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PERSPECTIVES

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- EDUCATION AND INCOME OF LONE PARENTS

- SHIFTS IN SPENDING PATTERNS OF OLDER CANADIANS

- FACT SHEET:
Education indicators



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-	not available for a specific reference period
...	not applicable
p	preliminary
r	revised
x	confidential
E	use with caution
F	too unreliable to be published

Highlights

In this issue

■ Education and income of lone parents

- The characteristics of lone parents changed greatly from 1981 to 2001. They were older on average, had slightly fewer children, and were much more educated.
- These changes gave rise to a sizeable increase in employed lone mothers as well as the proportion working full time. As a consequence, their average employment income rose 35% in real terms and their low-income rate declined by 9 percentage points, to 43%.
- These improvements did not extend to lone mothers aged 25 to 34 who had not finished high school. They saw their average earnings decline and their low-income rate rise substantially.
- For lone fathers, the increase in educational attainment did not have the same consequences. The proportion employed or employed full time declined over the period. Their earnings also fell, particularly for the youngest and least educated.
- Full-time work lessens the chances of being in low income. In 2000, 14% of lone mothers working full time throughout the year had a low income, compared with 62% of those with a different work pattern or not in the labour market. For lone fathers, the proportions were 7% and 38% respectively.

■ Shifts in spending patterns of older Canadians

- Households with a reference person aged 55 and older were spending more of their income dollar on personal consumption and income tax in 2003 than in 1982. As a result, their savings fell to 4 cents per dollar from 13 cents.
- As households age, income drops steeply because of loss in earnings whereas the drop in personal consumption is more gradual.
- Couples exhibited spending patterns closer to those of unattached men rather than women. Among unattached individuals, the spending gap between men and women narrowed between 1982 and 2003—largely because of improved income levels for older women.
- Older households spent more on health in 2003 than in 1982. Most of the money went for prescription drugs, other medical equipment and services, and dental and eye care.
- Older households receiving all of their income from government transfers spent most of their consumption dollar on shelter and food, ranging from 52 to 57 cents in 2003 and 58 to 65 cents in 1982. In both years, those in the 75-plus group spent more on gifts and contributions than on personal care or recreation.

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Education and income of lone parents

Diane Galarneau

Between 1981 and 2001, the proportion of lone-parent families went from 11% to 16%. These families also accounted for more children 18 and under in 2001—21% compared with 14% in 1981. Being a parent is not easy, and heads of lone-parent families face the same challenges as other parents but often with less financial resources. In 2000, the before-tax annual income of two-parent families was nearly \$78,800, compared with only \$27,700 for lone mothers and just under \$44,000 for lone fathers.¹

While lone mothers in 2000 were almost five times more likely to have a low income than mothers with spouses (43% versus 8%), the proportion was lower than in 1980 (52%). However, improvements were not observed for all age groups or education levels. And, among lone fathers, who represent a growing portion of heads of lone-parent families, low income increased, going from 16% to 20%. For them also, the pattern was not uniform. Even though their low-income rate was half the rate for lone mothers, it was more than double that for fathers with spouses (8%).

Low income has a major impact on many aspects of life, including well-being, work, friendships, health, and even longevity and crime. It is also likely to influence the future of children in affected families, reducing their chances of going on to postsecondary education (Acemoglu and Pischke 2001). This in turn may limit their future earnings potential and with it their chances of escaping from low income.

Using the 1981 and 2001 Censuses, this article examines changes in the characteristics of lone parents. It looks at their earnings and the proportion in low income by age group and education level, and compares them with parents living in a couple relationship. Changes in low-income rates for full-time, full-year workers are also examined (see *Data source and definitions*).

Diane Galarneau is with the Micro-economic Studies and Analysis Division. She can be reached at (613) 951-4626 or perspectives@statcan.ca.

Women heading lone-parent families

A phenomenal increase in educational attainment

The increase in lone-parent families has led to a sizeable rise in the number of lone mothers since 1981. In 1981, there were 330,000 lone mothers aged 25 to 54 with children aged 18 or under, compared with 555,000 in 2001, an increase of 68%. In comparison, the number of mothers in couple relationships rose 3% to 2,788,000 (Table 1).

The profile of mothers changed greatly during this period. Like the rest of the population, they were slightly older than in 1981. The average age of lone mothers rose 0.9 years compared with 1.8 for mothers with spouses. In addition to general population aging, other factors probably contributed to the aging of mothers. These include the later entry of women into conjugal relationships and having a first child later in life (Zukewich and Cooke-Reynolds 2003). Lone mothers had fewer children than mothers in couple relationships, although the average declined for both groups. Lone mothers were still more likely to have only one child (half compared with one-third for women in couple relationships), and large families were less common in 2001 for both groups.

One of the most marked changes was women's educational attainment. In 1981, 46% of lone mothers (compared with 42% of those with spouses) had not completed high school. By 2001, this proportion had fallen by more than half to 22% (17% for mothers in couple relationships), mainly in favour of high school completion and university education. A majority of all mothers had studied at the postsecondary level, in both 1981 and 2001. But overall, lone mothers had less education than mothers with spouses in 2001.

To a large extent, these trends were observed in all age groups. However, the increase in educational attainment was less pronounced for lone mothers aged 25 to 34. In 1981, they had a higher education level than older lone mothers, whereas in 2001, they were

substantially behind: more than one-quarter had not yet completed high school and only 6% had a university degree.

This slower advance changed the relative situation of young lone mothers, who had now lost their educational advantage. Moreover, a sizeable gap is evident between them and their counterparts in couple relationships, for whom the proportion of university graduates (18%) was three times higher in 2001. The gap was also sizeable for those aged 35 to 44 years, but it narrowed among those 45 to 54.

These educational gaps between lone mothers and those in couple relationships could be explained by the young age of lone mothers when they had their first child.⁴ Also, most in 2001 (61%) had never been married,⁵ and may have taken care of their children without the presence or support of a spouse. These two factors may have been decisive in determining whether to continue their education. Nevertheless, given the narrowing of the education gap with age, one cannot rule out the possibility that young lone mothers may eventually catch up.

The opposite is observed for the oldest group (45 to 54). In 2001, both lone mothers and those with spouses had the largest proportion of university graduates and the lowest proportion of women with no high school diploma. Being older, the women in this group had had more time to pursue their education, but the phenomenal increase in their education level might also mask a cohort effect. The increase more likely reflects the greater value placed on education by those

Table 1 Profile of lone mothers and mothers in couples

	Lone mothers		Couple mothers	
	1981	2001	1981	2001
Total	330	555	2,698	2,788
Average age	37.8	38.7	36.9	38.7
Education				
Less than high school diploma	45.8	21.9	42.1	16.6
High school diploma	1.9	14.2	2.0	17.2
Postsecondary, completed or not	48.2	52.3	52.2	46.8
Bachelor's or higher	4.1	11.6	3.7	19.4
25 to 34	128	158	1,178	772
Less than high school diploma	39.8	25.6	34.0	16.4
High school diploma	2.0	12.5	2.2	13.8
Postsecondary, completed or not	54.8	55.7	59.9	52.0
Bachelor's or higher	3.3	6.2	3.9	17.9
35 to 44	127	278	1,011	1,440
Less than high school diploma	44.8	21.5	44.7	16.7
High school diploma	2.0	15.0	1.8	18.6
Postsecondary, completed or not	47.9	52.6	49.4	46.3
Bachelor's or higher	5.3	10.8	4.1	18.4
45 to 54	76	119	509	576
Less than high school diploma	57.5	18.0	55.9	16.7
High school diploma	1.6	14.7	1.6	18.2
Postsecondary, completed or not	37.5	46.8	40.0	41.2
Bachelor's or higher	3.5	20.5	2.4	23.9
Children under 19				
One	47.2	51.3	31.9	35.7
Two	34.3	34.6	43.1	44.4
Three	12.9	10.7	18.0	15.2
Four and more	5.6	3.4	7.0	4.7
Average number of children	1.8	1.7	2.0	1.9
Labour market activity				
Employed	58.7	71.1	50.9	75.0
Unemployed	6.0	7.9	4.2	4.3
Not in the labour force	35.3	21.0	44.9	20.7
Work arrangements				
Mostly full-time	50.8	60.8	36.5	58.0
Mostly part-time	15.2	17.1	23.1	23.8
Did not work	34.0	22.1	40.4	18.2
Mostly full-time, full-year	32.1	40.3	21.0	40.2

Source: Census of Population, 1981 and 2001

at the beginning of the baby-boom generation, born between 1947 and 1956 (aged 45 to 54 in 2001), compared with the cohort born between 1927 and 1936 (45 to 54 in 1981).

Employment rate up, but the youngest trail behind

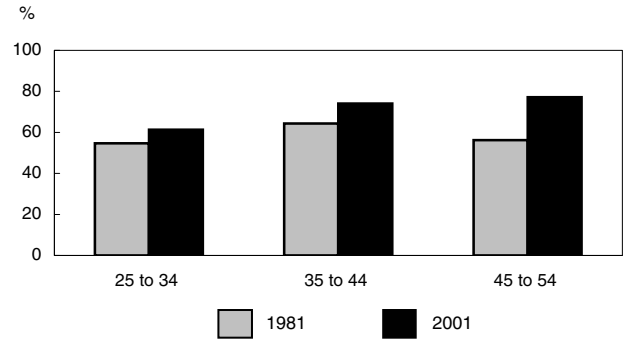
This increased education level is coupled with an equally substantial increase in the proportion of women classified as employed or employed mainly full time, especially among mothers in couple relationships since their attachment to the labour market was weaker in 1981. In 2001, 71% of lone mothers and 75% of mothers in couple relationships had a job, and for most, a full-time one.

However, the youngest (25 to 34) trailed their older counterparts, both in their employment rate in 2001 and the progress observed with respect to it over the 20 years (Chart A). In 2001, 61% had a job, compared with 77% of their counterparts aged 45 to 54. In 1981, the percentages were 55% and 56% respectively.

Also, a smaller proportion of these young lone mothers worked full-time, or full-time for the full year (Chart B), and the increase was less than for their older counterparts.

The unemployment rate for lone mothers rose slightly, from 9.3% in 1981 to 10.0% in 2001 (Chart C), while the rate for mothers in couples fell from 7.7% to 5.4%. The unemployment rate increased more for the youngest lone mothers with little education (from 16.2% to 21.6%) and for all lone mothers with little education (from 11.7% to 16.2%). According to a recent longitudinal study, lone mothers have a greater risk of being chronically unemployed (Brooks 2005).

Chart A The employment rate for young lone mothers rose less markedly.



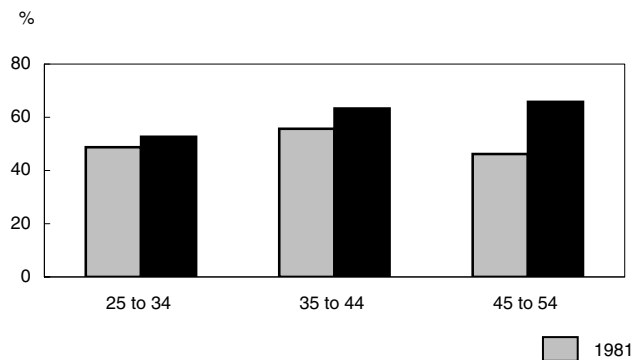
Source: Census of Population, 1981 and 2001

Annual employment earnings higher but the increase was not uniform

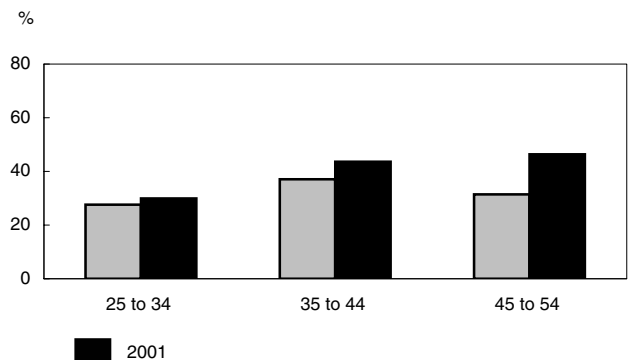
Income generally rises with age and education. Given lone mothers' increased participation in the labour market, their aging, and the major increase in their educational attainment since 1980, one would expect an increase in their employment earnings—and this in fact happened. Their annual earnings rose 35%⁶ in real terms between 1980 and 2000, going from \$14,700 to \$19,900⁷ (Table 2).

However, the increase was not universal. In particular, the youngest group registered sizeable losses for most education levels. This decline in earnings may be

Chart B Young lone mothers saw less of a rise... in full-time work



and in full-time, full-year work



Source: Census of Population, 1981 and 2001

Table 2 Earnings of lone mothers and those in couples

	Lone mothers			Couple mothers			Gap Lone: couple	
	1980	2000	Change	1980	2000	Change	1980	2000
	2000\$		%	2000\$		%	%	
Total	14,700	19,900	35.0**	11,100	22,700	103.6**	24.4	-14.1
Education								
Less than high school diploma	8,600	10,000	16.6**	7,900	12,600	59.7**	8.3	-25.6
High school diploma	15,500	17,600	14.0**	9,900	17,800	79.1**	35.7	-1.0
Postsecondary, completed or not	19,100	20,300	6.3**	13,400	21,800	62.5**	29.9	-7.2
Bachelor's or higher	36,500	39,100	7.1**	23,400	37,700	61.2**	35.9	3.6
25 to 34	12,500	12,900	3.2**	10,500	17,500	66.9**	16.0	-35.7
Less than high school diploma	7,100	6,900	-2.6	7,100	9,400	32.8**	0.8	-35.4
High school diploma	13,800	11,400	-16.9**	9,200	13,100	43.5**	33.5	-14.9
Postsecondary, completed or not	15,900	14,400	-9.8**	12,200	17,200	40.5**	23.2	-19.6
Bachelor's or higher	28,300	26,600	-6.0**	20,700	29,000	39.8**	26.8	-8.9
35 to 44	17,300	21,100	21.7**	12,400	23,800	92.2**	28.4	-13.0
Less than high school diploma	10,000	11,300	12.7**	8,900	13,800	54.6**	11.2	-21.9
High school diploma	17,500	18,700	6.8**	11,300	18,800	67.0**	35.5	-0.8
Postsecondary, completed or not	21,500	21,900	2.3**	14,700	23,300	59.0**	31.7	-6.2
Bachelor's or higher	40,100	39,400	-1.8	25,800	39,200	51.6**	35.6	0.6
45 to 54	14,200	26,400	85.7**	10,200	26,700	163.1**	28.4	-1.4
Less than high school diploma	8,500	12,100	42.4**	7,300	13,600	85.8**	13.6	-12.7
High school diploma	16,000	22,100	38.3**	10,000	19,900	99.6**	37.7	10.0
Postsecondary, completed or not	21,100	25,500	21.2**	13,900	25,300	82.0**	34.0	1.0
Bachelor's or higher	41,000	43,700	6.7*	27,400	43,600	59.0**	33.2	0.4

* Significant at the 10% level.

** Significant at the 5% level.

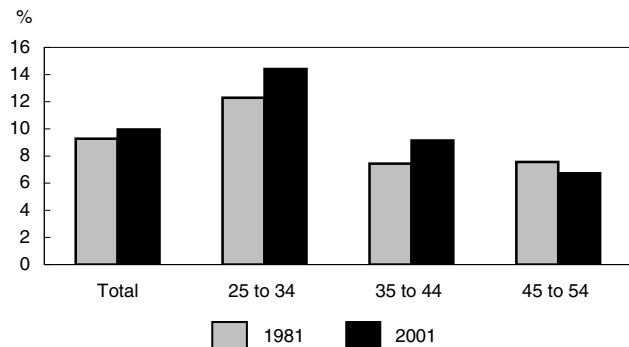
Note: These averages include nil and negative earnings.

Source: Census of Population, 1981 and 2001

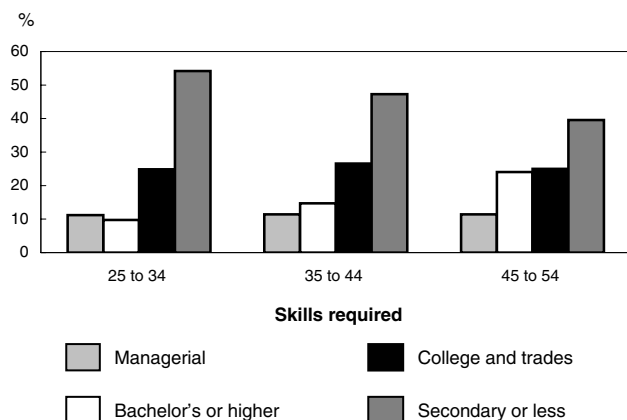
attributed to various factors, including the loss of their educational advantage and the rise in their unemployment rate. Their low employment rate and the small proportion working full time, or full time for the full year, also played a part. In addition, jobs held by young lone mothers in 2001 were less likely to require specific skills. Just over 54% had a job requiring at most a high school diploma, compared with 47% and 40% of their counterparts aged 35 to 44 and 45 to 54 respectively (Chart D). Also, temporary jobs, which are generally less well-paid than permanent ones, are more likely to be held by women, youths, and persons with little education (Galarneau 2005). This type of work may thus be more common among young lone mothers with little education.

