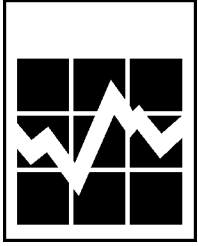


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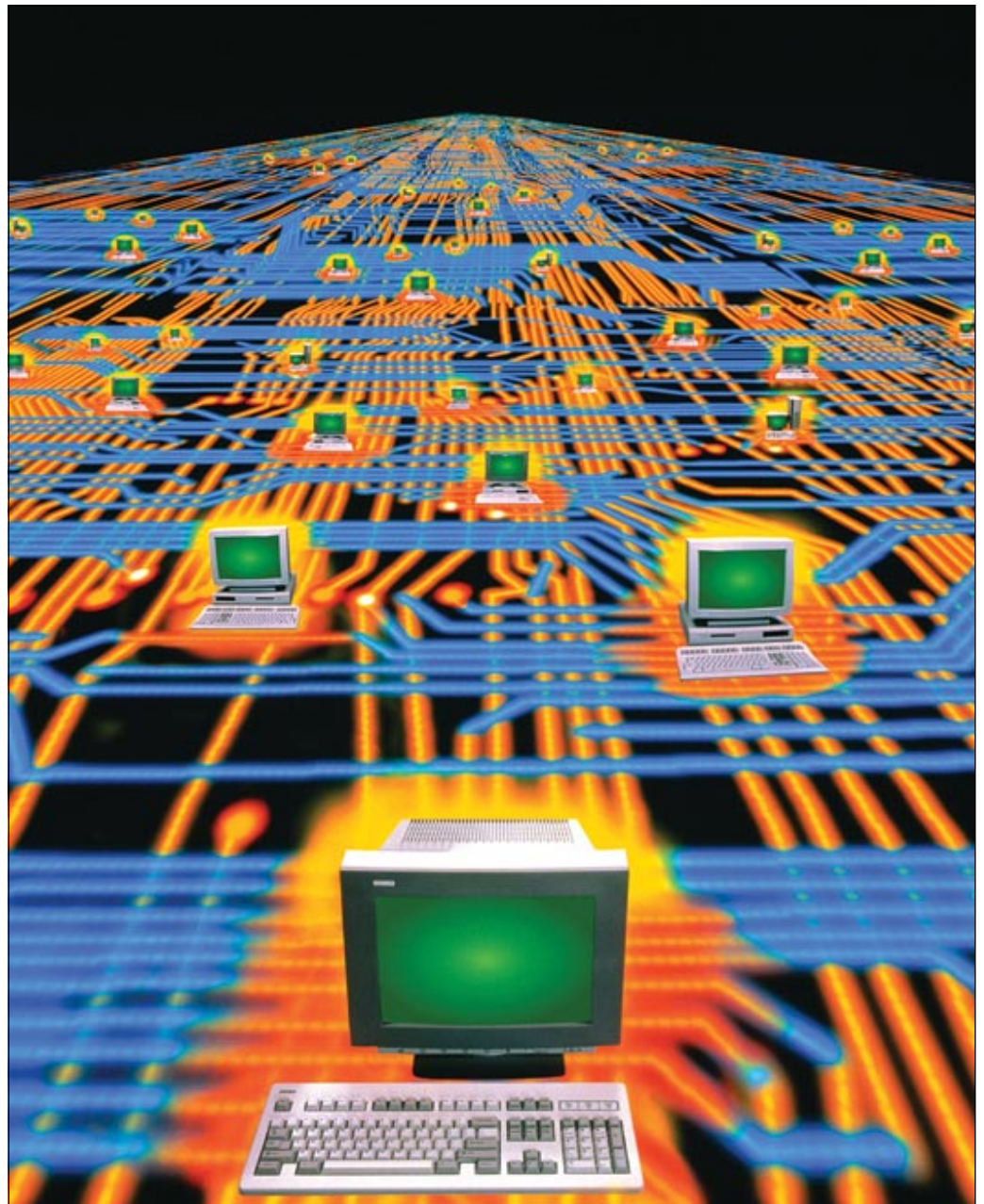
PERSPECTIVES

ON LABOUR AND INCOME

JUNE 2001

Vol. 2, No. 6

■ **LOW INCOME INTENSITY:
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Highlights

In this issue

■ **Low income intensity: urban and rural families**

- Despite an economy-wide expansion, low income intensity rose roughly equally for both rural and urban families between 1993 and 1997. However, the percentage growth was higher in rural areas. Low income intensity grew 13.1% in rural areas, 11.9% in small/medium urban areas, and 8.0% in large urban areas.
- Associated with the rising low income intensity was little or no increase in market income—despite a generally improving economy—and a decline in total transfer payments, especially Employment Insurance benefits received by low income families.
- Transfers to families appear to have declined by a similar percentage for both urban and rural low income families. But because rural low income families received a greater fraction of income from transfers, the change affected them more than urban families.

