0%
Two person	35.1%	37.9%	39.9%	42.7%
Three person	21.3%	22.1%	22.8%	22.7%
Four person	22.5%	24.0%	24.4%	23.4%
Five or more person	21.1%	15.9%	12.8%	11.2%
Five person	12.0%	10.7%	9.5%	8.5%
Six or more persons	9.1%	5.2%	3.3%	2.6%
Total Census families	100.0%	100.0%	100.0%	100.0%
Husband-wife families	90.2%	88.7%	87.3%	87.0%
Families of now married		83.1%	80.1%	77.2%
Families of common-law		5.6%	7.2%	9.9%
Lone-parent families	9.8%	11.3%	12.7%	13.0%
Male parent	1.7%	2.0%	2.3%	2.3%
Female parent	8.1%	9.3%	10.4%	10.7%
Total husband-wife families	100.0%	100.0%	100.0%	100.0%
No children at home	33.4%	35.9%	37.4%	40.3%
With children at home	66.6%	64.1%	62.6%	59.7%
One child	20.7%	21.2%	21.8%	21.6%
Two children	23.6%	25.7%	26.6%	25.6%
Three or more children	22.3%	17.2%	14.2%	12.4%
Persons in households	100.0%	100.0%	100.0%	100.0%
Persons in Economic	91.4%	89.8%	88.9%	87.5%
Unattached individuals	8.6%	10.2%	11.1%	12.5%
Total number of Economic	100.0%	100.0%	100.0%	100.0%
Two person	33.1%	36.2%	38.0%	40.6%
Three person	21.2%	22.0%	22.7%	22.7%
Four person	22.3%	23.8%	24.3%	23.4%
Five or more person	23.3%	18.1%	15.0%	13.4%

Appendix B: Comparison of Number of Families, Median & Average Income

Estimated By T1 Family File, Census, & Survey of Consumer Finances

Table (i) Comparison of Number of Families, Median & Average Income Estimated By T1 Family File, Census, & Survey of Consumer Finances 1990

	[1]	[2]	[3]	[4]	[5]
	T1 Family file	Census	SCF Original	SCF Revised	Demograph 91-07-01
Number of families					
All families	7,286,990	7,355,730	7,117,000	7,529,000	7,497,400
Husband-wife	6,225,780	6,402,090	6,226,000	6,532,000	6,524,900
Lone parent families	1,061,210	953,635	891,000	997,000	972,500
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	$\frac{([1]-[4])}{(0.5*([1]+[4]))}$	$\frac{([1]-[5])}{(0.5*([1]+[5]))}$	
All families	-0.9%	2.4%	-3.3%	-2.8%	
Husband-wife	-2.8%	-0.0%	-4.8%	-4.7%	
Lone parent families	10.7%	17.4%	6.2%	8.7%	
Median Income					
All families	\$42,700	\$44,891	\$45,129	\$44,783	
Husband-wife	\$46,600	\$48,091	\$48,113	\$47,973	
Lone parent families	\$20,700	\$23,552	\$22,477	\$22,500	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	$\frac{([1]-[4])}{(0.5*([1]+[4]))}$		
All families	-5.0%	-5.5%	-4.8%		
Husband-wife	-3.1%	-3.2%	-2.9%		
Lone parent families	-12.9%	-8.2%	-8.3%		
Average income					
All families	\$50,207	\$51,342	\$50,468	\$50,099	
Husband-wife	\$54,166	\$54,667	\$53,525	\$53,323	
Lone parent families	\$26,979	\$29,018	\$29,115	\$28,977	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	$\frac{([1]-[4])}{(0.5*([1]+[4]))}$		
All families	-2.2%	-0.5%	0.2%		
Husband-wife	-0.9%	1.2%	1.6%		
Lone parent families	-7.3%	-7.6%	-7.1%		

Note: There are some differences in the universes covered by these estimates.

**Table (ii) Comparison of Number of Families, Median & Average Income Estimated
By T1 Family File, Census, & Survey of Consumer Finances 1993**

	[1] T1 Family file	[2] Census	[3] SCF Original	[4] SCF Revised	[5] Demography 94-07-01
Number of families					
All families	7,832,990		7,513,000	7,959,000	7,797,200
Husband-wife families	6,676,430		6,451,000	6,764,000	6,771,100
Lone parent families	1,156,560		1,063,000	1,195,000	1,026,100
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	$\frac{([1]-[4])}{(0.5*([1]+[4]))}$	$\frac{([1]-[5])}{(0.5*([1]+[5]))}$	
All families		4.2%	-1.6%	0.5%	
Husband-wife families		3.4%	-1.3%	-1.4%	
Lone parent families		8.4%	-3.3%	12.0%	
Median Income					
All families	\$43,000		\$45,783	\$45,583	
Husband-wife families	\$47,400		\$49,694	\$49,761	
Lone parent families	\$20,200		\$24,201	\$24,207	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	$\frac{([1]-[4])}{(0.5*([1]+[4]))}$		
All families		-6.3%	-5.8%		
Husband-wife families		-4.7%	-4.9%		
Lone parent families		-18.0%	-18.0%		
Average income					
All families	\$51,361		\$52,112	\$51,889	
Husband-wife families	\$55,673		\$55,742	\$55,747	
Lone parent families	\$26,470		\$30,072	\$30,057	
	$\frac{([1]-[2])}{(0.5*([1]+[2]))}$	$\frac{([1]-[3])}{(0.5*([1]+[3]))}$	$\frac{([1]-[4])}{(0.5*([1]+[4]))}$		
All families		-1.5%	-1.0%		
Husband-wife families		-0.1%	-0.1%		
Lone parent families		-12.7%	-12.7%		