The lower employment rate for young lone mothers and their stronger inclination toward part-time work compared with older lone mothers may be partly

Chart C A sizeable gap in unemployment rates has opened between young and older lone mothers.



Source: Census of Population, 1981 and 2001

Chart D Young lone mothers are often in jobs requiring few skills.

Source: Census of Population, 1981 and 2001

explained by their being young and having small children. Large gaps were also evident between young lone mothers and their counterparts in couple relationships. However, on average, they had fewer children and their youngest child was older. Being young when their first child was born and not having the support of a spouse may have been determining factors for many in deciding whether to continue their studies—25% did not have a secondary school diploma in 2001. Lack of education probably had a large influence on their labour market performance as well as their earnings. These factors may have affected all lone mothers with little education. In a knowledge economy, where employers increasingly require specific skills and where the number of highly qualified persons is mounting, young people with little education are inevitably disadvantaged.

As for mothers in couple relationships, their earnings reached \$22,700 in 2000, up 104% from

1980, or three times the growth for lone mothers. This may be partly due to the lower earnings of mothers in couple relationships in 1980, which was in turn attributable to their weak attachment to the labour market. When this attachment subsequently strengthened, the trends were reversed, with mothers in couple relationships then having, on average, higher earnings than lone mothers.

Worsening situation of young lone mothers confirmed by low-income rates

The improvement in employment earnings resulted in a decrease in the low-income rate for lone mothers. The rate went from 52% to 43% between 1980 and 2000, with older and relatively educated women being the main beneficiaries.

Young lone mothers (apart from university graduates) generally saw their low-income rate deteriorate. Note that these rates were already disproportionate in 1980 (Table 3). However, the rate declined with education

Table 3 Low-income rates for lone mothers and those in couples

	Lone mothers		Couple mothers	
	1980	2000	1980	2000
	%			
Total	51.8	43.0	9.3	8.0
Education				
Less than high school diploma	60.4	63.6	12.3	17.0
High school diploma	48.9	43.3	8.9	8.9
Postsecondary, completed or not	46.0	39.5	7.2	6.6
Bachelor's or higher	25.8	19.1	3.7	3.0
25 to 34	63.5	59.0	10.6	10.7
Less than high school diploma	73.5	75.2	14.6	22.4
High school diploma	61.5	62.3	10.2	13.3
Postsecondary, completed or not	57.9	54.0	8.8	8.8
Bachelor's or higher	37.8	30.6	4.9	3.6
35 to 44	47.1	40.1	8.3	7.4
Less than high school diploma	58.2	60.0	11.4	15.5
High school diploma	42.9	40.4	8.4	8.1
Postsecondary, completed or not	39.6	35.8	6.0	5.9
Bachelor's or higher	21.9	20.3	2.9	2.9
45 to 54	39.8	28.5	8.0	6.0
Less than high school diploma	47.7	51.7	10.5	13.5
High school diploma	34.6	28.7	5.7	6.3
Postsecondary, completed or not	30.0	26.2	4.8	4.7
Bachelor's or higher	16.4	13.0	2.6	2.7

Source: Census of Population, 1981 and 2001

Data source and definitions

This study uses census microdata representing 20% of the population. It concerns lone parents and parents in couple relationships who have children aged 18 and under. Only persons aged 25 to 54 were selected to avoid school-work or work-retirement transition situations when employment income is usually lower. Men accounted for 19% of lone parents in this age group. Since their average earnings were higher and they exhibited different trends than female lone parents, they are dealt with separately (see *Men heading lone-parent families*).

The reference years for the censuses selected (1980 and 2000) are comparable in terms of the business cycle (unemployment rates of 7.5% and 6.8% respectively). The greater number of new immigrants in the 2001 Census likely affected incomes more than in 1981.² To not bias the results, they were excluded from the analysis.³

Family type is a derived variable. Respondents are asked the names of all persons usually residing at the address, even those temporarily absent. The first adult on the list becomes Person 1, followed by their spouse, children, and

any other persons in the dwelling. Each person's relationship to Person 1 is indicated. On the basis of this information, a family type is assigned. If children are under joint custody, the parent who has custody for the most time is considered the 'lone parent.' If children spend the same amount of time with each parent, the one with whom they are staying at the time of collection will be the lone parent.

The low-income rate refers to the proportion of families with income below the 'low-income cut-off.' Thresholds are determined by first estimating the average percentage of income allocated to the basic necessities of food, clothing, and shelter (using the Survey of Household Spending). An average is determined for families of different sizes and degrees of urbanization. A family spending 20% more than the average (55%) on basic necessities is deemed to be in 'straitened circumstances.' These low-income cut-offs are set for different-sized families with different degrees of urbanization. Since 1992, cut-offs have been updated yearly by changes in the consumer price index.

level. In 2000, 75% of those without a high school diploma were in low income; the proportion fell to 62% for those with a high school diploma, and to 54% for those with non-university postsecondary education. For university graduates, the rate was 31%.

In general, the low-income rate for lone mothers in other age groups has declined since 1980, except for those who did not complete high school. The rate for these women aged 35 to 44 and 45 to 54 reached 60% and 52% respectively in 2000.

The low-income indicator includes all sources of income. Low-income families depend more on government transfers, which did not increase sufficiently to compensate for their lower earnings (Picot, Morissette and Myles 2003). This probably partly explains the rise in low-income rates among lone mothers with little education.

In contrast, low-income situations were much less frequent among mothers in couple relationships. However, rates for those with less education, which were already high, increased.

Full-time work: better protection than 20 years ago?

Up to now, the focus has been on lone mothers without regard to their participation in the labour market. Clearly, holding a full-time job for the full year should

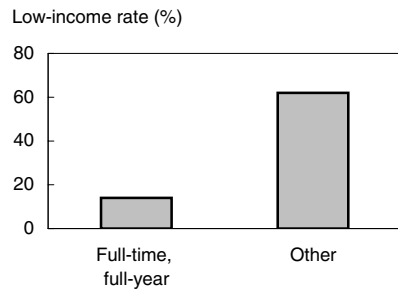
lessen low-income situations. But does it offer better protection than 20 years ago?

In 2000, 40% of lone mothers worked mainly full time (that is, at least 30 hours per week) for at least 48 weeks. This proportion was up from 1980, when it stood at 32%.

When lone mothers working full time for the full year are compared with those not in the labour market or those with a different work pattern, it is not surprising to find that the former find themselves in low income much less often. In 2000, 14% of lone mothers working full time for the full year had a low income, compared with 62% of those with a different work pattern or not in the labour market (Chart E). Generally speaking, without taking into account age, education, occupation, industry or other characteristics, full-time work for the full year seems to mitigate against low income. However, it appears to do so less than 20 years earlier, especially for the youngest women with less education. Among them, the proportion with a low income went from 23% to 37%. Similarly, for those with the least education in the older groups, the rate rose 7 percentage points, reaching 26% for those 35 to 44 and 20% for those 45 to 54 (Table 4).

It is important to distinguish between low earnings and low income. Persons are considered working poor if they make a substantial work effort (such as

Chart E Having a full-time, full-year job reduces the chances of low income for lone mothers.



Source: Census of Population, 1981 and 2001

working full time for the full year) but are low-paid. In fact, relatively few low-paid workers are in low income,⁸ since the earnings of other household members prevent it. Low income depends more on family circumstances than on an individual's employment situation (Fleury and Fortin 2004). Lone mothers with children 18 and under, even if they work full time throughout the year, have little chance of making ends meet without the contribution of a supplementary income. For this reason, a larger proportion of them compared with mothers with spouses were in low income (43% versus 8%), even when they worked full time throughout the year (14% versus 3%).

Full-time work is not a panacea, especially in the case of the youngest and least educated. For them, earnings from employment may turn out to be inadequate after taking into account employment-related expenses (such as childcare, transportation, extra expenditures on clothing and meals) and the loss of certain government benefits. This probably explains in part the youngest mothers' low level of participation in the labour market and the few changes that have occurred since 1981.

Table 4 Earnings and low-income rates for lone mothers working full time, full year

	Earnings			Low-income rate	
	1980	2000	Change	1980	2000
Total	31,200	34,100	9.4**	14.1	14.0
Education					
Less than high school diploma	25,200	24,700	-2.1*	18.1	27.0
High school diploma	29,100	29,600	1.7*	16.3	14.5
Postsecondary, completed or not	32,100	33,100	2.8**	12.9	13.0
Bachelor's or higher	50,300	52,000	3.4*	4.6	4.7
25 to 34	29,500	26,800	-9.0**	17.7	22.7
Less than high school diploma	24,700	21,100	-14.7**	22.7	36.6
High school diploma	27,900	24,100	-13.7**	20.2	26.1
Postsecondary, completed or not	30,400	27,100	-10.9**	16.4	20.9
Bachelor's or higher	44,000	39,100	-11.0**	7.4	5.4
35 to 44	32,600	34,400	5.5**	13.8	13.3
Less than high school diploma	26,000	25,200	-3.1**	18.4	25.5
High school diploma	30,200	29,800	-1.4	16.9	14.2
Postsecondary, completed or not	33,100	33,900	2.3**	12.3	11.7
Bachelor's or higher	52,200	52,900	1.4	4.4	5.3
45 to 54	31,000	39,700	28.1**	9.5	8.2
Less than high school diploma	24,600	27,500	11.9**	13.3	19.8
High school diploma	29,700	33,200	11.7**	6.8	7.2
Postsecondary, completed or not	33,000	37,400	13.4**	7.3	8.0
Bachelor's or higher	54,400	55,200	1.6	1.4	3.7

* Significant at the 10% level.

** Significant at the 5% level.

Source: Census of Population, 1981 and 2001

Men heading lone-parent families

A growing number

The increase in lone-parent families has meant an increase not only in lone mothers, but also lone fathers. The latter have almost doubled since 1981, from just over 62,000 to nearly 119,000. In comparison, the number of fathers with spouses held steady at around 2.7 million. Despite this substantial increase, the proportion of male lone-parent families grew only slightly, from 17.4% to 18.6%.⁹ However, the phenomenon cannot be described as marginal since they account for approximately one lone-parent family in six (Table 5).

The average age of lone fathers increased only slightly in 20 years (from 41.6 to 41.8), while the age of fathers in couple relationships increased by two years (from 38.3 to 40.4).¹⁰ As a result, the gap between the two groups narrowed. Lone fathers had fewer children (1.5 compared with 1.9), down slightly from 1981. Lone fathers often had only one child, and large families were less common for both groups.

Lone fathers, like lone mothers, have advanced considerably in their educational attainment since 1981. However, compared with fathers in couple relationships, slightly fewer held a university degree and slightly more had not completed high school. Also, on this score, the youngest lone fathers were somewhat behind lone fathers in the older age groups.

A deterioration in employment earnings

Overall, lone fathers saw their average earnings decline 7.3% in real terms since 1980, going from

Table 5 Profile of lone fathers and those in couples

	Lone fathers		Couple fathers	
	1981	2001	1981	2001
Total	62	119	2,719	2,755
			'000	
Education			%	
Less than high school diploma	41.1	26.4	36.3	19.4
High school diploma	6.7	14.0	6.6	13.9
Postsecondary, completed or not	45.6	46.9	50.2	46.8
Bachelor's or higher	6.6	12.6	6.9	19.9
25 to 34	18.9	14.1	36.3	20.8
Less than high school diploma	28.9	29.5	29.4	20.3
High school diploma	5.5	14.4	5.6	14.4
Postsecondary, completed or not	60.8	50.1	59.1	50.6
Bachelor's or higher	4.9	5.9	5.9	14.7
35 to 44	42.7	50.1	39.1	49.5
Less than high school diploma	39.3	27.8	35.6	19.5
High school diploma	6.5	14.1	6.8	14.2
Postsecondary, completed or not	46.2	48.2	49.1	47.7
Bachelor's or higher	8.0	9.8	8.5	18.7
45 to 54	38.4	35.8	24.5	29.6
Less than high school diploma	49.1	23.2	47.5	18.7
High school diploma	7.5	13.7	7.9	13.1
Postsecondary, completed or not	37.6	43.8	39.0	42.7
Bachelor's or higher	5.8	19.2	5.7	25.5
Average age	41.6	41.8	38.3	40.4
Children under 19				
One	52.7	61.3	31.9	35.3
Two	31.2	30.0	43.5	44.7
Three	10.5	6.9	17.9	15.3
Four and more	5.5	1.8	6.8	4.7
Average number of children	1.7	1.5	2.0	1.9
Labour market activity				
Employed	87.2	82.0	93.1	90.8
Unemployed	5.4	7.6	3.2	4.2
Not in the labour force	7.4	10.4	3.7	5.0
Work arrangements				
Mostly full-time	88.6	83.6	94.4	92.6
Mostly part-time	4.8	5.7	2.9	3.2
Did not work	6.6	10.7	2.6	4.2
Mostly full-time, full-year	62.7	59.0	70.3	71.5

Source: Census of Population, 1981 and 2001

\$41,000 to \$38,000 (Table 6).¹¹ This contrasts with lone mothers, who registered a significant (but not uniform) increase in earnings. However, the decrease was larger for younger and less educated lone fathers—similar to the situation of young lone mothers. Lone fathers aged 25 to 34 posted declines ranging between 28% and 13%. Various other subgroups also posted substantial decreases. For their part, fathers in couples saw

Table 6 Earnings of lone fathers and those in couples

	Lone fathers			Couple fathers		
	1980	2000	Change	1980	2000	Change
	2000\$	2000\$	%	2000\$	2000\$	%
Total	41,000	38,000	-7.3**	45,900	48,400	5.4
Education						
Less than high school diploma	32,700	26,300	-19.7**	36,800	31,400	-14.6
High school diploma	39,300	34,300	-12.9**	43,800	39,400	-10.1
Postsecondary, completed or not	42,500	37,900	-10.7**	46,100	45,300	-1.9
Bachelor's or higher	72,300	67,400	-6.8*	72,100	78,500	8.9
25 to 34	35,800	27,500	-23.0**	41,300	38,400	-7.1
Less than high school diploma	30,100	21,600	-28.2**	34,300	27,000	-21.1**
High school diploma	36,100	26,300	-27.1**	39,200	34,600	-12.0**
Postsecondary, completed or not	36,900	29,400	-20.4**	42,000	38,200	-9.2**
Bachelor's or higher	51,400	44,500	-13.4**	57,300	58,700	2.5**
35 to 44	42,900	37,600	-12.3**	49,000	49,400	0.9
Less than high school diploma	34,400	27,100	-21.2**	38,400	32,600	-15.0**
High school diploma	40,000	36,000	-9.9	46,600	40,100	-13.9**
Postsecondary, completed or not	44,400	38,200	-14.0**	48,700	46,800	-3.9**
Bachelor's or higher	70,000	67,100	-4.2	76,300	81,100	6.3**
45 to 54	41,500	42,700	3.0	47,700	53,500	12.3
Less than high school diploma	31,900	27,100	-15.2**	37,100	32,700	-11.9**
High school diploma	41,400	35,000	-15.3**	49,900	41,700	-16.3**
Postsecondary, completed or not	43,600	41,300	-5.3*	49,600	48,400	-2.4**
Bachelor's or higher	85,200	70,400	-17.5**	89,400	83,400	-6.7**

* Significant at the 10% level.

** Significant at the 5% level.

Source: Census of Population, 1981 and 2001

earnings rise by a modest 5%; however, the youngest and least educated among them registered sizeable decreases.

These results are consistent with other studies showing that the employment earnings of low-educated young men have fallen since 1980 (Morissette, Ostrovsky and Picot 2004; Morissette and Johnson 2004; Beaudry and Green 2000; Burbidge, Magee and Robb 2002). This drop is attributable to various factors, including young men's loss of educational advantage owing to the increased educational attainment of older cohorts and women in general. Also, the wages of new entrants to the labour market are lower than in the past (Morissette 2002). One can also point to other factors, such as the rise in the number of temporary jobs (Galarneau 2005; Schellenberg and Clark 1996) and the decrease in the unionization rate among young men (Morissette, Schellenberg and Johnson 2005). The greater declines registered by lone fathers are probably related to the

decrease in their participation rate and their greater tendency to work part time. Also, a major factor distinguishing lone fathers from other fathers is their weaker attachment to the labour market.