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Low income intensity: urban and rural families

Andrew Heisz

THIS PAPER EXAMINES low income intensity among urban and rural families for the years 1993 and 1997. Low income intensity incorporates both the more commonly known low income rate and the average depth of low income. Changes in the low income rate often understate changes in the economic well-being of low income individuals and families. By combining rate and depth information, low income intensity provides a more complete measure of low income.

The years 1993 to 1997 encompassed a period of economic growth in Canada when one might have expected some reduction in low income following the recession of 1990-1992. In real terms, the gross domestic product (GDP) grew 14% between 1993 and 1997, an average of just over 3% per year.

Despite the economy-wide expansion, the measure of low income intensity rose between 1993 and 1997 for both rural and urban families. The size of the increase was roughly equal in absolute terms for both types of families. However, since intensity was comparatively low in rural areas, its rate of growth was slightly higher—13.1% compared with 11.9% in small/medium urban areas, and 8.0% in large urban areas. Low income intensity also rose for self-employed farmers with unincorporated farms.

Underlying the rise in low income intensity were changes in market and transfer incomes. Market income for families with low income rose only slightly, or not at all, despite the growth in the economy, whereas transfers fell. Declines in transfer income were associated primarily with reduced Employment Insurance (EI) receipts. Social assistance receipts also declined, but to a lesser extent. Other transfers rose somewhat, but failed to offset these declines. EI

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decreases affected low income families in all provinces, but had the largest effect on rural families in the Atlantic provinces. Social assistance fell most for low income families in Ontario and Alberta.

The focus is on non-elderly families, because one objective was to look at income changes by source of income. Elderly families have a substantially different income mix than non-elderly families, which would have necessitated a different approach. Otherwise, the study encompasses all families and individuals. For convenience, individuals and families are referred to as 'families' (see *Data source and definitions*).

Low income intensity: a more complete measure of low income

The low income rate is at best a partial indicator of low income. While it shows what fraction of the population is below a pre-determined cutoff, it does not indicate how far below they are—the low income gap. One could imagine a policy that gave money to the worst-off Canadians, but not enough to lift any recipients above the threshold. While this transfer would clearly make low income Canadians better off, it would not affect the low income rate. Low income intensity takes into account both the *rate* and the *depth* of low income (see *Low income cutoffs*).

Low income intensity is defined as the product of three factors: the low income rate, the low income gap, and the level of inequality of the gap:

$$\text{Intensity} = \text{Rate} \times \text{Gap} \times \text{Inequality.}$$

This yields a simple graphical interpretation of low income intensity—the volume of a three-dimensional box (Osberg, 2000). To make matters simpler, the third term is nearly constant in most cases, making it possible to display low income intensity in two dimensions as a function of the rate and the gap.²

Data source and definitions

Data are from the 1993 and 1997 versions of the T1 family file (T1FF), created and maintained by the Small Area and Administrative Data Division (see *T1FF and the official Statistics Canada low income estimates*). The T1FF comprises all T1 tax records filed by Canadians, grouped into families. Records for children and non-filing spouses of taxfilers are imputed from information on the taxfiler's T1. Thus, all income sources and the tax bill can be tallied for each family, along with its basic demographic profile and area of residence. The full file is large—over 29 million records in 1997—but this study uses a 10% file of randomly selected records to yield 1.2 million families in each of 1993 and 1997. Approximately 20% are rural families.

Since the analysis uses tax data, the sources of income are those normally reported on the T1 file, plus the federal Child Tax Benefit, the Goods and Services Tax (GST) or the Harmonized Sales Tax (HST) credit, provincial family benefits and provincial refundable credits. One important source of income not consistently reported on the T1 file over this period is family allowance benefits. These are non-taxable provincial and local programs targeted at families with dependent children. A number of different programs are grouped under the family allowance banner and these differ between provinces. Provincial family allowance benefits are available in this data in 1997 but not 1993. This mainly affects the incomes measured for residents of Quebec who received provincial family allowance benefits in both years. Residents of some other provinces received provincial family allowance benefits only in 1997. Because the focus of this study is on changes in low income over time, it is important that definitions of income remain the same. For residents of Quebec, this means excluding provincial family allowance benefits for 1997. Including benefits for 1997 when they cannot be measured in 1993 would introduce a bias to the changes in income of provincial families since any provincial family allowance benefits in 1997 would be measured as an increase in income.

For residents of other provinces, however, this means including these benefits for 1997 since for those families they represent new programs offering additional incomes to families.

Rural areas: the regions outside census metropolitan areas (CMAs) and census agglomerations (CAs). CMA and CA codes have been matched to the T1FF using a postal code conversion to yield a highly accurate locational identifier.

Small/medium urban areas: CMAs or CAs with less than 500,000 residents.

Large urban areas: CMAs or CAs with more than 500,000 residents.

Market income: total earnings (from paid employment or self-employment), investment income, retirement income (private pension plan) and "other income." It excludes government transfers.

Government transfers: all direct payments to individuals and families by the federal, provincial and municipal governments: Old Age Security pensions, the Guaranteed Income Supplement, Spouse's Allowance, Canada and Quebec Pension Plan benefits, Child Tax Benefits, Employment Insurance benefits, workers' compensation benefits, credits for the GST/HST, provincial or territorial refundable tax credits, social assistance payments and other government payments. For all provinces except Quebec this included provincial family allowance benefits. These benefits were excluded for Quebec because of data unavailability for 1993.

Total income: income from all sources before deduction of federal and provincial taxes, that is, market income plus government transfer payments.

Income tax: total federal and provincial taxes on income and capital gains in a given year.

After-tax income: total income minus income taxes.

The overall level of low income intensity increased between 1993 and 1997 (Chart A). Over the period, low income intensity rose by 9.9% (Table 1). A substantial fraction of this rise was due to an increase in the low income gap. Roughly speaking, the growth in low income intensity equals the growth in the low income rate plus the growth in the gap. Thus, about one-third of the rise in low income intensity was due to an increase in the gap, the remainder due to an increase in the rate.

What lay behind the increase in low income intensity? Did low income families receive less income from market sources, or did transfers decline?³ This can be answered by considering changes in incomes by source for the population of families at risk of being in low income—that is, families whose market incomes were below the low income cutoff based on income after

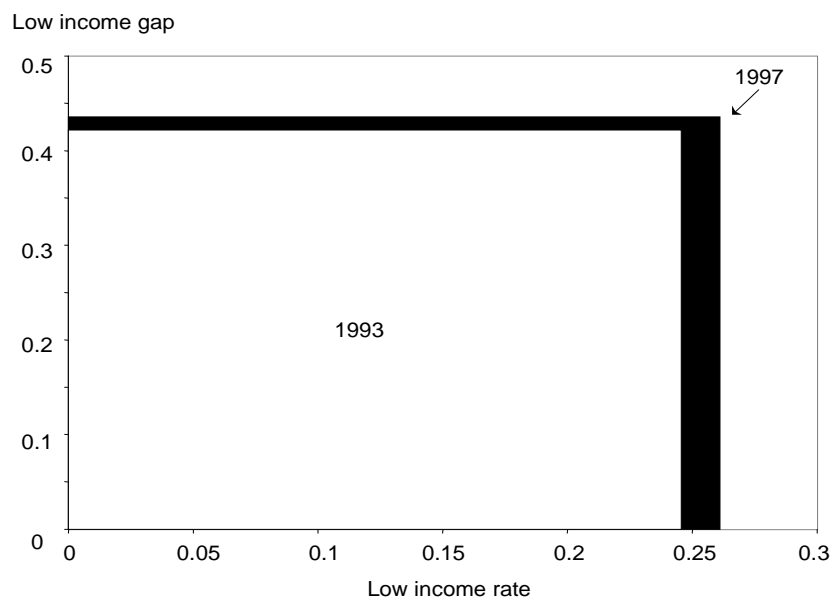
Table 1: Low income rate, gap and intensity

	Rate	Gap	Intensity
1993	0.245	0.422	0.191
1997	0.262	0.437	0.210
Change (%)	6.8	3.5	9.9

Source: T1 Family File

tax (LICO-IAT). These 'low market income families' are families whose income from market sources does not surpass the cutoff—although some of these families may not be in low income after income from transfers is factored in. Changes in the amount and composition of income for this group shed light on

Chart A: Overall, low income intensity increased between 1993 and 1997.



Source: T1 Family File

the relative contribution of market and transfer incomes to the low income rate and gap, and hence low income intensity.

After tax income fell by \$1,300 between 1993 and 1997 for families with low market income (Table 2). The largest contributor to this decline was the \$1,100 drop

in EI benefits received by these families. Social assistance also fell (-\$500), whereas other transfers rose slightly. Market earnings were virtually unchanged. The lack of increase in market earnings is surprising given the GDP growth enjoyed over this period, and suggests that families not in low income benefited more from this growth.

Table 2: Average income of individuals and families with market income below LICO-IAT

	Market earnings	EI benefits	Social assistance	Other transfers	Taxes	After tax income	LICO-IAT
	\$						
1993	5,613	1,983	3,351	2,406	546	12,807	16,716
1997	5,652	872	2,867	2,500	396	11,494	16,732
Change	39	-1,111	-485	94	-149	-1,313	16