More low-income fathers in 2000

In 2000, low-income situations were half as common for lone fathers as for lone mothers (20% and 43% respectively). However, the low-income rate for lone fathers was up from 16% in 1980, probably in part because of their weaker attachment to the labour market (Table 7). This increase was observed for all age groups and education levels, but the situation deteriorated most for the young and the least educated. In 1980, these groups already posted rates that stood out from the others. In 2000, the low-income rate of those without a high school diploma was close to 30%. Among fathers in couple relationships, the percentage remained below 10% throughout this 20-year period, except for the least educated.

Table 7 Low-income rates for lone fathers and those in couples

	Lone fathers		Couple fathers	
	1980	2000	1980	2000
Total	15.9	20.0	9.5	8.3
	%			
Education				
Less than high school diploma	21.3	29.2	13.5	16.2
High school diploma	13.4	20.5	8.4	9.0
Postsecondary, completed or not	12.7	17.6	7.6	6.8
Bachelor's or higher	6.5	9.1	3.6	3.6
25 to 34	18.6	27.7	11.0	11.3
Less than high school diploma	26.0	34.9	16.0	21.0
High school diploma	9.5	30.2	10.5	12.2
Postsecondary, completed or not	16.4	24.4	9.2	9.1
Bachelor's or higher	12.2	13.4	5.3	4.4
35 to 44	14.7	19.9	9.0	8.0
Less than high school diploma	20.0	28.3	13.5	15.5
High school diploma	13.3	19.9	8.3	8.5
Postsecondary, completed or not	11.9	17.2	6.9	6.5
Bachelor's or higher	5.5	9.4	3.1	3.4
45 to 54	15.9	17.1	8.0	6.8
Less than high school diploma	21.1	27.9	11.3	13.7
High school diploma	14.8	17.2	6.2	7.6
Postsecondary, completed or not	11.0	15.1	5.2	5.6
Bachelor's or higher	5.5	8.3	2.4	3.5

Source: Census of Population, 1981 and 2001

Having full-time work for the full year appears to reduce the risk of being in low income. In 2000, 59% of lone fathers worked full time for at least 48 weeks, a slightly lower proportion than in 1980 when it was 63%. A larger proportion of fathers in couples worked full time throughout the year, the proportion rising marginally from 70% in 1980 to 71% in 2000.

For lone fathers working full time for the full year, the low-income rate was just under 7%, compared with 38% for lone fathers with a different pattern or not working. In fact, the rate for lone fathers was similar to that for fathers with spouses (4%). However, the mitigating effect appears a little less than in 1980, since low-income rates among lone fathers working full time for the full year rose slightly (from 6% to 7%). On average, the rate declined with age and education (Table 8).

Summary

Lone mothers are one of the main groups at risk of low income. Among others sharing this unfortunate distinction are those with low education, new immigrants, and unattached individuals (Morissette and Picot 2005). Low income depends more on family circumstances than on an individual's employment situation. Thus, when considering lone-parent families, the proportion with low incomes is a major concern.

The characteristics of lone parents have changed greatly as have Canadians as a whole. In 2001, lone parents were older on average than in 1981, had slightly fewer children, and were much more educated.

These changes gave rise to a sizeable increase in the number of lone mothers employed as well as the proportion working full time. As a consequence, their average employment income rose 35% in real terms compared with their counterparts the same age in 1981. The growth in earnings was reflected in the low-income rate, which, overall, declined by 9 percentage points (from 52% to 43%).

However, these improvements did not extend to lone mothers aged 25 to 34 who had not finished high school—and more than one-quarter of young lone mothers fell into this category. These women saw their average earnings decline and their low-income rate rise substantially. In 2000, at least two-thirds of them were in low income. Low-educated women in other age groups posted a small increase in their earnings, but their low-income rate was little changed and reached more than 50% in 2000.

High rates of low income among the youngest may be related to loss of an educational advantage in relation to their seniors, their weaker attachment to the labour force, and being in occupations requiring few skills. Young lone mothers had their first child earlier in life than mothers in couple relationships. Most of them also raised their child without the support of a spouse. This probably was decisive in their ability to continue their education, which in turn may have had ramifications for their subsequent participation in the labour market

Table 8 Low-income rates for lone fathers and couple fathers working full time, full year

	Lone fathers		Couple fathers	
	1980	2000	1980	2000
Total	5.7	6.8	5.0	4.0
Education				
Less than high school diploma	7.9	9.7	7.0	7.7
High school diploma	5.0	9.3	4.4	4.9
Postsecondary, completed or not	4.6	6.0	4.2	3.5
Bachelor's or higher	2.7	3.0	1.9	1.8
25 to 34	6.7	10.5	5.7	5.3
Less than high school diploma	11.3	12.1	7.9	10.0
High school diploma	4.1	13.0	5.7	6.4
Postsecondary, completed or not	5.8	10.1	5.1	4.6
Bachelor's or higher	0.9	4.6	2.5	1.8
35 to 44	5.5	6.6	5.0	4.0
Less than high school diploma	7.7	9.4	7.5	7.6
High school diploma	5.4	8.7	4.5	4.9
Postsecondary, completed or not	4.6	5.7	4.1	3.5
Bachelor's or higher	2.8	3.0	1.8	1.8
45 to 54	5.4	5.8	3.9	3.2
Less than high school diploma	7.3	9.1	5.7	6.4
High school diploma	5.1	8.9	2.9	3.8
Postsecondary, completed or not	3.9	5.0	2.7	2.8
Bachelor's or higher	3.3	2.8	1.3	1.8

Source: Census of Population, 1981 and 2001

and their income from employment. These factors may also have affected older lone mothers with little education. These low-educated women have small hope of earning very much after job-related expenses are taken into account, especially in a knowledge-based economy, which more and more requires specific skills and highly qualified workers. This probably explains in part their low employment rate and the little improvement registered since 1980.

Full-time work lessens the chances of being in low income. In 2000, 14% of lone mothers working full time throughout the year were in low income, compared with 62% of those with a different work pattern or not in the labour market. However, full-time work offers less protection than in 1980, especially for the youngest with little education and for the less-educated in general.

For lone fathers, the increase in educational attainment did not have the same implications as for lone mothers. In 1981, these men were for the most part already participating in the labour market, whereas in 2001, a smaller proportion were employed or employed full time. Their earnings generally fell, particularly for the youngest and least educated, where the drop was close to 30%. The low-income rate therefore rose, going from 16% to 20% for lone fathers in general. All age groups and education

levels showed an increase. In 2000, low-income rates were highest for the young with little education (35%) and for the low-educated in general (29%).

Lastly, full-time work for the full year reduces lone fathers' risk of being in low income. Only 7% of those who had this work pattern were in low income, compared with 38% of those with another work pattern or not working. Nevertheless, the mitigating effect seems to have diminished since 1980.

Perspectives

Notes

1 The census reference year for income and work arrangements is the year preceding the collection year.

2 A new immigrant is usually defined as a person born abroad who arrived in Canada during the five years preceding the census year. For example, for the 2001 Census, a new immigrant would have arrived in Canada between 1996 and 2001.

3 In addition to the problems that new immigrants often face—non-recognition of their credentials, education level or experience abroad (Green and Worswick 2002; Ferrer and Riddell 2003), poorer quality education (Sweetman 2003), linguistic disadvantage, weak social network, and lack of information about the job market—new immigrants at the head of lone-parent families also have more dependent children 18 and under. This can make their participation in the labour market even more difficult. They in fact warrant a separate study and have therefore been excluded from the analysis.

4 The census does not give information on a mother's age at the birth of her first child. However, 30% of young lone mothers had a preschool-aged child at home compared with

50% of young mothers in a couple relationship. Among older mothers, the proportion with a preschool-aged child was also less for lone mothers. This would indicate that lone mothers had their child earlier in life.

5 In 1981, the majority of young lone mothers were separated or divorced (72%). In 2001, the proportion was 37%, with nearly two-thirds being single, having never married or lived in a common-law relationship. These lone mothers are more likely than those in 1981 to find themselves truly alone, leaving them with even less chance of pursuing their education.

6 Throughout this article, the different income indicators are expressed in 2000 dollars to account for inflation.

7 These averages include nil and negative earnings.

8 According to Chung (2004), “Of the 1.7 million workers receiving low weekly earnings, 30% lived in families with low income in 2000—unchanged from 1980.”

9 These percentages apply to the population aged 15 and over. For the population covered by this article (the population aged 25 to 54 with children aged 18 and under, excluding new immigrants), the proportion of male lone-parent families went from 15.9% to 17.6% during the same period.

10 The general tendency to postpone forming a couple and having a first child is also contributing to the aging of lone fathers and fathers with spouses.

11 These averages include nil and negative employment earnings.

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Shifts in spending patterns of older Canadians

Raj K. Chawla

As households age, their economic and demographic situations change. Income, savings and wealth generally decline, and household size shrinks as adult children leave or a spouse dies. Spending patterns may also change. For example, older families may spend less on transportation as they experience reduced mobility, and more on health.

The economic well-being of older households with respect to pre- and post-tax income, low-income rates, and wealth holdings has been widely discussed (Myles 2000; Gower 1998; Chawla and Pold 2003; Williams 2003). However, less is known about how their income is divided among taxes, security,¹ consumption and savings. This article looks at three household groups based on the age of the reference person: 55 to 64, 65 to 74, and 75 or over (see *Data sources and definitions*). Since more than three-quarters of the first group had employment earnings compared with around one-third of the second group and just one-tenth of the third, the shifts in expenditure patterns should also reflect the adjustments households make as their active attachment with the labour market diminishes.²

Household expenditure depends on factors such as income, size, composition, and urban or rural location, so any comparisons over time would at least require adjustments with respect to type and size of household. A common approach is to use per capita or equivalence scale concepts (Pendakur 1998). Since the study focuses on households at a life-cycle stage when the majority are either couples with no children or unattached individuals, it should not be affected by such concerns. In 1982, unattached men and women and couples accounted for 57% of all households in the 55-to-64 group compared with 86% in the 75-and-over group; by 2003, their proportions were 61% and 85% respectively.

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Expenditure patterns change not only over the life cycle but also over time as new products and services emerge. Changes in spending patterns between 1982 and 2003 are highlighted using 'similar' rather than 'cohort' households. For example, an increase of \$100 in mean expenditure on a given item by unattached men implies that they were, as a group, spending that much more in 2003 than similar men in 1982. (All money figures are in 2003 dollars.)

Socio-demographic transitions as households age

The composition of households changes notably as they age. In both 1982 and 2003, a little over one-third of households in the 55-to-64 group still contained children or other relatives, with the remainder being unattached individuals or couples (Table 1). By 65 to 74, however, households consisted largely of couples and unattached women; and by 75 plus, unattached women predominated, at a little over 40% of households. Such compositional shifts result in smaller households, causing some to downsize or move to rental accommodation. For instance, between the 55-to-64 and 75-plus age groups, the proportion renting increased from 28% to 43% in 1982 and from 24% to 36% in 2003.

Another change at this time concerns major source and amount of income. In both 1982 and 2003, three-quarters of households in the 55-to-64 group had employment earnings, accounting for more than 70% of their income. For those in the 75-plus group, on the other hand, government transfers and pensions (private and work-related) became more prevalent—constituting 59% of income in 1982 and 80% in 2003. Although a greater proportion of households in the 75-plus group reported earnings in 2003 than in 1982, the share of income from earnings fell from 12% to 9%. The share of income from investments also fell for this group—from 29% in 1982 to 10% in 2003.³

Shifts in spending patterns of older Canadians

Table 1 Profile of older households by age of reference person

	1982				2003			
	Total	55-64	65-74	75+	Total	55-64	65-74	75+
Households	2,669	1,203	939	527	4,233	1,881	1,221	1,131
Household type								
Unattached men	7.9	6.6	6.8	12.9	10.6	9.3	9.5	14.1
Unattached women	26.2	16.4	29.3	42.9	24.7	14.3	25.0	41.6
Couples only	36.1	33.6	42.9	29.9	36.8	37.2	43.4	29.0
Households with children or relatives	24.5	38.5	15.0	9.1	22.9	35.1	16.8	9.0
Other mixed households	5.3	4.9	6.0	5.2	5.0	4.1	5.3	6.3
Homeownership								
Renter	32.1	27.6	31.7	43.3	27.1	24.2	24.0	35.5
Owner without mortgage	54.4	49.9	60.1	54.6	57.1	49.3	65.4	61.3
Owner with mortgage	13.4	22.5	8.2	2.1	15.7	26.5	10.6	3.2
Income sources								
Earnings	48.8	80.3	29.5	11.3	46.4	76.0	32.4	12.2
Investment income	69.8	66.9	73.2	70.6	35.0	29.1	38.2	41.4
Government transfers	85.4	68.4	99.1	99.9	87.7	73.1	99.4	99.5
Other sources	34.9	26.0	44.1	38.8	47.5	35.5	60.3	53.5
Composition of income								
Earnings	51.0	72.9	22.4	12.4	50.3	71.7	27.7	9.2
Investment income	16.1	10.7	21.8	28.8	5.7	4.1	6.7	10.2
Government transfers	24.0	10.4	42.5	46.3	25.6	10.4	40.8	55.6
Other sources	8.9	6.0	13.3	12.5	18.5	13.8	25.0	24.9
Income from government transfers								
None	14.6	31.6	0.9	0.1	12.3	26.9	0.6	0.5
Some	73.2	60.5	84.8	81.6	69.8	63.8	80.5	68.2
Complete	12.2	7.9	14.3	18.3	17.9	9.3	18.9	31.3
Income level								
Under \$20,000	31.4	18.1	35.8	53.9	23.7	14.9	23.0	39.1
\$20,000 - \$34,999	25.8	18.3	34.6	27.4	26.6	17.9	32.3	35.0
\$35,000 - \$49,999	15.2	18.0	14.5	10.1	16.2	16.4	19.4	12.5
\$50,000 or more	27.5	45.6	15.0	8.7	33.5	50.8	25.4	13.4
Expenditure level								
Under \$20,000	35.8	18.5	41.9	64.7	24.0	12.8	24.3	42.3
\$20,000 - \$34,999	26.4	21.3	33.9	24.4	26.2	17.9	31.2	34.7
\$35,000 - \$49,999	16.3	24.0	12.5	5.7	16.9	17.5	21.1	11.3
\$50,000 or more	21.4	36.3	11.6	5.2	33.0	51.9	23.4	11.8
Expenditure to income ratio								
Under 75.0	21.3	18.9	22.2	24.9	12.9	10.6	13.6	16.0
75.0 - 94.9	36.0	38.0	33.6	35.6	34.4	34.2	32.9	36.3
95.0 - 99.9	10.0	10.4	9.6	9.9	10.1	10.3	10.0	10.0
100.1 - 104.9	8.6	8.0	10.1	7.5	6.1	5.6	6.9	6.1
105.0 - 124.9	13.9	14.6	12.8	14.1	18.3	19.6	18.1	16.2
125.0 or more	10.2	10.0	11.7	7.9	16.4	17.9	16.7	13.6

Sources: Family Expenditure Survey, 1982; Survey of Household Spending, 2003

A change in the principal component of income is accompanied by a shift in the income distribution of households as they age. In both 1982 and 2003, the majority of households in the 55-to-64 group, with earnings as the major source of income, had incomes of \$50,000 or more, whereas the majority in the 75-plus group, with pensions and transfers, received under \$20,000.