Source: T1 Family File

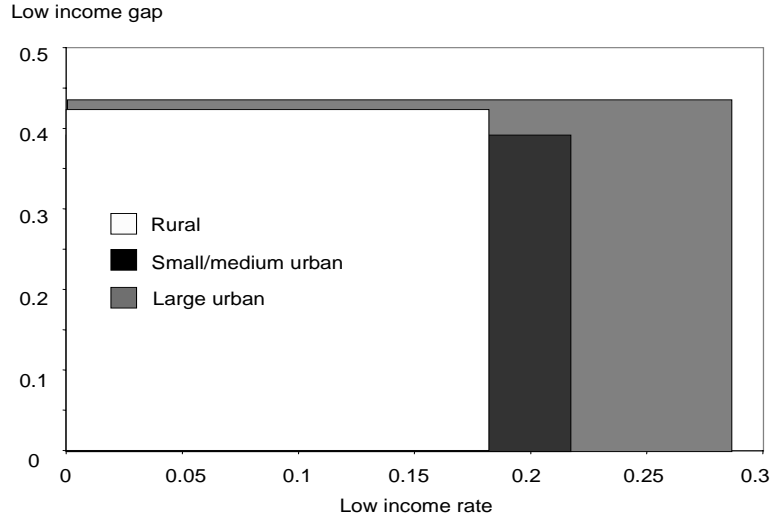
The preceding discussion shows that low income intensity is useful for two reasons. First, it is a more complete indicator of income deprivation among low income families than the traditional 'head-count' represented by the low income rate. The rate tells only part of the story, and important changes in incomes among low income families can be missed by focusing only on changes in the rate. Second, low income intensity can be useful for evaluating programs targeted at low income Canadians. Changes in the economic well-being of low income families may be missed by the low income rate, but they are always registered in measures of low income intensity (see also Myles and Picot, 2000).⁴

Low income intensity among rural and urban families

In 1993, low income intensity was lowest in rural communities at 0.145 (Table 3), and rose with urbanization class. In large urban areas, low income intensity was 0.226 (Chart B). Why this difference? Mainly, it occurred because the low income rate was higher in more urbanized areas. The low income rate was 0.182 in rural areas and 0.286 in large urban areas. There was much less difference in the low income gap. The average family in low income was 42.2% below the LICO-IAT in rural areas, and 43.5% below in large urban areas. Smaller urban areas had a lower gap than either the large urban or rural areas, but their low income rate fell between the two. The difference in low income rates between community sizes was primarily due to differences in expenditures on necessities (see *Comparing rural and urban Canadians*).

In absolute terms, low income intensity grew almost equally between 1993 and 1997 in each community size: 1.9 percentage points in rural areas, 1.9 points in small/medium urban areas, and 1.8 points in large urban areas (Chart C). However, since rural areas were growing from a smaller initial level, their percentage growth was higher: 13.1%, compared with 11.9% in small/medium urban areas, and 8.0% in large urban areas. These increases were driven in part by a rise in the low income rate, plus an increase in the low income gap. In rural areas and small/medium urban areas the increase in the rate was more important; in large urban areas increases in the rate and the gap played approximately equal roles. Again, increases in the low income rate understated the size of increases in the income deprivation faced by low income families. Over the 1993-to-1997 period, the low income population not

Chart B: In 1993, low income intensity was greatest in large urban areas.



Source: T1 Family File

Table 3: Low income among non-elderly families, by area size

	Rate	Gap	Intensity
Rural			
1993	0.182	0.422	0.145
1997	0.199	0.438	0.164
Change (%)	9.3	3.8	13.1
Small/medium urban			
1993	0.217	0.393	0.160
1997	0.240	0.403	0.179
Change (%)	10.6	2.5	11.9
Large urban			
1993	0.286	0.435	0.226
1997	0.299	0.451	0.244
Change (%)	4.5	3.7	8.0

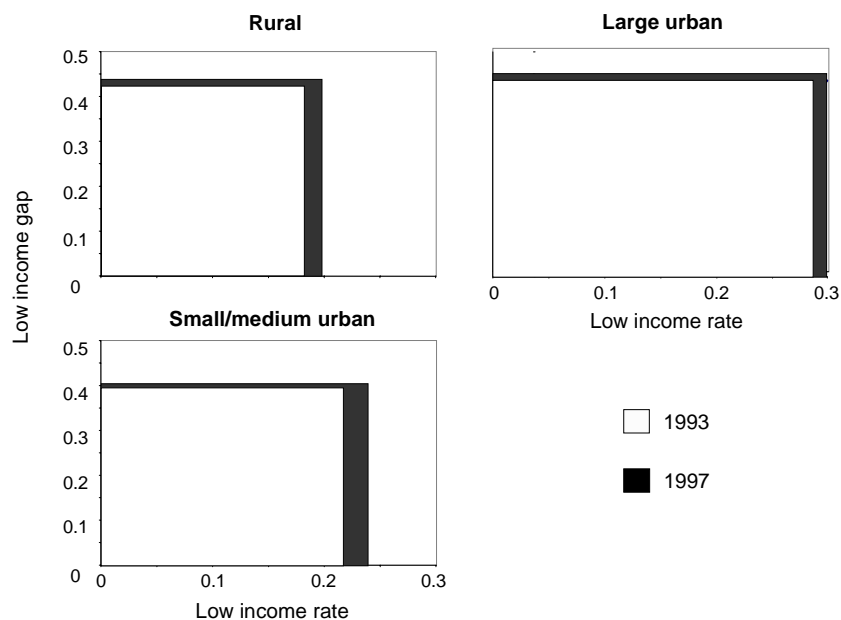
Source: T1 Family File

only increased, but it also became economically worse off—which would not have been apparent from the low income rate.

Income by source

Low income intensity rose for both urban and rural families between 1993 and 1997. How did incomes change over the period? Net income for low market income families fell by \$1,800 in rural areas, \$1,500 in small/medium urban areas, and \$1,000 for families in large urban areas (Table 4). The largest single contributor to the decline was a large drop in EI benefits. These fell by \$1,600 for rural families, by \$1,100 in small/medium sized urban areas and by \$900 in large urban areas. At the same time, average market earnings failed to rise substantially, despite increases in aggregate real GDP. Real market earnings fell by \$200 for low market income families in rural areas and small/medium urban areas, but rose marginally (\$200) in large urban areas.

Chart C: Between 1993 and 1997, low income intensity increased in all size regions.



Source: T1 Family File

income intensity rose for these families between 1993 and 1997 (Table 5). Low income intensity rose less for farm than non-farm families, but, because of its lower initial rate, the percentage growth was about the same. For farm families, rising low income intensity was associated with declines in EI and market income (Table 6).⁵

Provincial differences

Social assistance falls under provincial and local jurisdiction and these programs differ substantially in terms of eligibility and benefit rates. And eligibility for EI depends upon local unemployment rates, which differ between and within provinces.

Declines in EI income were most important for rural low market income families, particularly those in the Atlantic provinces, as

Social assistance also declined, particularly in urban areas. Although other transfers did increase, the amounts were not large enough to offset the declines in EI and social assistance. Total transfers fell about equally in percentage terms for each type of area: 20% in rural areas, 17% in small/medium urban areas, and 20% in large urban areas. Because transfers made up a larger part of net income for low market income families in rural and small/medium urban areas, the same proportional decrease in transfers had a larger effect on net income for these families.

Farm families

Farm families are those with more than \$10,000 of gross income from unincorporated farms. Low

Table 4: Average income of individuals and families with market income below LICO-IAT

	Market earnings	EI benefits	Social assistance	Other transfers	Taxes	After tax income	LICO-IAT
	\$						
Rural							
1993	4,360	2,870	2,969	2,832	486	12,545	13,084
1997	4,123	1,277	2,677	2,947	276	10,748	12,874
Change	-237	-1,593	-292	115	-210	-1,797	-210
Small/medium urban							
1993	5,079	1,916	4,007	2,597	493	13,106	15,614
1997	4,914	855	3,497	2,686	335	11,617	15,476
Change	-166	-1,061	-510	89	-158	-1,489	-138
Large urban							
1993	6,379	1,673	3,156	2,140	596	12,752	18,705
1997	6,584	730	2,622	2,242	471	11,707	18,782
Change	204	-943	-534	102	-125	-1,045	77

Source: T1 Family File

Low income cutoffs

Low income cutoffs (LICOs) were established using data from the Family Expenditure Survey, which covered approximately 14,000 households. It was conducted periodically from 1955 to 1996 when it was replaced by the annual Survey of Household Spending. Between surveys, low income cutoffs were adjusted for inflation using the consumer price index.

This study uses 1992 LICOs based on income after tax (LICO-IATs) to measure low income. These are defined as the after-tax income level at which an economic family spends 20% more than the average family of similar size and area of residence (urbanization) on necessities (food, shelter and clothing). Although LICOs are often referred to as poverty lines, they have no official status as such, and Statistics Canada does not recommend their use for this purpose.¹

LICO-IATs are based on family size and urban class. For example, in 1993 for a family with three members, the LICO-IAT was \$13,773 in rural areas and \$21,007 in large urban areas. The difference arises because the average three-person family in a large urban area spends a higher fraction of its income on necessities. Persons with after-tax income below the LICO-IAT for their family size and area size class are defined to be in low income.

Ontario, Alberta and British Columbia. Compared with changes in EI, changes in social assistance were smaller and less differentiated by area, although declines appeared slightly smaller the larger the urban area. Social assistance rose in Newfoundland, but changed little in other provinces. Social assistance fell by 4.2% of the LICO-IAT in rural Ontario, 4.1% in rural Alberta, 3.4% in rural British Columbia, 4.3% and 3.3% in small/medium urban areas in Ontario and Alberta respectively, and 3.2% in large urban areas in Ontario. Other declines were less than 3%. The introduction of family allowance in British Columbia served to offset declines in social assistance.⁶ Also, market incomes fell or rose very little in most provinces, except Alberta (up \$400).

Why do changes in transfers affect rural low-income families more?

In all communities, increases in low income intensity were associated with little increase in market income and declining transfer payments. Changes in transfers particularly affected rural low income families. For all levels of after tax income, families in rural communities received a larger proportion from transfers than families in large urban areas (Chart E). And, at the levels of income given by the LICO-IATs, a rural family received a 60% larger proportion of income from transfers than did a family in a large urban area. This is because of differences in both the cutoff level and the average fraction of income received from transfers at all levels of income. The former appears to have been more important.