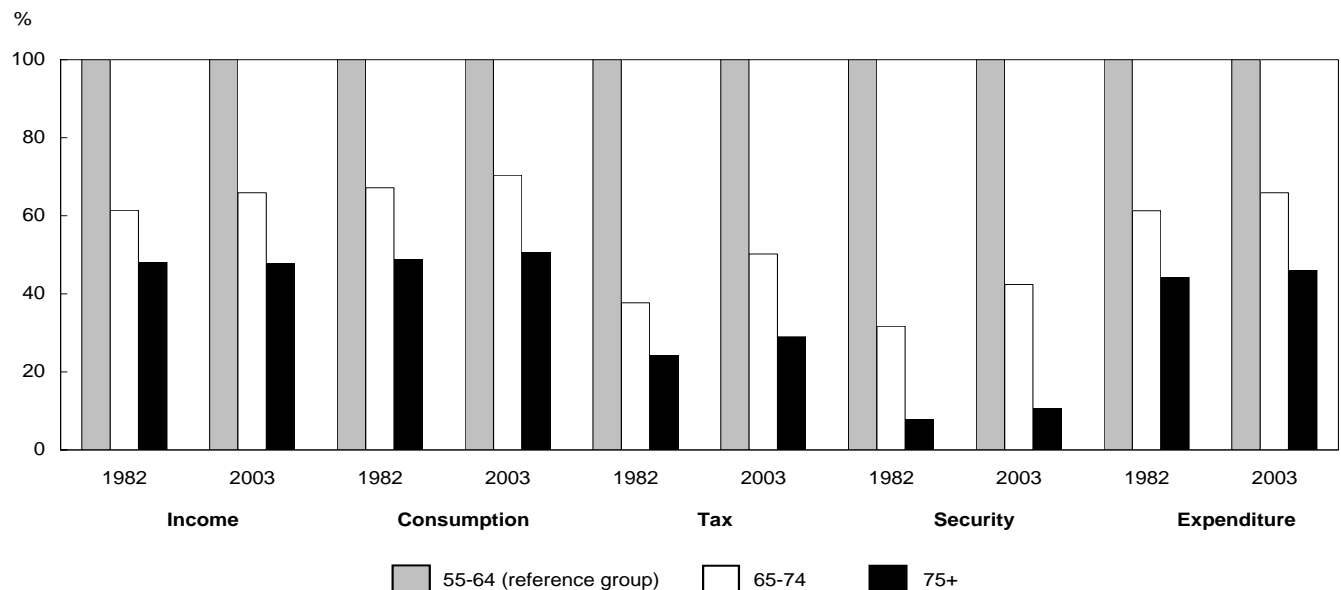
Income, consumption and expenditure changes

As households age, their income drops (Chart). The largest decline occurs between the 55-to-64 and 65-to-74 groups, as labour market attachment diminishes and earnings are no longer the major source of income. A further drop occurs between the 65-to-74 and 75-plus groups, largely because of little or no earnings and more reliance on government transfers and pensions. Compared with a mean income of \$53,100 for households 55 to 64 in 1982, those 65 to 74 received 39% less and those 75 plus, 52% less (Table 2). By 2003, even though the mean income of households in the first group had grown to \$62,800, the pattern remained the same, with income falling by

34% and 52% for those in the older groups. In both years, the mean income of households 55 or older with no earnings was about half that of those with an employed member.

As household income declines, so does expenditure. The expenditure drop reflects primarily the drop in income tax and security contributions. Under a progressive taxation system, the effective tax rate drops as income decreases. Security contributions will also be less as people retire from paid employment. However, income and expenditure do not drop equally over the three age groups. Income drops much more significantly between the 55-to-64 and 65-to-74 groups, largely because of the loss of earnings, whereas expenditure drops more gradually because households take a little longer to adjust their spending. Among couples, for example, of the total drop in income over the three age groups in 2003, 68% occurred between the two younger groups (55 to 64 and 65 to 74) with 32% between the two older ones (65 to 74 and 75 plus); the corresponding drops in expenditure were 64% and 36%, with 58% and 42% for personal consumption.

Chart The largest drops in income, consumption and expenditure are seen between the first two age groups.



Sources: Family Expenditure Survey, 1982; Survey of Household Spending, 2003

Table 2 Income disbursement by age of reference person

	1982				2003			
	Total	55-64	65-74	75+	Total	55-64	65-74	75+
All households					2003\$			
Mean income	40,500	53,100	32,600	25,600	47,900	62,800	41,400	30,100
Disbursement					%			
Personal consumption	66.3	64.4	70.5	65.4	71.1	69.2	73.9	73.3
Income tax	13.5	16.3	10.0	8.2	17.6	20.2	15.3	12.2
Security	3.1	4.0	2.1	0.7	4.2	5.4	3.5	1.2
Gifts and contributions	4.4	3.5	5.5	6.7	3.6	2.3	4.3	7.0
Savings ¹	12.7	11.8	12.0	19.1	3.5	2.9	3.0	6.3
Unattached men					2003\$			
Mean income	27,100	34,700	24,100	20,900	29,300	32,700	27,100	27,200
Disbursement					%			
Personal consumption	63.5	57.8	74.9	62.2	72.9	70.5	76.2	73.7
Income tax	13.5	18.1	9.5	8.9	18.2	21.6	14.9	16.1
Security	2.6	3.8	2.6	0.3	2.2	3.3	1.6	1.2
Gifts and contributions	4.9	4.5	5.3	5.4	6.2	5.8	5.6	7.1
Savings ¹	15.4	15.7	7.7	23.2	0.5	-1.2	1.7	1.9
Unattached women					2003\$			
Mean income	19,400	22,500	19,200	16,900	23,600	28,500	22,800	21,200
Disbursement					%			
Personal consumption	75.3	76.4	74.4	75.1	81.0	82.1	84.1	78.0
Income tax	8.4	12.6	7.3	5.2	12.8	16.5	12.3	10.3
Security	1.3	3.1	0.6	0.1	1.9	4.4	1.0	0.5
Gifts and contributions	7.1	4.2	8.5	8.4	6.8	2.4	7.0	10.0
Savings ¹	8.0	3.7	9.2	11.2	-2.4	-5.4	-4.4	1.2
Couples only					2003\$			
Mean income	43,700	54,700	36,700	33,800	52,900	66,200	45,800	36,300
Disbursement					%			
Personal consumption	62.9	59.3	68.9	61.6	69.7	67.1	73.7	71.5
Income tax	13.5	16.7	10.2	9.2	18.5	21.7	16.0	11.2
Security	3.0	4.0	2.6	0.3	3.7	5.0	2.7	1.0
Gifts and contributions	4.9	4.0	5.4	7.0	3.5	2.9	3.4	6.1
Savings ¹	15.7	16.1	12.8	21.9	4.6	3.4	4.2	10.3

¹ Income less expenditure.

Sources: Family Expenditure Survey, 1982; Survey of Household Spending, 2003

Spending changes by age

Since income is a key determinant of expenditure, a drop in income may adversely affect standard of living. Households may spend more than their income, running down savings or incurring debt in order to maintain their lifestyle. In fact, about one-third of households 55 and over spent more than their income in 1982, and almost 41% in 2003. One-sixth of households in the 55-to-64 and 75-plus groups were on the border line, with expenditure within 5% of income. The majority of those who outspent their income did so by 5% to 25%.

All households spent most of their income dollar on personal consumption—anywhere between 58 cents and 84 cents, depending on age and type of household. The remainder went for income tax, security contributions, gifts and contributions,⁴ or savings. (The shares spent on these items also varied by age and type of household.) In 1982, households in the 55-to-64 group, with earnings as the major source of their relatively higher incomes, used 64 cents for personal consumption, 16 cents for income tax, and 4 cents each for security and gifts and contributions, saving the remaining 12 cents; by 2003, such households were spending more on consumption (69 cents), income tax

(20 cents), security and gifts and contributions (8 cents), and saving very little (3 cents). The situation was no different for non-working households in the 75-plus group. They spent 65 cents of each income dollar on personal consumption and another 8 cents on income tax in 1982, compared with 73 cents and 12 cents in 2003. Consequently, these households also saved much less of their income dollar in 2003 than in 1982—6 cents versus 19.

In both 1982 and 2003, unattached women in the 55-to-64 and 75-plus groups spent most of their income dollar on personal consumption (food, shelter, household operations, clothing, and the like)—much more than their male and couple counterparts. Since these women's incomes were low, they of course paid less in income tax and security contributions. Nonetheless, they spent relatively more of their income dollar on gifts and contributions and saved less. On the other hand, unattached men aged 55 to 64 spent more of their income dollar on gifts and contributions and income tax than couples.

Consumption changes by age

All types of households spent more of their income dollar on personal consumption in 2003 than in 1982. In 1982, the 55-to-64 group spent \$34,200 compared with \$16,700 for those 75 plus. By 2003, spending had reached \$43,500 and \$22,000 (Table 3A). The widening gap between working and non-working households largely reflected greater expenditures by working households—\$9,300 compared with \$5,300. As always, food, shelter and transportation dominated, accounting for between 61 and 68 cents of each consumption dollar. The ranking of these three items changed for households in the 55-to-64 group—from food, shelter, transportation in 1982 to shelter, transportation, food in 2003. However, the order did not change for those 75 plus: shelter, food, transportation (Table 3B).

The next three components of consumption in 1982 for those 55 to 64 were clothing, recreation, and household operations; in 2003, this group spent relatively more on recreation and much less on clothing. In both years, these three items accounted for another 18 to 19 cents of consumption. For households in the 75-plus group, on the other hand, the next three components of consumption in 1982 were household operations, clothing and household furnishings; by 2003, the last two were replaced by health and recreation. Expenditure on these three components took 17 to

19 cents. Overall, then, in both 1982 and 2003, just six components of consumption accounted for 80% of the total for households in the 55-to-64 group and 84% for those 75 plus.

The amount spent on personal consumption drops as households age. For instance, in 1982, mean consumption by couples in the 55-to-64 group was \$32,400 compared with \$20,800 for those 75 plus, almost 36% less; by 2003, the difference was nearly 42% as expenditures hit \$44,400 and \$25,900 for the respective groups. A similar pattern prevailed for unattached individuals. The picture was much the same in 2003, but with narrower gaps between unattached individuals and couples in the 75-plus group.

Since most women have lower incomes than men, they also consume less. In the 55-to-64 group in 1982, women had 35% less income but only 14% less consumption. But as women's incomes improved over time, their income in 2003 was only 13% less and their consumption matched men's. For unattached individuals 75 plus, on the other hand, both income and consumption ratios by sex dropped—from 81% to 78% for income and from 97% to 83% for consumption.

Despite increases in personal consumption between 1982 and 2003, the spending patterns of couples in the 55-to-64 and 75-plus groups were about the same. In both years, food, shelter and transportation accounted for nearly two-thirds of their total consumption. Both groups spent less on food in 2003 than in 1982, but more on shelter and transportation. More was also spent on recreation and health; for couples 55 to 64, the mean expenditure rose from \$1,500 to \$3,900 (157%) on recreation, and from \$1,000 to \$2,300 (116%) on health; the corresponding increases in the 75-plus group were from \$800 to \$1,000 (25%) and from \$700 to \$2,100 (219%).

The key spending patterns of unattached individuals were similar to couples. Like couples in the 55-to-64 group, unattached men and women allocated a little over 60% of their consumption to food, shelter and transportation. However, in the 75-plus group, women spent more on household operations while men spent much more on transportation. The gap between men and women on health expenditures narrowed in the 75-plus group—men spent a little over half the amount spent by women in 1982 but slightly more in 2003.

Decreases occurred in some areas of spending as households aged. For example, for couples in 1982, substantial decreases were noted for tobacco and

Shifts in spending patterns of older Canadians

Table 3A Mean expenditure on components of consumption by age of reference person

	1982				2003			
	Total	55-64	65-74	75+	Total	55-64	65-74	75+
	2003\$							
All households¹								
Food	6,010	7,400	5,280	4,130	5,660	6,750	5,390	4,120
Shelter	6,330	7,170	5,860	5,280	6,690	10,350	7,670	7,040
Household operation	1,530	1,820	1,380	1,140	2,180	2,610	1,960	1,690
Furnishings and equipment	1,170	1,510	1,010	660	1,300	1,730	1,120	760
Clothing	1,920	2,640	1,510	1,030	1,730	2,430	1,480	850
Transportation	4,610	6,390	3,810	1,960	6,780	9,470	6,080	3,050
Health	790	1,030	650	510	1,700	1,860	1,680	1,470
Personal care	640	810	540	410	650	780	630	470
Recreation	1,300	1,800	1,090	550	2,460	3,410	2,210	1,160
Reading and printed material	230	280	210	150	270	310	260	200
Tobacco and alcohol	1,140	1,690	830	430	1,110	1,540	1,010	500
Miscellaneous	990	1,410	760	460	1,060	1,380	950	660
Mean personal consumption ²	26,810	34,210	22,990	16,730	34,040	43,490	30,610	22,030
Mean expenditure	35,310	46,860	28,710	20,700	46,220	61,000	40,190	28,150
Unattached men								
Food	3,850	4,320	3,820	3,320	3,380	3,360	3,510	3,300
Shelter	4,880	4,940	5,420	4,300	6,750	7,250	5,900	6,800
Household operation	930	1,020	930	820	1,390	1,570	1,160	1,370
Furnishings and equipment	490	860	320	230	740	950	500	660
Clothing	760	1,070	750	400	640	920	610	340
Transportation	2,830	3,080	3,650	1,760	3,890	3,770	4,370	3,680
Health	400	660	280	200	900	750	860	1,090
Personal care	230	300	240	150	230	260	250	190
Recreation	670	850	630	500	1,400	1,630	1,130	1,350
Reading and printed material	170	200	180	110	190	190	180	180
Tobacco and alcohol	1,160	1,640	1,140	610	1,020	1,330	1,230	540
Miscellaneous	840	1,130	700	620	830	1,020	950	530
Mean personal consumption ²	17,200	20,080	18,050	13,010	21,380	23,070	20,650	20,060
Mean expenditure	22,910	29,260	22,240	16,070	29,180	33,100	26,630	26,690
Unattached women								
Food	3,220	3,320	3,380	2,950	3,170	3,490	3,230	2,950
Shelter	5,180	5,340	5,070	5,190	6,910	7,790	6,770	6,490
Household operation	1,110	1,190	1,070	1,100	1,520	1,620	1,480	1,480
Furnishings and equipment	520	590	550	430	710	960	750	550
Clothing	890	1,080	900	720	880	1,190	970	660
Transportation	1,440	2,640	1,240	630	2,170	3,860	2,260	1,150
Health	410	530	360	360	1,040	1,100	990	1,030
Personal care	390	440	370	360	470	540	480	420
Recreation	560	820	580	300	1,110	1,270	1,120	1,010
Reading and printed material	140	160	150	120	170	210	190	150
Tobacco and alcohol	310	520	270	170	390	720	430	170
Miscellaneous	400	530	360	340	480	570	440	450
Mean personal consumption ²	14,580	17,170	14,300	12,660	19,080	23,410	19,150	16,560
Mean expenditure	17,830	21,640	17,460	14,960	24,130	30,080	23,770	20,980
Couples only								
Food	6,130	6,930	5,670	5,260	6,150	6,660	6,140	5,090
Shelter	6,550	7,290	6,120	5,760	8,830	10,180	8,010	7,290
Household operation	1,660	1,950	1,510	1,260	2,270	2,600	2,100	1,830
Furnishings and equipment	1,400	1,650	1,250	1,100	1,650	2,090	1,440	1,050
Clothing	1,830	2,200	1,640	1,390	1,890	2,450	1,650	1,060
Transportation	4,970	5,920	4,770	3,020	7,600	9,850	6,640	4,340
Health	860	1,050	750	660	2,160	2,260	2,060	2,100
Personal care	650	750	600	520	700	770	680	570
Recreation	1,290	1,520	1,260	790	2,870	3,910	2,670	990
Reading and printed material	240	280	210	190	290	330	270	240
Tobacco and alcohol	1,120	1,570	910	520	1,170	1,600	930	660
Miscellaneous	790	1,220	540	310	1,150	1,480	1,020	650
Mean personal consumption ²	27,520	32,380	25,270	20,790	36,870	44,390	33,730	25,910
Mean expenditure	36,880	45,880	31,950	26,390	50,460	63,920	43,820	32,530

¹ Includes those with children or relatives, and other household types.

² Includes small expenditure on education, not shown separately.