This means that, other things being equal, for a given change in transfers, low income families in rural areas were affected more than those in urban areas. This

Table 5: Low income among farm families

	Rate	Gap	Intensity
1993	0.113	0.260	0.057
1997	0.119	0.277	0.064
Change (%)	5.3	6.5	12.3

Source: T1 Family File

well as in Quebec and British Columbia (Chart D). EI declined for other provinces and areas, but substantially less (relative to the LICO-IAT). In the Atlantic rural areas, EI dropped by 20.5% of the LICO-IAT in Prince Edward Island, 19.0% in Newfoundland, 16.4% in New Brunswick, and 8.5% in Nova Scotia.

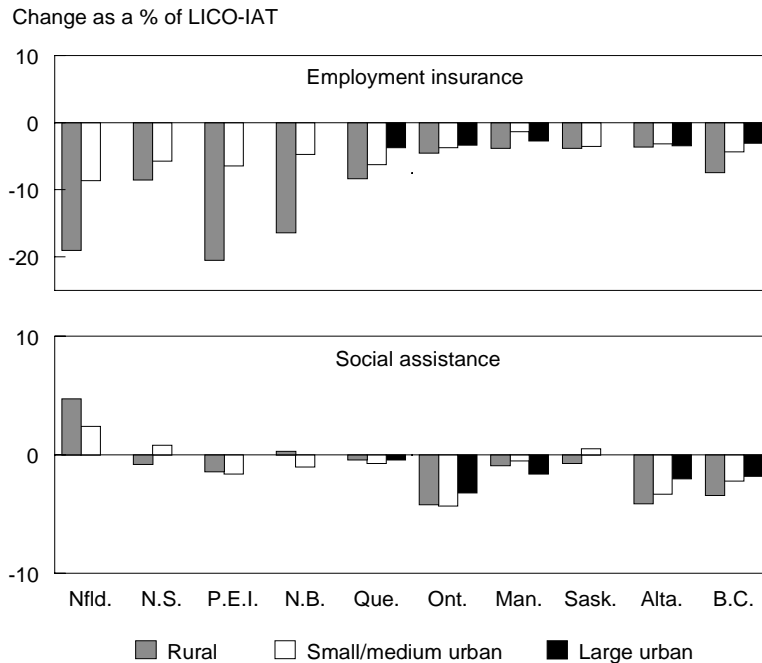
Declines in social assistance income were most important for low market income families in

Table 6: Average income of farm families with market income below LICO-IAT

	Market earnings	EI benefits	Social assistance	Other transfers	Taxes	After tax income	LICO-IAT
	\$						
1993	10,494	1,519	226	3,712	279	15,673	16,279
1997	10,192	752	142	3,873	259	14,700	16,192
Change	-302	-767	-85	161	-20	-973	-87

Source: T1 Family File

Chart D: EI declines affected the Atlantic provinces the most.



Source: T1 Family File

Note: Changes in these transfers have been standardized by dividing them by the average LICO-IAT observed in the two years (1993 and 1997). Thus, values given are the change in transfer income received as a fraction of the low income cutoff for an average family with low market income.

was more because of differences in the level of the low income cutoffs, and less because rural families were more dependent on transfers (at any given level of income).

Conclusion

Low income intensity is a useful indicator for describing trends in low income. Unlike the low income rate, it is sensitive to changes in the amount of income received by low income families, not just whether or not they fall below a low income threshold. From 1993 to 1997, low income intensity showed larger increases in low income than did the low income rate.

The increases in low income were related to a decline in transfers received by low income families. But the decline in transfers was only half the story. Also important was the slow growth in market earnings despite a generally improving economy.

In absolute terms, low income intensity increased equally for rural and urban families between 1993 and 1997. However, since it was growing from a lower base, the percentage growth was higher in rural areas. Associated with the rising low income intensity was little or no increase in market income and a decline in total transfer payments, especially EI benefits

received by low income families. Transfers to families appear to have declined by a similar percentage for both urban and rural low income families, but because the latter received a greater fraction of income from transfers, the change affected them more than urban families. Low income intensity also rose for rural farm families. The EI shortfall was greatest in the Atlantic provinces, while social assistance dropped the most in Ontario, Alberta and British Columbia. Market earnings rose for families in Alberta and transfers from other sources (mainly family allowance benefits) rose for British Columbia families.

The ability to identify the importance of EI or social assistance in this change in low income intensity is limited in this study, and no conclusions can be drawn regarding the effect of changes in these programs on low income intensity. The analysis of the effect of all transfers is done in a 'first order' sense only, and this paper does not try to account for behavioural responses (possibly significant) to changes in a program.⁷

The years 1993 to 1997 reflected sluggish, but improving, economic conditions. Between 1993 and 1997, the unemployment rate fell from 11.4% to 9.1%.⁸ As economic conditions improve, transfer payments could normally be expected to decline and market incomes to rise. However, the latter did not happen for families in low income. Nevertheless, the length of recession and the slow pace of recovery suggests that exhaustion of EI benefits and difficulty obtaining the minimum hours of work required to qualify for EI might have been an ongoing problem. In other words, the drop in EI received by low income families may have been due to a change in the program, or it might have happened even in the absence of changes to EI.⁹ Atlantic Canadians in particular had difficulty meeting minimum entrance requirements and were more likely to exhaust benefits in 1997 (HRDC, 1998b).