Sources: Family Expenditure Survey, 1982; Survey of Household Spending, 2003

Shifts in spending patterns of older Canadians

Table 3B Allocation of consumption by age of reference person

	1982				2003			
	Total	55-64	65-74	75+	Total	55-64	65-74	75+
	%							
All households¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food	22.4	21.6	23.0	24.7	16.6	15.5	17.6	18.7
Shelter	23.6	20.9	25.5	31.6	25.5	23.8	25.1	32.0
Household operation	5.7	5.3	6.0	6.8	6.4	6.0	6.4	7.7
Furnishings and equipment	4.4	4.4	4.4	3.9	3.8	4.0	3.7	3.5
Clothing	7.2	7.7	6.6	6.1	5.1	5.6	4.8	3.9
Transportation	17.2	18.7	16.6	11.7	19.9	21.8	19.9	13.8
Health	3.0	3.0	2.8	3.1	5.0	4.3	5.5	6.7
Personal care	2.4	2.4	2.4	2.5	1.9	1.8	2.0	2.1
Recreation	4.9	5.3	4.8	3.3	7.2	7.9	7.2	5.3
Reading and printed material	0.9	0.8	0.9	0.9	0.8	0.7	0.8	0.9
Tobacco and alcohol	4.2	4.9	3.6	2.6	3.3	3.5	3.3	2.2
Miscellaneous	4.2	4.9	3.5	2.8	4.5	5.2	3.7	3.2
Unattached men	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food	22.4	21.5	21.1	25.5	15.8	14.6	17.0	16.5
Shelter	28.4	24.6	30.0	33.0	31.6	31.4	28.6	33.9
Household operation	5.4	5.1	5.2	6.3	6.5	6.8	5.6	6.8
Furnishings and equipment	2.9	4.3	1.8	1.7	3.4	4.1	2.4	3.3
Clothing	4.4	5.3	4.1	3.1	3.0	4.0	2.9	1.7
Transportation	16.4	15.3	20.2	13.5	18.2	16.3	21.1	18.4
Health	2.3	3.3	1.6	1.5	4.2	3.3	4.2	5.4
Personal care	1.4	1.5	1.3	1.2	1.1	1.1	1.2	0.9
Recreation	3.9	4.2	3.5	3.8	6.6	7.1	5.5	6.7
Reading and printed material	1.0	1.0	1.0	0.9	0.9	0.8	0.9	0.9
Tobacco and alcohol	6.7	8.2	6.3	4.7	4.8	5.8	5.9	2.7
Miscellaneous	4.9	5.7	3.9	4.7	4.0	4.6	4.7	2.7
Unattached women	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food	22.1	19.4	23.6	23.3	16.6	14.9	16.9	17.8
Shelter	35.6	31.1	35.5	41.0	36.2	33.3	35.4	39.2
Household operation	7.6	7.0	7.5	8.6	8.0	6.9	7.7	8.9
Furnishings and equipment	3.6	3.4	3.9	3.4	3.7	4.1	3.9	3.3
Clothing	6.1	6.3	6.3	5.7	4.6	5.1	5.0	4.0
Transportation	9.9	15.4	8.7	5.0	11.4	16.5	11.8	7.0
Health	2.8	3.1	2.5	2.8	5.4	4.7	5.2	6.2
Personal care	2.7	2.6	2.6	2.9	2.5	2.3	2.5	2.5
Recreation	3.8	4.8	4.1	2.4	5.8	5.4	5.8	6.1
Reading and printed material	1.0	0.9	1.0	0.9	0.9	0.9	1.0	0.9
Tobacco and alcohol	2.1	3.0	1.9	1.3	2.0	3.1	2.3	1.0
Miscellaneous	2.8	3.2	2.5	2.7	2.8	2.8	2.4	3.0
Couples only	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food	22.3	21.4	22.4	25.3	16.7	15.0	18.2	19.6
Shelter	23.8	22.5	24.2	27.7	24.0	22.9	23.7	28.1
Household operation	6.0	6.0	6.0	6.1	6.1	5.9	6.2	7.1
Furnishings and equipment	5.1	5.1	5.0	5.3	4.5	4.7	4.3	4.1
Clothing	6.7	6.8	6.5	6.7	5.1	5.5	4.9	4.1
Transportation	18.1	18.3	18.9	14.5	20.6	22.2	19.7	16.8
Health	3.1	3.2	3.0	3.2	5.9	5.1	6.1	8.1
Personal care	2.4	2.3	2.4	2.5	1.9	1.7	2.0	2.2
Recreation	4.7	4.7	5.0	3.8	7.8	8.8	7.9	3.8
Reading and printed material	0.9	0.9	0.8	0.9	0.8	0.7	0.8	0.9
Tobacco and alcohol	4.1	4.8	3.6	2.5	3.2	3.6	2.8	2.5
Miscellaneous	3.0	3.9	2.2	1.5	3.5	3.8	3.4	2.7

¹ Includes those with children or relatives, and other household types.

Sources: Family Expenditure Survey, 1982; Survey of Household Spending, 2003

Data sources and definitions

The analysis is based on the 1982 **Family Expenditure Survey** (FAMEX) conducted in February-March 1983 and the 2003 **Survey of Household Spending** (SHS) done in January-March 2004. Since the surveys were taken nearly 20 years apart, some changes in spending patterns could be attributed to changes in survey concepts, content, and methods. Both surveys were conducted by personal interview, used a multi-stage stratified clustered sample drawn from the Labour Force Survey frame. The population in institutions such as nursing homes, hospitals and penitentiaries were excluded as well as those living in the territories and on Indian reserves. However, some key differences remain. First, FAMEX, a periodic survey until 1996, asked 641 questions compared with 425 in the SHS, an annual survey since 1997. Also, the methods used to derive population estimates from the respective samples were different, and the SHS used much more automated systems. For more details on these issues, see Statistics Canada (1984, 2000 and 2003).

The surveys collected data on expenditures and income from all private households in the 10 provinces. The household spending unit is defined as a group of persons dependent on a common or pooled income for major expenses and living in the same dwelling, or one financially independent individual living alone. Since the composition of a household may vary over a year, the use of part-year and full-year households would have distorted some of the comparisons. Hence, the analysis is restricted to full-year households and their composition and dwelling characteristics as of December 31 linked to details on expenditures incurred and income received during the calendar years 1982 and 2003. The analysis is based on households with the reference person 55 or older—3,455 for 1982 and 5,935 for 2003.

Household: A person or group of persons occupying one dwelling unit. The number of households, therefore, equals the number of occupied dwellings. A full-year household has at least one full-year member; a part-year household is composed entirely of part-year members.

Head/reference person: Despite some differences, the two concepts are used here synonymously. The 1982 data are classified by age of the head of household and the 2003 data by age of the reference person. The husband was treated as the head in families consisting of married couples with or without children, as was the parent in lone-parent families and normally the eldest in all other families. On the other hand, the reference person was chosen by the household member as the person mainly responsible for the financial maintenance of the household. Also, this person must have been a member of the household on December 31 of the reference year. The head/reference person can be either male or female.

Tenure: Households are classified by tenure (homeownership status) into three groups: renters, homeowners without a mortgage, and homeowners with a mortgage.

Expenditure on shelter: Data on this component are not comparable. In 1982, they included mortgage interest on a home and vacation home whereas the principal was included under 'net changes in assets and debts'. In 2003, this component included information on regular mortgage payments (principal and interest).

Pre-tax household income: Sum of incomes before taxes and other deductions received during the reference calendar year by all members of the household. Sources include wages and salaries, net income from self-employment, rental and investment income, government transfers (EI benefits, Child Tax Benefits, GST credits, provincial tax credits, social assistance, OAS, GIS, C/QPP benefits), private and employer pension plans, scholarships, alimony, child support payments, and so forth. Income in kind, windfall gains, and capital gains and losses are excluded.

Expenditures collected: With some minor exceptions, the surveys include spending on all goods and services received during the reference calendar year. All expenses attributable to an owned business are excluded. On the other hand, taxes such as GST, provincial sales tax, duties, customs and excise on all goods and services purchased are included in expenditures.

Total expenditure: Sum of expenditure on current consumption of goods and services, federal and provincial income tax paid, payments pertaining to security, and gifts and contributions made. Contributions to registered retirement savings plans are not treated as a component of security.

Current consumption (also referred to as **total consumer spending**): Includes expenditure on broad components: food, shelter, household operation, household furnishings and equipment, clothing, transportation, health, personal care, recreation, reading material and other printed matter, education, tobacco products and alcoholic beverages, and miscellaneous (including union dues and games of chance). For a detailed breakdown of components, see Statistics Canada (2003).

Constant dollars: To remove the effect of inflation or rising prices on consumption, all money figures are in 2003 dollars. While the prices of all 1982 goods and services may not have moved up at the same pace as the all-items CPI, the use of one conversion factor simplifies the analysis. Another advantage of using one such conversion factor is that it preserves the rank order and budget percentage of spending items (Snider 2005).

Average expenditure by item: Unless stated otherwise, overall averages are used. The overall average is obtained by dividing the aggregate amount of an item by total households.

alcohol, recreation, transportation, health, and clothing. Shelter and food on the other hand showed the least reduction. By 2003, the components with larger reductions remained the same but those with least reduction now included health, and reading and printed materials.⁵ Similarly, for the unattached, relatively smaller reductions were noted for shelter, food, and household operations.

Rising health expenditures

Between 1982 and 2003, household expenditures on health rose because of increased premiums for government and private health insurance, and because of higher out-of-pocket expenses for treatments and medicines not covered by insurance.⁶ Households with a reference person 55 and over spent \$7.2 billion in 2003 on health compared with \$2.1 billion in 1982. And in both years, health insurance premiums accounted for 30% of these costs.

Since supplementary medical coverage through a private insurance plan is often a benefit of employment, the proportion of households covered under such schemes declines between the 55-to-64 and 75-plus groups. For instance, for unattached women, it fell from 53% to 47% in 1982 and from 49% to 42% in 2003. Thus, not only are more households in the 75-plus group incurring more out-of-pocket health expenses, but also these direct costs constitute the lion's share of their health expenditure—for unattached women, the percentage grew from 78% in 1982 to 81% in 2003 while jumping from 64% to 75% for men (Table 4).

Besides health insurance, all households, irrespective of age, spent the most on prescribed drugs, and other medical equipment and appliances. After these two, the order of spending on dental services, eye care, and other health care and medical services varied across age groups—more in 1982 than in 2003. However, couples and unattached individuals in the 75-plus group in 2003 showed a consistent order of out-of-pocket spending on health: prescribed drugs, other medical and health care services, dental services, and eye care.

Spending patterns of households dependent on government transfers

For households in the 55-to-64 group, government transfers may include Employment Insurance benefits, worker's compensation, C/QPP disability benefits, or social assistance; for households 65 to 74 and 75 plus,

such payments may also include Old Age Security, Guaranteed Income Supplement, the Allowance, veterans' pensions, or the C/QPP retirement pension. Households in the latter two age groups are more likely to derive all their income from government transfers—especially those with no work-related pension, investments, or other source of income.

In 2003, almost one-third of households in the oldest group received their entire income from government transfers compared with less than one-fifth in 1982; the corresponding proportions for the 55-to-64 group were 9% and 8%. In both years, two-thirds of these households were unattached individuals (more women than men) and one-quarter were couples.

The average income of households totally dependent on transfers in the 55-to-64 group rose from \$11,200 in 1982 to \$12,900 in 2003, while their expenditures jumped from \$11,800 to \$15,400. In the 75-plus group, on the other hand, income went from \$12,500 to \$17,000 and expenditures from \$11,900 to \$17,200 (Table 5). The higher income of the 75-plus group in 2003 can be attributed to the maturity of the C/QPP, resulting in more recipients as well as higher benefits, and to inflation-adjusted payments from other programs. In spite of such increases in income, 42% of these households spent more than their income in 2003 compared with 35% in 1982; the corresponding proportions for households in the 55-to-64 group were 62% and 53%.

Because of lower incomes, households with their entire income from government transfers paid very little in personal taxes or security contributions. Instead, they spent their income on personal consumption. Those 75 plus spent slightly more on gifts and contributions than those 55 to 64. In fact, in both 1982 and 2003, households in the 75-plus group spent, on average, more on gifts and contributions than they did on personal care, recreation, or tobacco and alcohol.

Most of the consumption dollar in households dependent on transfers went for food and shelter, accounting for 52 to 57 cents in 2003, compared with 58 to 65 cents in 1982. The relative share spent on shelter grew over time as rent and home maintenance went up and food dropped. Relatively similar amounts were spent in 1982 and 2003 on transportation and household operations. The major difference between the 55-to-64 and 75-plus groups was in spending on tobacco and alcohol and on health. The former spent more on tobacco and alcohol, the latter on health.

Table 4 Health expenditure by age of reference person

	1982				2003			
	Total	55-64	65-74	75+	Total	55-64	65-74	75+
All households¹	2,114.5	1,235.1	609.4	270.0	7,202.7	3,497.0	2,048.7	1,657.0
				2003\$ (millions)				
				%				
Direct cost to household	70.6	63.7	80.5	79.7	70.0	64.9	71.7	78.5
Medicines and pharmaceuticals	24.5	23.3	27.0	24.4	33.1	28.0	37.7	38.0
Eye care	12.7	11.9	13.4	15.2	8.6	9.4	7.9	7.8
Dental services	21.2	19.3	26.0	18.8	16.9	18.2	16.9	14.1
Other services	12.2	9.2	14.2	21.2	11.3	9.2	9.1	18.6
Health insurance premiums	29.4	36.3	19.5	20.3	30.0	35.1	28.3	21.5
Unattached men	84.1	52.9	17.9	13.3	405.1	132.7	99.8	172.6
				2003\$ (millions)				
				%				
Direct cost to household	65.1	62.5	73.9	63.5	69.8	60.8	73.4	74.6
Medicines and pharmaceuticals	23.5	21.6	28.7	23.9	30.7	27.1	33.6	31.8
Eye care	12.5	12.9	15.1	7.3	7.9	7.9	9.0	7.2
Dental services	17.1	17.7	18.4	13.0	17.1	16.0	25.0	13.4
Other services	12.0	10.3	11.7	19.3	14.1	9.8	5.8	22.2
Health insurance premiums	34.9	37.5	26.1	36.5	30.2	39.2	26.6	25.4
Unattached women	284.9	104.1	100.0	80.7	1,085.0	295.4	303.3	486.2
				2003\$ (millions)				
				%				
Direct cost to household	75.3	65.7	83.2	77.8	76.9	69.9	76.6	81.3
Medicines and pharmaceuticals	26.3	30.4	24.3	23.6	36.2	29.9	36.6	39.8
Eye care	16.2	12.8	17.6	18.8	9.1	10.0	9.0	8.6
Dental services	19.5	12.0	27.6	19.2	15.6	15.5	20.9	12.4
Other services	13.3	10.5	13.8	16.3	15.9	14.4	10.1	20.5
Health insurance premiums	24.7	34.3	16.8	22.2	23.1	30.1	23.4	18.7
Couples only	830.3	422.8	303.9	103.5	3,362.3	1,580.8	1,091.8	689.7
				2003\$ (millions)				
				%				
Direct cost to household	72.1	62.2	82.4	82.0	68.9	63.5	71.0	77.8
Medicines and pharmaceuticals	25.9	24.0	27.9	27.8	34.2	29.5	37.9	39.3
Eye care	12.2	10.9	12.7	15.4	7.8	8.3	7.6	6.9
Dental services	21.5	18.1	26.7	20.3	16.9	17.4	17.2	15.4
Other services	12.5	9.3	14.9	18.6	9.9	8.3	8.3	16.1
Health insurance premiums	27.9	37.8	17.6	18.0	31.1	36.5	29.0	22.2

¹ Includes those with children or relatives, and other household types.

Note: Overall mean expenditure by age and type of household is shown in Table 3A.

Sources: Family Expenditure Survey, 1982; Survey of Household Spending, 2003

Summary

As households age, not only does their income drop but also their spending patterns change. In addition, they tend to become smaller, which may necessitate downsizing or moving to rental accommodation. The loss of earnings as the major income source means

less personal income tax to pay and almost no contributions for security. This lowers expenditures. On the other hand, the proportion of spending on personal consumption as well as gifts and contributions tends to increase. Changes in spending patterns also reflect altered lifestyles.

Table 5 Mean expenditure of households dependent on government transfers by age of reference person

	1982				2003			
	Total	55-64	65-74	75+	Total	55-64	65-74	75+
Households	326,300	95,380	134,410	96,500	758,750	174,430	230,750	353,570
Total expenditure	12,910	11,780	14,420	11,930	17,200	15,440	18,580	17,180
Pre-tax income	13,110	11,150	14,930	12,510	16,250	12,880	17,660	16,990
					\$			
Total consumption	12,420	11,650	13,680	11,420	16,270	15,190	17,620	15,920
Food	3,630	3,420	3,890	3,480	3,490	3,140	3,790	3,460
Shelter	3,910	3,730	4,060	3,900	5,500	5,320	5,380	5,670
Household operation	900	860	1,010	760	1,190	1,040	1,240	1,220
Furnishings and equipment	420	350	490	390	620	320	630	750
Clothing	670	610	740	640	610	520	710	590
Transportation	1,040	850	1,320	840	1,930	1,750	2,530	1,640
Health	320	290	330	350	850	640	930	910
Personal care	290	260	310	280	340	230	380	370
Recreation	340	270	450	250	570	660	760	410
Reading and printed material	120	90	150	90	120	80	130	120
Tobacco and alcohol	540	670	660	250	650	1,120	670	400
Miscellaneous	230	220	280	170	380	300	450	380
Personal tax	-10	-80	60	-40	410	40	360	620
Security	40	50	30	40	110	80	180	80
Gifts and contributions	470	160	650	520	410	130	420	550

Note: These households receive all their income from transfers.

Sources: Family Expenditure Survey, 1982; Survey of Household Spending, 2003

All households 55 and over were spending more on personal consumption, income tax and security in 2003 than in 1982. As a result, saving fell from 13% of income in 1982 to only 4% in 2003. Largely because of their higher incomes, couples fared better than unattached individuals.

The key components of household consumption were food, shelter, and transportation, together accounting for 61 to 68 cents of the consumption dollar. The ranking of these components changed for the 55-to-64 group: from food, shelter and transportation in 1982 to shelter, transportation and food in 2003. For those 75 plus, on the other hand, the ranking remained unchanged: shelter, food, and transportation. Households in this group were also spending more out-of-pocket on health in 2003 than in 1982; expenses incurred were for prescribed drugs, other medical and health care services, dental services, and eye care (ranked by relative share of the health dollar).