T1FF and the official Statistics Canada low income estimates

Low income rates computed using the T1 Family File (T1FF) compare favourably with those using the Survey of Consumer Finances (SCF). Low income rates computed using the T1FF tend to be about 5 percentage points higher, but otherwise fit closely with official rates. On average, changes in low income rates in the T1FF between 1993 and 1997 understated those in the SCF, T1FF growth rates being about 40% lower. In terms of ranking and qualitative comparisons, changes in low income rates also compared well between the T1FF and the official series.

One reason for the higher T1FF rates may be differences in family structure used by the two surveys. The T1FF uses **census families**, which comprise a couple and any unmarried children living in the same dwelling unit, or a lone parent with unmarried children. The SCF uses the **economic family**, which is a group of individuals sharing a common dwelling unit and related by blood, marriage or

adoption. Economic families may comprise two or more census families. Census families will tend to be smaller, and to have lower income.

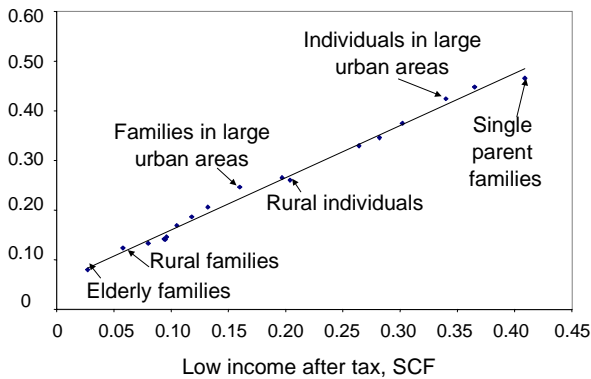
A second reason is coverage. The SCF excludes the population on reserves, in the military, and in institutions, while the T1FF does not.

A third possibility is that the grouping of families into urban size classes may be slightly different between the two sources.

Although the rates are higher using the T1FF, the relative ranking of different family types and urbanization areas suggests that these rates are reasonable. This is particularly true for the purposes of this study, where the main interest is in examining changes over the 1993 to 1997 period, rather than discussing differences in levels.

Incidence of low income, 1997

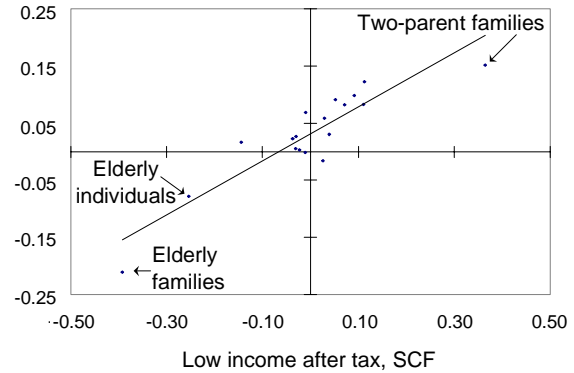
Low income after tax, T1FF



Note: Only selected family types have been highlighted.

Change in incidence of low income, 1993 to 1997

Low income after tax, T1FF



Note: Only selected family types have been highlighted.

Other research has shown that the slow growth and program changes may both have played roles over this period. Between 1994 and 1997, low income intensity also rose in the United States. Provincial and state jurisdictions that saw less deterioration in macroeconomic conditions (like employment and unemployment), and unemployment insurance and social assistance benefits and eligibility over this period saw a smaller rise in low income (Osberg, 2000).

Equally as interesting as understanding why transfers fell for low income families in 1997 relative to 1993 is understanding why market incomes among low

income families failed to rise in response to (slow) economic growth. Aggregate growth seen between these years appears not to have benefited families below the low income cutoffs. This is important because escaping from low income depends, in part, on finding employment. Getting or losing a job or a change in the number of earners in a family tends to have a major influence on moving in or out of low income (Picot, Zyblock and Pyper, 1999). Furthermore, small changes in the unemployment rate when unemployment is high may do little to affect the employment probabilities of low income persons. Just as persistently low unemployment in the 1990s contributed to

Comparing rural and urban Canadians

Families are defined as in low income when their after tax income falls below the low income after tax cutoff line (LICO-IAT) for families of the same size and urban class. These cutoffs rise with family size and urbanization (see Catalogue no. 13-592-XIB). Because larger families spend more on necessities than smaller families, they require more income to exceed the cutoff. And, on average, urban families spend more of their income on necessities. The distributions of incomes for urban and rural families are nearly identical in the lower half of the scale, so low income rates are higher in large urban areas not because incomes are lower there, but because expenditures

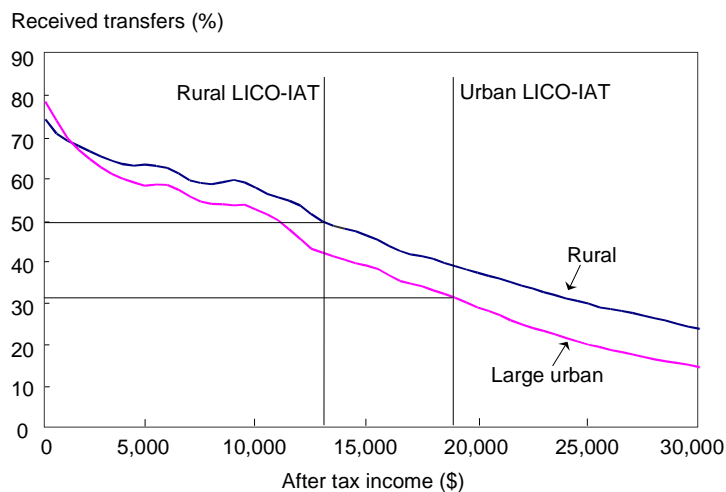
on necessities—particularly shelter—are higher. Hence the cutoff is higher for this group, and in turn, the fraction of families falling below the cutoff is greater (Heisz, 2001).

One common criticism of the LICO methodology is that it focuses on gross expenses for food, shelter and clothing, which will differ between rural and urban Canada because of price differences, quality differences and quantity differences. Hence, the low income population in different urbanization classes may not have the same standard of living. Differences between groups may be over or under stated using different low income measures. This is one motivation for the move

towards establishing a “market basket measure” of low income (HRDC, 1998a). For this reason, this paper highlights changes in low income over time, and not differences between groups.

Some analysts have also criticised the methodology underlying the computation of the LICOs for making differences between urban and rural LICOs too large (for example, Wolfson and Evans, 1989). However, using LICO-IATs that are closer together shows that the main conclusions are not affected by the amount of difference in the LICOs (Heisz, 2001).

Chart E: For virtually all levels of income, transfer payments were more important for rural families.



Source: T1 Family File

improving the earnings of Americans at the bottom of the wage distribution (Mishel, Bernstein and Schmitt, 2001), several consecutive years of sustained growth and low unemployment—from 1997 through (at least) 2000—may serve to improve the market earnings of low income families in Canada.

Perspectives

Notes

1 For a detailed explanation, see “On poverty and low income,” by I.P. Fellegi (Catalogue no. 13F0027XIE). This article is available on Statistics Canada’s website (www.statcan.ca), under “Products and services,” “Research papers (free),” “Personal finance and household finance.”

2 Inequality is defined as $1 + G(X)$ where $G(X)$ is the Gini coefficient of low income gaps. The Gini is a measure of inequality that ranges between zero and one, getting closer to one as inequality becomes higher. In terms of inequality in the gap, most families have a gap of zero, so empirically, $G(X)$ is usually close to one—a relatively few families compose most of the low income gap. Families above the low income cutoff have gaps set to zero. Thus $1 + G(X)$ is close to two in most cases. Low income intensity is proportionate to the product of the rate and the gap. The low income gap is the average ratio of the income shortfall to the LICO-IAT for low income families.

3 Changes in taxes are also possible contributors.

4 Myles and Picot examined low income intensity among families with children. They used a different data source, but also found an increase in low income between 1993 and 1996, as a result of no increase in market earnings and decreases in EI and social assistance.

5 Farmers cannot qualify for EI on the basis of their farm income. EI for farm families must be associated with off-farm income by family members.

6 The British Columbia Family Bonus is a refundable tax credit commencing in July 1996 that extends the child tax benefit for residents of British Columbia. Provincial family allowance benefits for Alberta and New Brunswick are also included for 1997.

7 Changes to the UI/EI system from 1993 to 1997 include Bill C-113 (effective April 4, 1993) after which quits became disqualified from benefits; Bill C-17 (effective July 7, 1994) which raised the variable entrance requirement and raised the replacement rate for low earning claimants and claimants with families while lowering it for others; and Bill C-12 (effective July 1, 1996) which renamed UI to EI, introduced a declining scale of replacement rates for repeat users, and dropped maximum insurable earnings from \$845 to \$750.

8 Real GDP growth was: 1993: 2.3%, 1994: 4.7%, 1995: 2.8%, 1996: 1.5%, 1997: 4.4%. Unemployment rates were: 1993: 11.4%, 1994: 10.4%, 1995: 9.4%, 1996: 9.6%, 1997: 9.1%.

9 Research examining the declining EI beneficiaries to unemployed (B/U) ratio concludes that about one-half of the drop in this ratio over the 1990s was due to changes in the EI program, while another half was due to other changes like the duration of unemployment, and the difficulty workers had obtaining the minimum hours to qualify (HRDC, 1998b; Sargent, 1998).

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