The proportion of households receiving their entire income from government transfers increased over the 1982-to-2003 period. Nearly two-thirds of these households were unattached individuals—more women than men. Most of their consumption dollar was spent on the two essentials of food and shelter: 52 to 57 cents in 2003 compared with 58 to 65 cents in 1982. The major difference over time in spending of these households by age was that those 55 to 64 were spending more on tobacco and alcohol whereas those 75 and over spent more on health.

Perspectives

Notes

1 Security expenditures include Canada/Quebec Pension Plan, Employment Insurance, and private pension plan contributions.

2 The analysis could have been carried out by splitting older households into only two groups: 55 to 64 and 65 and over. However, this would have masked the expenditure patterns

of households in which the reference person may have opted to delay retirement to after age 65, or in which the spouse or other family members are working. Such situations, more common in 2003 than in 1982, made it desirable to examine a 65 to 74 year-old group, many of whom had some attachment with the labour force—32% had earnings in 2003 compared with 30% in 1982. Although the tables show data for the three age groups, the text makes comparisons mainly between the 55-to-64 and 75-plus groups. In the former, the majority had earnings, whereas in the latter, the majority did not. See Chawla and Wannell (2005) for shifts in expenditures between 1982 and 2001 based on household surveys, and Harchaoui and Tarkhani (2004) and Sauvé (2005) for shifts based on personal expenditure data from the System of National Accounts.

3 Some of the drop in investment income may be due to the decline in the trendsetting bank rate, which fell from 13.96% in 1982 to 3.19% in 2003. Not all households are equally affected by interest-rate fluctuations. For households with large savings, a higher rate will generate more investment income, perhaps encouraging them to spend more. On the other hand, for households with greater consumer and mortgage debt liability, the higher rate may dampen spending as more of their income goes toward discharging debt.

4 Gifts were treated somewhat differently in the 1982 and 2003 surveys. The 1982 questionnaire contained a separate category for gifts, while in 2003 respondents were directed to include them under the relevant subject category (furniture, toys, and so forth), except for clothing. This creates a small upward bias in personal consumption in 2003 relative to 1982.

5 Some of the reduced expenditure on food, clothing and recreation over time may be attributed to a drop in prices for these products and services. This has been brought about largely by increased competition in the retail and wholesale markets, the opening of discount outlets, and changes in tariffs and quotas on imports. Similarly, some reduction in spending on tobacco and alcohol may be due to greater knowledge of their harmful health effects.

6 The SHS does not collect information on the cost of treatment provided by doctors or hospitals under provincial health insurance schemes. Instead, it asks about expenses such as government or private insurance health premiums, prescription drugs, dental and eye care, and services provided by other medical professionals. See also Luffman (2005) for spending by households on prescription drugs.

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December 2005

PERSPECTIVES

ON LABOUR AND INCOME

Fact sheet on education indicators

In today's world, education is more important than ever—for both individuals and nations. This human capital is instrumental to economic growth, productivity, and living standards. In an environment of increasing globalization and outsourcing, the demand for learning is growing and changing. Government and enterprises everywhere are engaged in improving the education and skills of people in cost-effective and equitable ways.

In Canada, education is a provincial or territorial responsibility. Each province or territory controls financing and administration, and sets its own teaching standards. The federal government has a limited role. It provides financing to special schools such as those for Aboriginal people or for the physically disabled or visually impaired. In addition, it contributes to universities by creating special chairs or by funding research and development activities. Student loans and tax-deferred plans to save for educa-

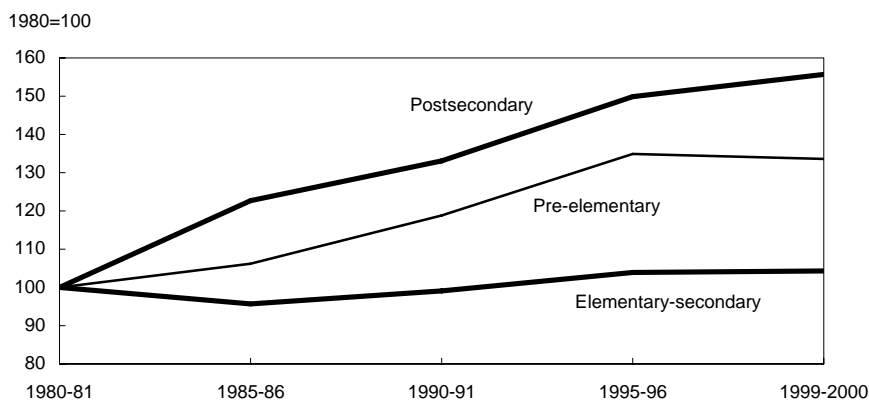
tion are also federal initiatives. Municipal governments deliver funds to elementary and secondary schools from property taxes or provincial transfers. Both enrolment and funding at all levels of education have been affected by changing socio-demographics: a declining birth rate, aging of the population, almost stagnant incomes, and increasing immigration.

These issues are examined in this first segment of indicators on education, which contains 24 charts highlighting developments over the last two decades. Future segments will focus on interprovincial differences in expenditure on education, qualitative indicators such as class size and pupil-teacher ratios, spread of information technology, major fields of postsecondary study, sources of income for postsecondary students, and salaries and employment conditions of teaching staff at different levels.

Growth in full-time enrolment by level of education

The formal learning process may start as early as age 4 with pre-elementary education. Elementary-secondary education is compulsory to at least age 16; the age varies by province. Public education is free until the end of secondary school. (Up to 2002-03, secondary education in Ontario included grade 13; in Quebec elementary-secondary education requires 11 years, but university-bound students must complete a two-year program at a community college—CEGEP).

Of Canada's 24.5 million inhabitants in 1980, 5.7 million (23.3%) were enrolled full time at educa-



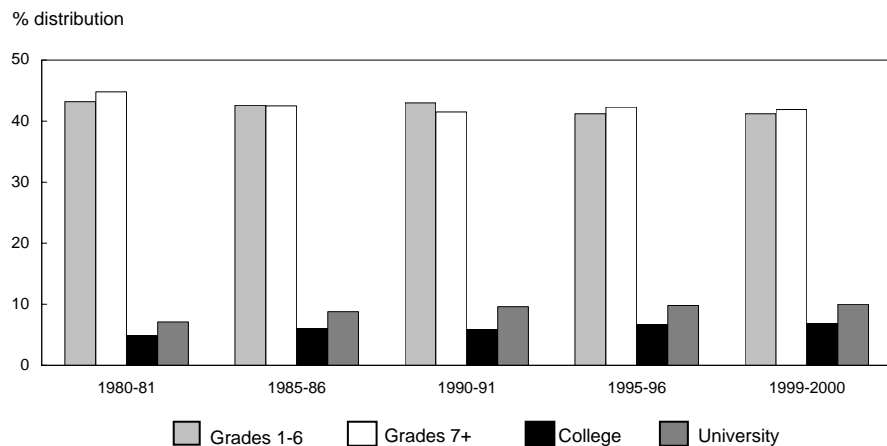
tional institutions. By 1999, the population increased to 30.4 million and full-time enrolment to 6.4 million (21.1%). Although the overall growth in full-time enrolment was only 12.1%, postsecondary institutions saw a 55.7% increase over the period.



Statistics Canada
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Canada

Full-time enrolment by level of education



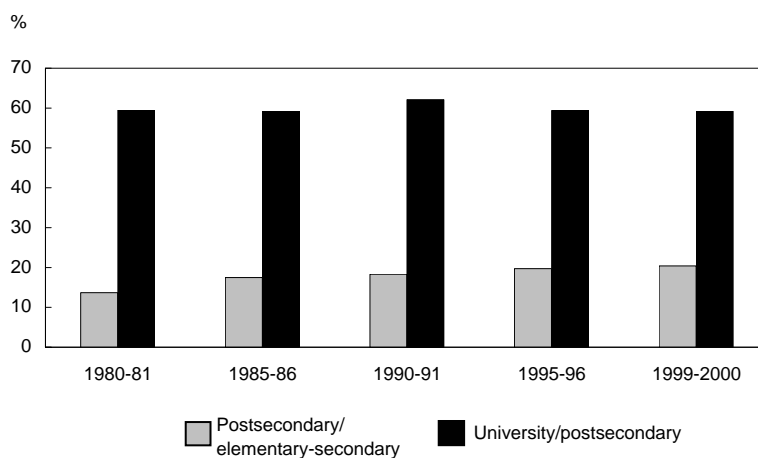
Note: Pre-elementary is not included.

Among students enrolled full time at public or private educational institutions (excluding pre-elementary), the proportion attending postsecondary institutions rose steadily, from 12.0% in 1980 to 16.9% in 1999. Universities accounted for 3 of the 5 percentage-point increase and colleges for 2 points. The proportion attending elementary or secondary schools declined between 1980 and 1999, largely because of the drop in the birth rate (1.46% to 1.05%) but also because of an increase in the secondary-school dropout rate.

Full-time postsecondary enrolment

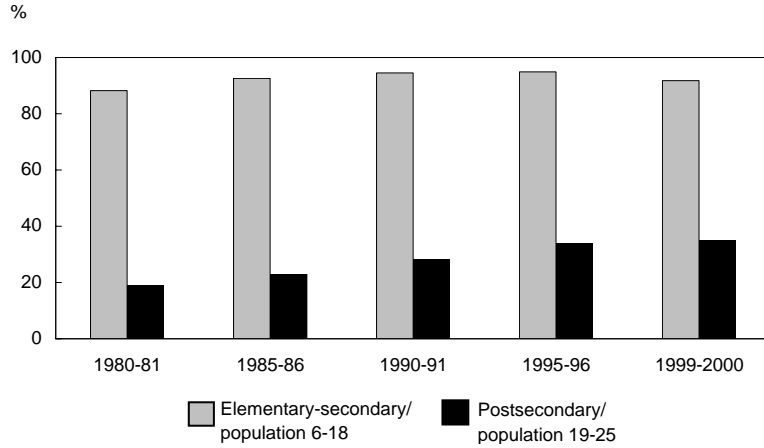
An increasing trend for full-time postsecondary enrolment can also be seen in the rising ratio of postsecondary to elementary-secondary school enrolment—from 14 per 100 in 1980 to 20 per 100 by 1999.

Postsecondary institutions include non-degree-granting community colleges providing trade or vocational programs, and degree-granting universities. Their shares of full-time enrolment did not change much between 1980 and 1999—universities accounted for 60% and colleges the rest.



Note: Pre-elementary is not included.

Full-time enrolment rates for elementary-secondary and postsecondary populations



Note: Pre-elementary is not included.

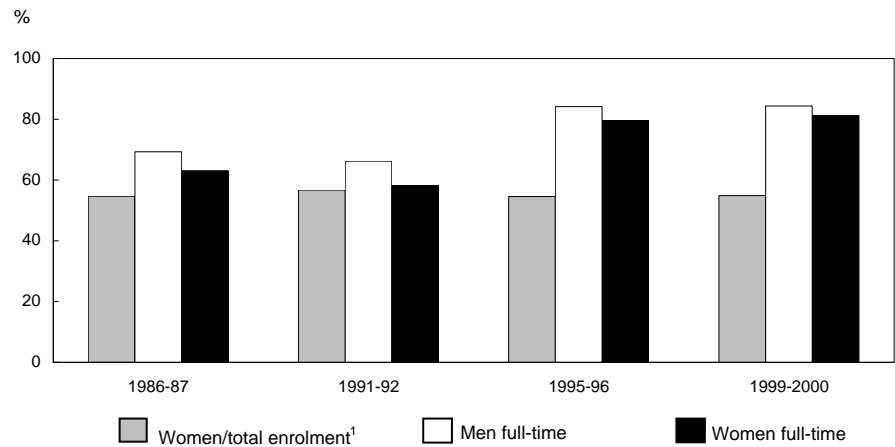
populations. As expected, the participation rate for those 6 to 18 enrolled full time at elementary or secondary school fluctuated between 88.2% and 95.5%. The rate will be less than 100% because the upper age limit varies by province, and also because of the dropout rate, which varied over time and by province.

The steadily growing pursuit of postsecondary education is evident in the rising participation rate—in 1980-81, only 19.0% of persons 19 to 25 were enrolled full time at a postsecondary institution compared with 35.1% in the 1999-2000 academic year.

A 'participation rate' can be calculated for elementary-secondary (ages 6 to 18) and postsecondary (19 to 25) populations by expressing enrolments as a percentage of their respective

Community college enrolment

The overall number of students attending community colleges hovered around half a million between 1986 and 1999, with just over half being women. Among both sexes, the proportion enrolled full time rose: from 69.3% to 84.4% for men and from 63.1% to 81.3% for women. Over time, therefore, the difference in the proportions narrowed from 6 to 8 percentage points in the late 1980s to around 3 points in the late 1990s.



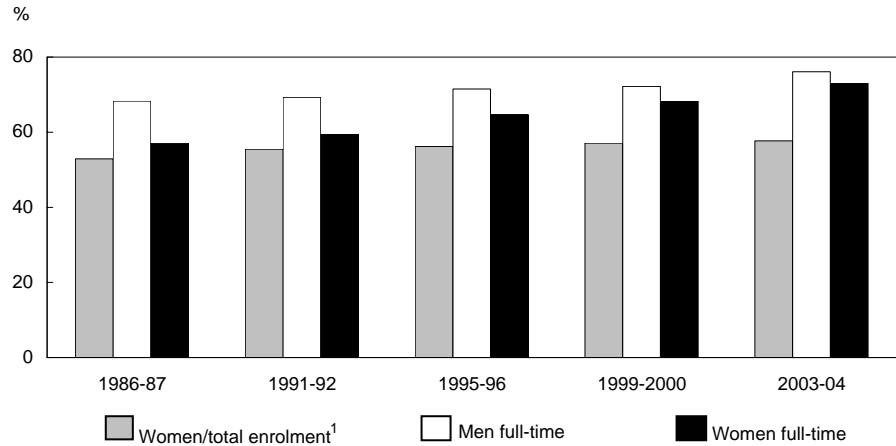
¹ Includes full and part-time enrolment.

A major reason behind increased full-time enrolment at community colleges is the growing demand for greater skills in a rapidly changing job market. Colleges can generally provide job-oriented skills in less time and at a lower cost than universities.

University enrolment

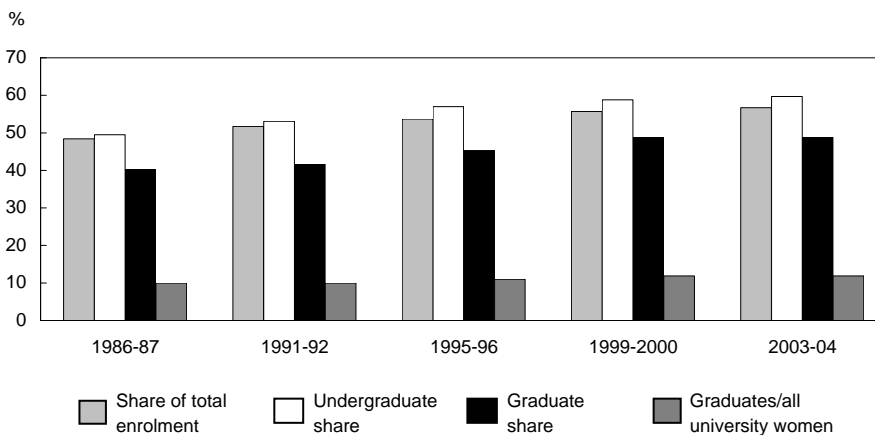
Enrolment at universities increased from 763,000 in 1986 to 990,000 by 2003, with women's representation also rising from 52.9% to 57.7%. Although the majority of both men and women attended university on a full-time basis, the rise in the proportion of women outpaced that of men: from 57.0% to 73.0% for women and from 68.3% to 76.1% for men. Similar trends were seen for community and technical colleges.

Among those enrolled at a university, 87.8% were in undergraduate programs in 1986 compared with 85.7% in 2003, indicating a slight increase in the proportion of those taking graduate programs.



¹ Includes full and part-time enrolment.

Women's representation in full-time university enrolment

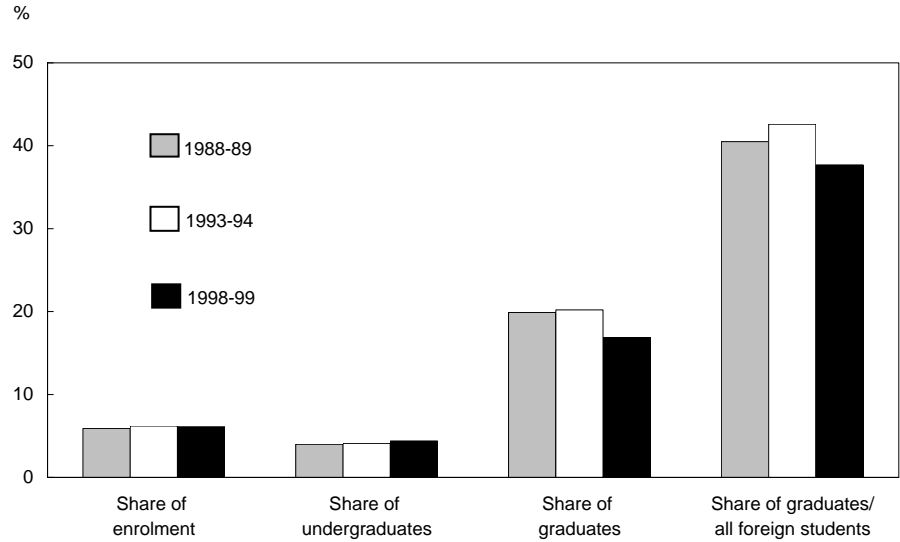


Between 1986 and 2003, women's representation among undergraduates increased from 49.5% to 59.7%, and among graduates from 40.3% to 48.8%. On the other hand, the proportion of men and women enrolled for a graduate degree did not vary much over the years, staying around 10% to 12% for women and 15% to 17% for men.

Foreign student representation in full-time university enrolment

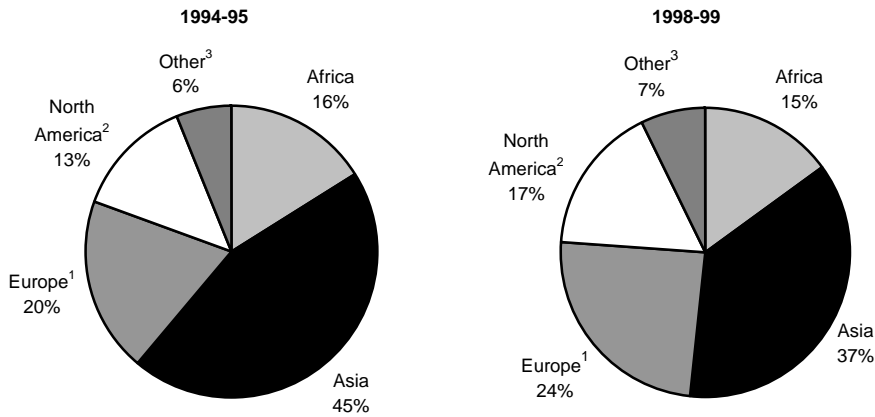
Many foreign students from developing countries come to Canada to pursue higher education. Some receive public funds from their own country or through Canadian assistance programs, while others rely on private or personal means.

Between 1988 and 1998, full-time foreign student enrolment at Canadian universities grew from 31,000 to 37,000 of a total respective enrolment of 532,000 and 580,000. The proportion of foreign students among those enrolled full time has remained around 6%. Their representation, however, varied considerably by level—around 4% among undergraduates but between 17% and 23% among graduates.



Four in 10 foreign students attended a graduate program. Between 1988 and 1998, the proportion of foreign students among graduates peaked at 23.3% in the 1990-91 academic year, after which it dropped steadily—largely because of steadily rising tuition fees for foreign students pursuing advanced degrees.

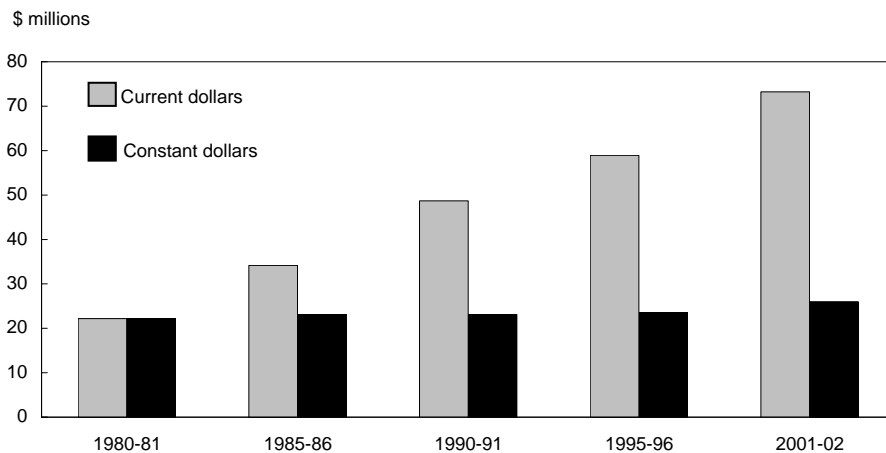
Full-time foreign students by country of origin



- 1 Includes Russia.
 2 Includes Central America and the Caribbean.
 3 South America, Oceania, stateless, and not reported.

The distribution of foreign students by country of origin changed slightly between 1994-95 and 1998-99 academic years. In 1994-95, 44.9% of all foreign students came from Asian countries and 19.6% from Europe. By 1998-99, the proportions were 36.7% and 24.3%. At the same time, a slight increase was seen in the proportion from North American countries (including Central America and the Caribbean).

Total expenditure on education



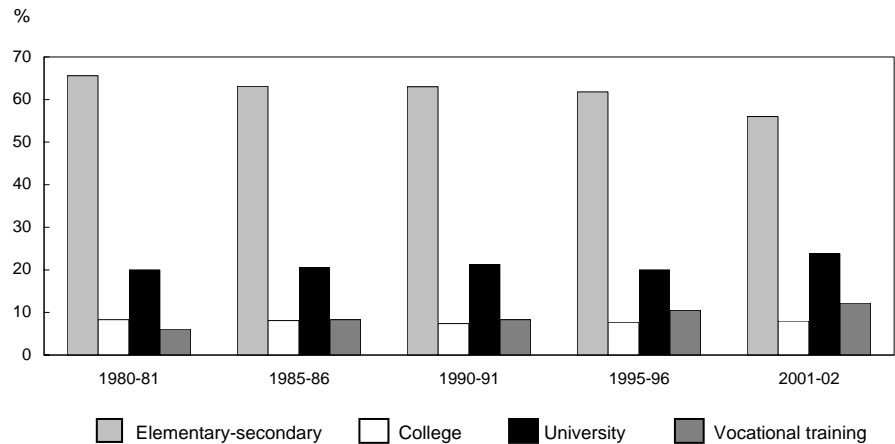
dollars. In other words, 92.5% of the increase in total education expenditure between 1980 and 2001 was due to inflation and the rest to other factors (such as more instructors, services and materials, and infrastructure). Since most education expenses are sensitive to inflation—wages and salaries, goods and services, and capital outlays—this result is not unexpected.

In total, Canada spent \$73.2 billion on education in the 2001-02 academic year compared with \$22.2 billion in 1980-81. However, adjusting for inflation (using the change in the consumer price index), the difference dropped to just \$3.8 billion as the 2001-02 expenditure became \$26 billion in 1980

Share of expenditure on education by level

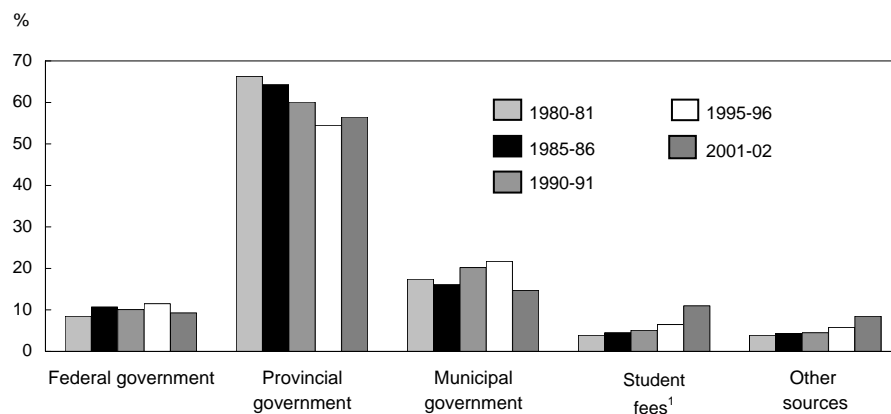
The distribution of education spending by type of institution has changed over the last two decades. In the 1980-81 academic year, 66 cents of each dollar went to elementary and secondary schools, 8 cents to colleges, 20 cents to universities, and 6 cents to trade and vocational training. By 2001-02, spending on schools was reduced by 10 cents, while 4 cents went to universities and 6 cents to vocational training.

The elementary-secondary school drop resulted from falling enrolment and restructuring or closings, largely due to the declining birth rate. The increase for universities and trade or vocational programs can be attributed to



growing demand for higher education and career-oriented trade skills—the latter necessitated by the changing labour market, globalization, international competitive forces, and other socio-economic factors.

Share of expenditure on education by source of funding



¹ Student fees include tuition fees plus additional compulsory fees such as those for recreation and athletics, student health services, and student associations.

Canada is a provincial/territorial responsibility, most of the funding comes from this level: 66.3% in 1980-81 and 56.5% in 2001-02. The provincial share peaked at 68.4% in 1982-83. Federal spending remained between 8.2% and 11.5% over the period.

Some shift to private sources has occurred over the last two decades—in 2001, 80.5% of funding was public compared with 92.2% in 1980. This 12 percentage-point drop was offset by an increase of 7 points in direct student fees, and another 5 from private sources.

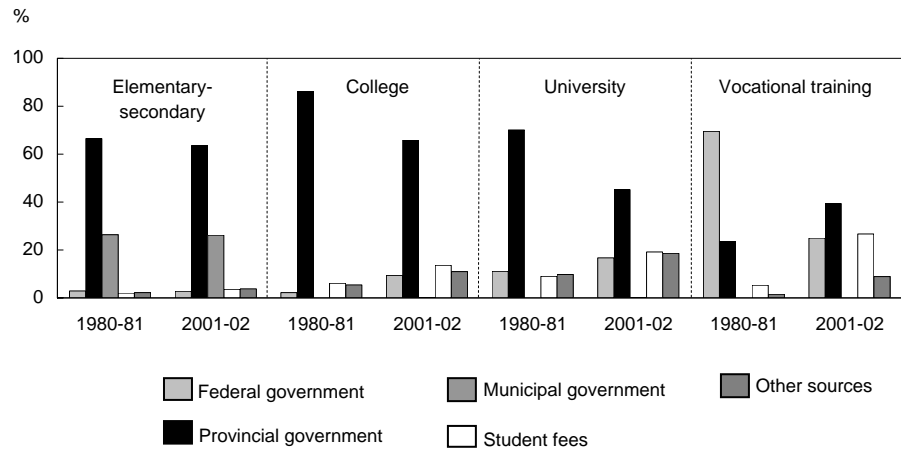
Education is funded by all three levels of government, student fees and private sources including bequests, donations, non-government grants, investment income, and borrowings. Since the provision of education in

Source of funding

Funding sources vary by type of institution. Public funds (money directly spent by the three levels of government) were the major source of financing at all levels.

Elementary-secondary schools spent \$41.0 billion in 2001 compared with \$14.6 billion in 1980. Almost all of this was publicly funded (93% to 96%), with provincial governments accounting for two-thirds. Community college expenditures rose from \$1.8 billion to \$5.8 billion, but the share financed through public funds (from federal and, mainly, provincial governments) fell from 88.5% to 75.3%. This shortfall shifted the burden more to students than to other private means; the share of student fees went from 6.1% to 13.6%.

University spending quadrupled (\$4.4 billion to \$17.5 billion) between 1980 and 2001. The

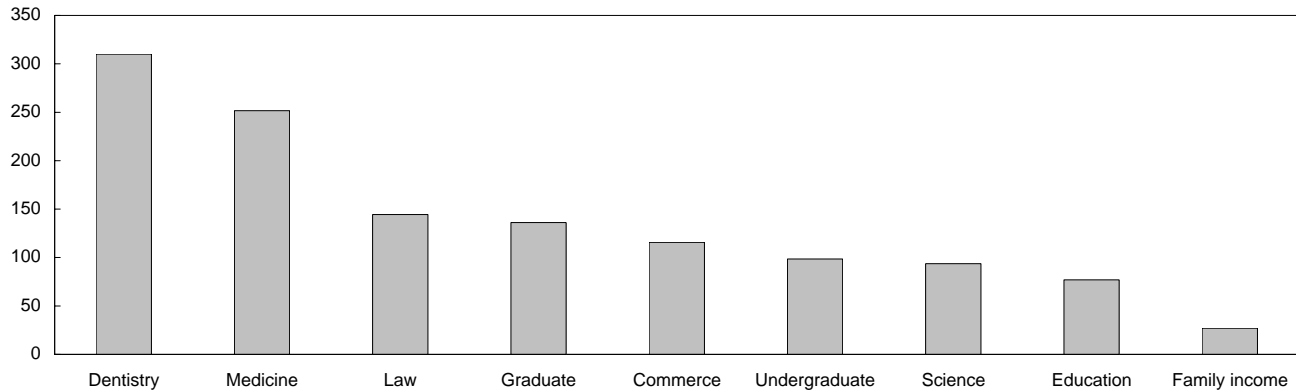


provincial share fell from 70.1% to 45.2%, while the federal share rose from 11.1% to 16.7%. The increased federal share went toward more sponsored research and development since such funds are not generally used for operating costs. Over the last two decades, universities have doubled their financial dependence on private sources, such as donations and non-government support (from 9.8% to 18.6%) and student fees (from 9.0% to 19.2%).

Spending on trade/vocational training crept up from \$1.3 billion in 1980 to \$8.9 billion in 2001. The federal share fell from 69.5% to 25.0% as the provinces increased their funding (from 23.7% to 39.4%) and student fees rose (5.3% to 26.7%).

Change in average family income and tuition fees for selected university faculties

% change between 1990-91 and 2000-01



Note: All money data are in 2001 dollars.

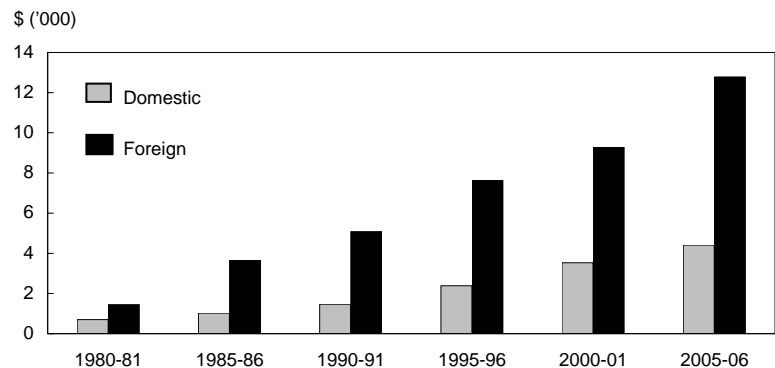
Between 1990-91 and 2000-01, increases in university fees greatly exceeded the growth in family incomes—in 2001 dollars, average pre-tax family income increased by 27% whereas fees for undergraduate programs rose by 99% and graduate programs by

136%. Fees went up 310% for dental schools, followed by 252% for medical schools, 144% for law schools, and 94% for science programs.

Rising fees may dampen enrolment or create economic hardship for those keen to advance their education and skills at a university.

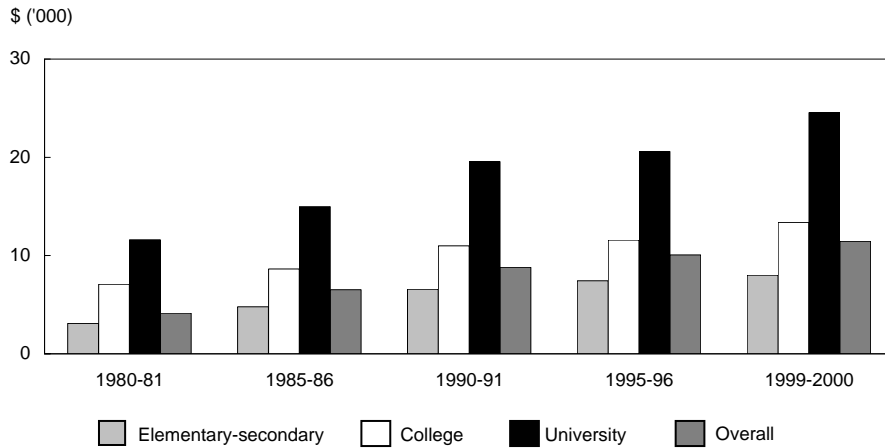
Weighted average university tuition fees for full-time domestic and foreign students

Foreign students typically pay two to three times the fees paid by domestic students, whether for undergraduate or graduate programs. In the 1980-81 academic year, the weighted average tuition fee paid by full-time foreign students was \$1,400 whereas their domestic counterparts paid \$700; by 2005-06, the respective fees were \$12,800 and \$4,400—jumps of 8.8 times and 6.3 times. High fees for foreign students may have contributed to their declining enrolment at Canadian universities.



Note: All money data are in current dollars.

Average education expenditure per full-time student



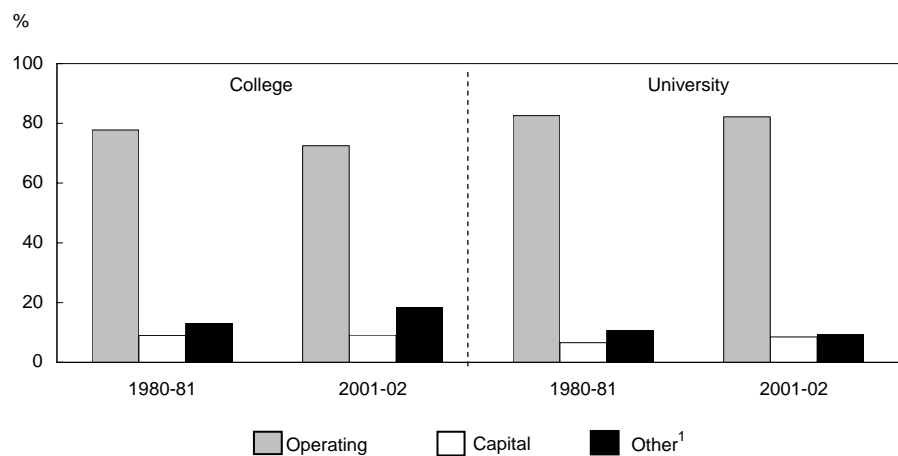
Note: All money data are in current dollars.

Compared with elementary-secondary school, the average expenditure per full-time student nearly doubles at college and triples at university. These ratios remained almost unchanged between 1980 and 1999.

Over the period, the cost per full-time student escalated from \$3,100 to \$8,000 for elementary-secondary schools, from \$7,100 to \$13,400 for colleges, and from \$11,600 to \$24,500 for universities.

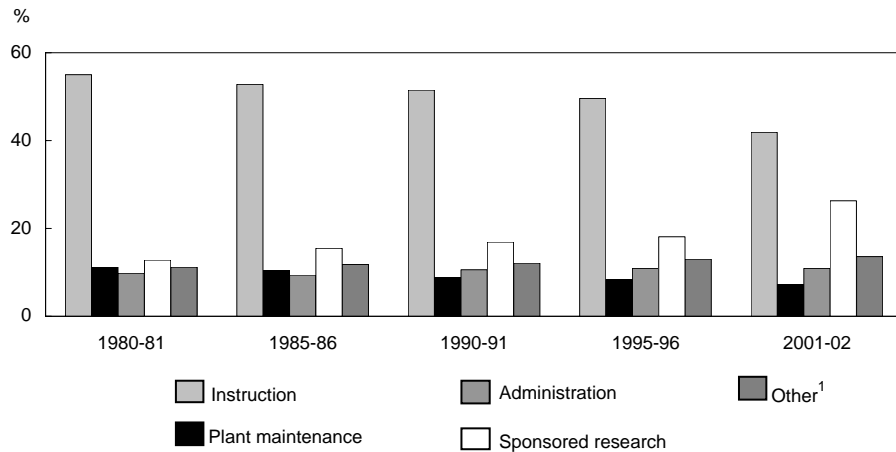
Disbursement of total education expenditure for colleges and universities

During both the 1980-81 and 2001-02 academic years, the lion's share of the expenditure dollar went to cover operating costs—between 72 and 78 cents for colleges and about 83 cents for universities. For both, the second largest component was student support and other departmental expenditures (excluding capital outlays), with colleges spending relatively more (between 13 and 18 cents) than universities (between 9 and 11 cents). The remainder was spent on capital outlays.



¹ Student support and other departmental expenditure

Components of university operating expenditures



¹ Includes libraries, student services, and other unspecified expenditures.

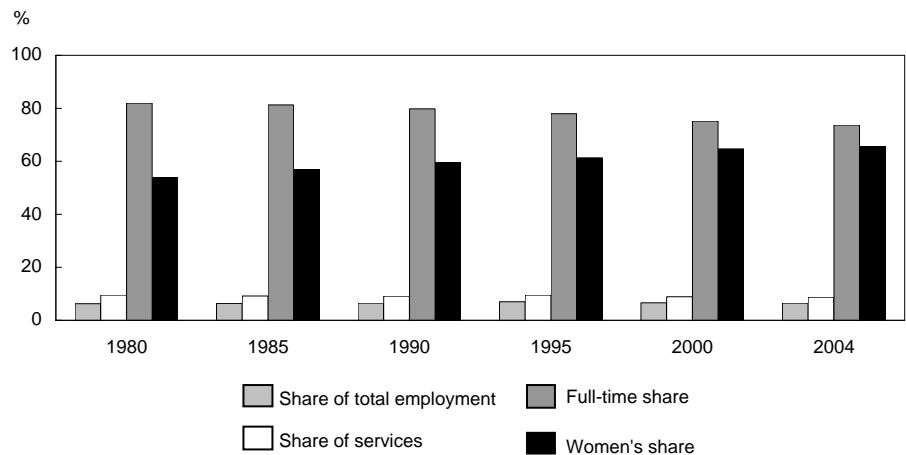
The remaining 11.2% went for libraries, student services, scholarships, and other expenses. By 2001-02, the share spent on sponsored research had risen (to 26.3%) while all other components fell—instruction by 13.1 percentage points.

Undertaking and spending more on sponsored research may qualify universities to receive more federal funding. Spending less on instruction may mean a reduction in permanent teaching staff; larger class sizes; the hiring of temporary, contract, or part-time staff; and more use of teaching aids.

For universities, expenditure on instruction (wages and salaries of teaching staff and supplementary labour costs) accounted for 55.0% of operating costs in the 1980-81 academic year. This was followed by 11.2% for plant maintenance, 9.8% for administration, and 12.8% for sponsored research.

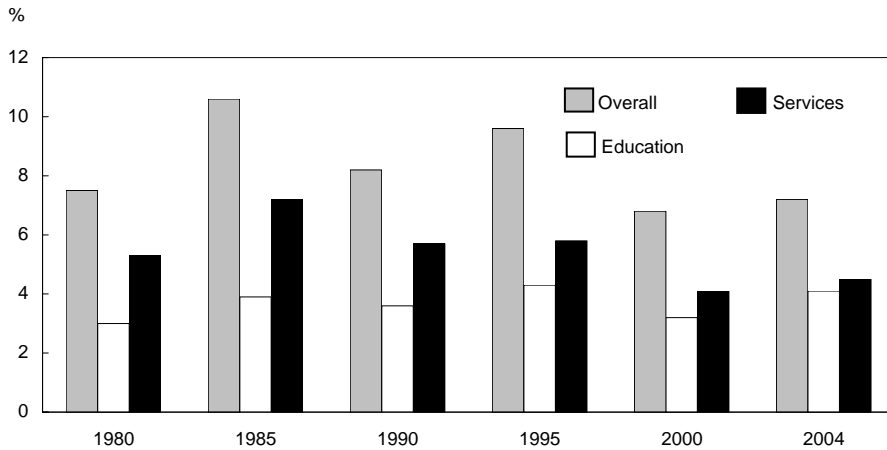
Employment in educational services

Between 1980 and 2004, total employment grew from 11 million to 16 million, and educational services employment from 695,000 to 1,038,000, keeping the proportion employed in the educational services industry at 6% to 7%. Overall service employment grew from 7 million to 12 million, leaving educational services at 9% of total services.



The proportion employed full time in educational services has been sliding—from 82% in 1980 to 74% in 2004 (one factor responsible for reduced expenditure on instruction). At the same time, women have increased their representation—from one-half to two-thirds of employment in educational services.

Unemployment rate in educational services

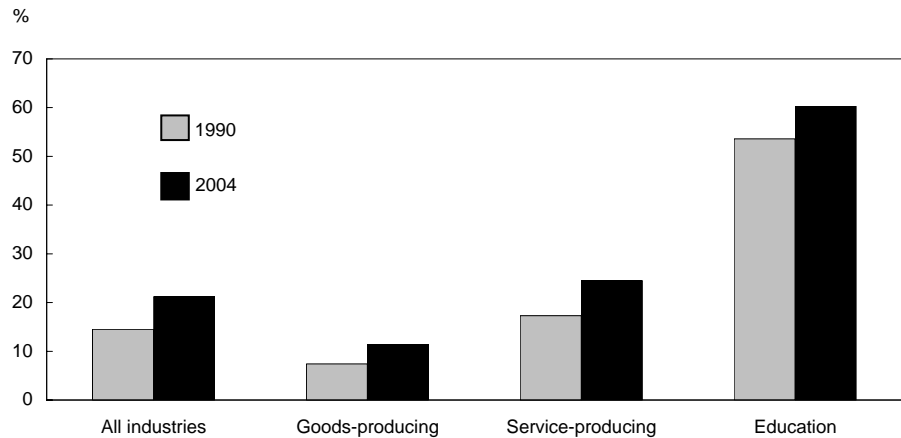


lower than the rate for all services or all industries. Between 1980 and 2004, the overall unemployment rate fluctuated between 6.8% and 12.0%, while in educational services, it varied between 3.0% and 4.6%.

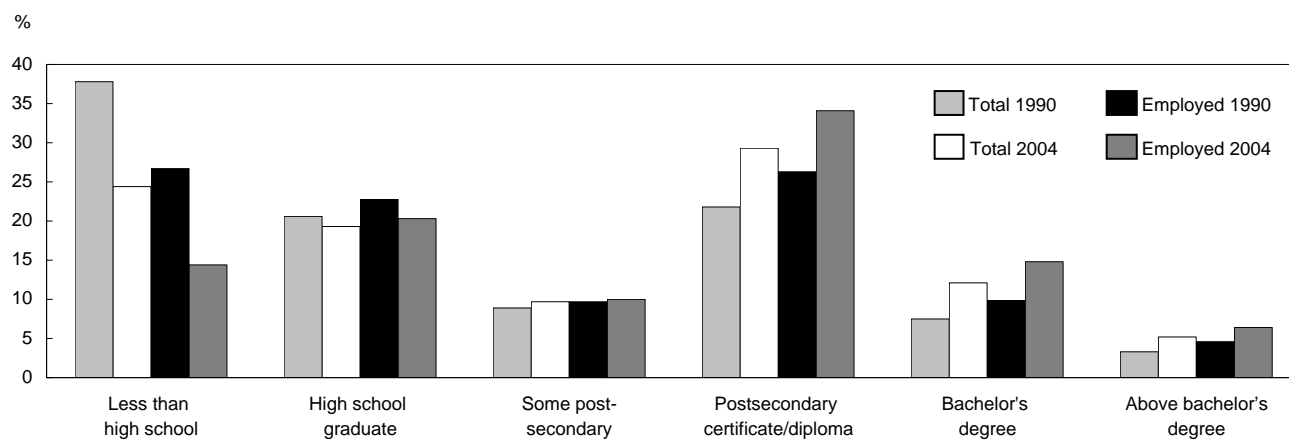
Generally, higher levels of education and skills are associated with lower unemployment. Those employed in educational services, who have relatively higher levels of education (see chart below), had an unemployment rate much

Percentage of employed with a university degree

Since the majority employed in educational services are teachers, they are likely to have higher levels of education—for many, a university degree may be an entry requirement. Some 60.3% had a university degree in 2004 compared with 53.6% in 1990—the corresponding proportions for the overall service-producing sector were 24.5% and 17.3%; for goods-producing, 11.4% and 7.4%. Among employed persons generally, the proportion with a university degree rose from 14.5% to 21.2% over the period.



Population and employed 15 and over by level of education



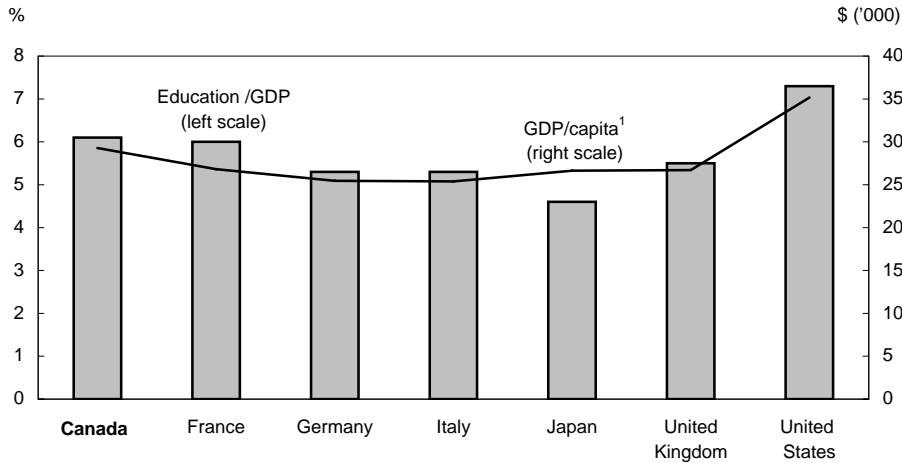
Educational attainment can be used as a crude proxy for the stock of human capital (the knowledge and skills that people acquire). In the general population, the proportion that had completed postsecondary education increased from 32.6% in 1990 to 46.6% in 2004; the proportion with a university degree increased from one-tenth to one-sixth over this period.

Among the employed, the shifts by education were more noticeable: 55.3% had completed postsecondary education in 2004 compared with 40.8% in 1990. Although the proportion with a bachelor's degree

increased by 5 percentage points (from 9.9% to 14.8%), the proportion with credentials above a bachelor's degree inched up by less than 2 points (4.6% to 6.4%).

Factors responsible for this improvement in human capital may include government initiatives to promote higher education, the desire to maintain Canada's social and economic competitiveness with other advanced nations, the labour market seeking more skilled persons, and changing demographics (for example, population aging, more immigration).

Education expenditure as a percentage of GDP for G-7 countries, 2001



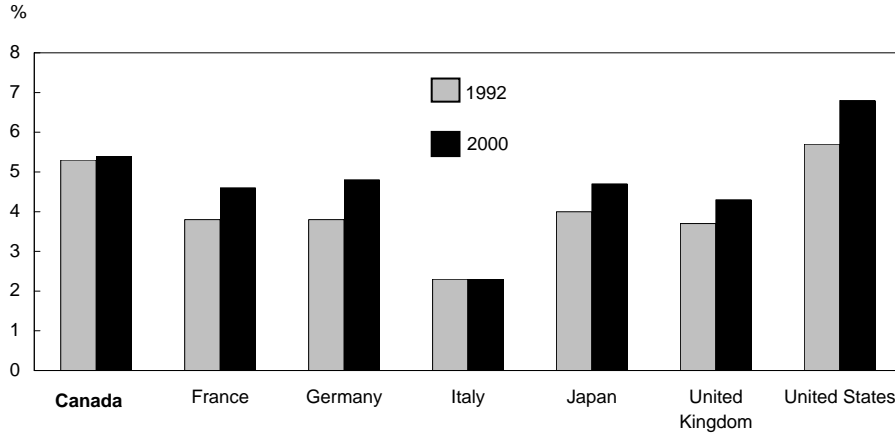
¹ Based on purchasing power parity in US 2001 dollars.

Among G-7 countries, Canada ranked second only to the United States in respect to spending on education. In 2001, expenditure on education was 6.1% of GDP compared with 7.3% in the United States and 4.6% in Japan.

Countries with higher GDP per capita spent a relatively larger share of GDP on education as well. The top four countries, ranked on the basis of these two ratios, were the United States, Canada, France and the United Kingdom. The remaining three G-7 countries showed a different pattern; for example, Japan, which ranked fifth on the basis of GDP per capita, was at the bottom in terms of GDP spent on education.

(GDP per capita is commonly used to compare living standards internationally. The ratio is based on purchasing power parity, which reflects the equivalent national currency needed to buy the same basket of goods that one US dollar will buy in the United States.)

Investment in knowledge as a percentage of GDP for G-7 countries



Knowledge can be gained not only through formal education but also through research and development activity and day-to-day job experience. Accordingly, it may be more meaningful to compare countries in terms of investment in knowledge rather than just formal education. Investment in knowledge includes spending on public and private higher education, research and development, and software. The importance a country places on knowledge can be gauged by its investment in knowledge expressed as a percentage of GDP.

Based on this ratio, Canada again ranked second only to the United States in both 1992 and 2000. Over this period, Canada's ratio barely changed (from 5.3% to 5.4%) while the U.S.'s climbed from 5.7% to 6.8%. Japan, which ranked at the bottom with respect to expenditure on education, ranked third in 1992 and fourth in 2000 in expenditure on knowledge. Japan, like the United States and Canada, has been putting emphasis on research and development activities as well as on developing software. On the other hand, the United Kingdom, which ranked fourth both in expenditure on formal education and per capita income, ranked sixth in investment in knowledge.

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