Poverty Dynamics among Vulnerable Groups in Canada

Tony Fang and Morley Gunderson

7HEN DISCUSSING INCOME INEQUALITY, THE TOPIC OF POVERTY ALMOST INVARIABLY comes up. Indeed, the terms are often used interchangeably (see Banting and Myles, in this volume). Yet the increase in inequality that has occurred in Canada in recent decades has been driven primarily by changes at the top of the income distribution, not at the bottom. The rapid rise in the income share of top earners — in particular, the top 1 percent of earners — is the main story. And, as Andrew Heisz (in this volume) points out, income inequality increased even though the after-tax incomes of those at the bottom of the income distribution grew significantly and the low-income rate, based on Statistics Canada's low-income cut-off (LICO), fell from over 15 percent in the mid-1990s to 9 percent in 2011. So inequality and poverty are not the same, although they are related. Inequality has risen in Canada because the incomes of top earners have grown much more rapidly than those of lower-income individuals. As a society our concern for the circumstances and living conditions of those with the lowest incomes should be informed by how this segment of the population is doing, not only in absolute terms but also relative to the others. By looking at the share of the population whose income falls below a threshold set at one-half the median income — a relative low-income measure (LIM) — we can gauge whether income inequality is increasing or decreasing in the lower half of the income distribution. Based on the LIM, the low-income rate increased throughout most of the 1990s and (unlike the LICO rate) has remained more or less steady at 13 percent since then (see Heisz, in this volume).

Beyond these movements in aggregate indicators of low income and how they might relate to growing concerns about rising income inequality trends, it is equally important from a policy standpoint to understand the dynamics of poverty. Recent research shows that, at any point in a given six-year period, as many as 20 percent of Canadians experience low income, but that, for a significant proportion, this is a transitory phenomenon: one-third are no longer in low income after a year, and the average duration is a little over two years (Murphy, Zhang and Dionne 2012). Some groups, however, are far more susceptible to *persistent* low income. Hatfield (2004, 20) explains succinctly why that is and why it matters: "Experiencing low income over several years can mean exclusion from meaningful participation in community life, long-term mental and physical health risks, living in bad housing, and restricted opportunities for the children whose parents must cope with inadequate incomes on a persistent basis...Exclusion and persistent low income often reinforce one another."

In this chapter, we examine the transitions into and out of poverty and the extent to which individuals in particular groups and with particular characteristics are more vulnerable than others to being trapped in persistent poverty. Vulnerable (high-risk) groups are defined in the literature as those with the highest concentration of persistent low income. As in similar studies (Hatfield 2004; Kapsalis and Tourigny 2002, 2007; Morissette and Zhang 2001), we consider that an individual is experiencing persistent low income if, over a given period, the cumulative post-transfer, post-tax income of the economic family to which the individual belongs falls short of the applicable LICO. Based on that definition, Hatfield (2004) identifies five vulnerable groups: Aboriginal persons living offreserve; recent immigrants; lone parents, defined as a family with only one parent and with at least one child; persons with disabilities; and unattached persons ages 45 to 64 living on their own. During the period from 1996 to 2001, low-income rates among these groups generally remained in the range of 20 to 30 percent, compared with an average of 3.4 percent for the nonvulnerable group. Persons belonging to at least one of these groups accounted for less than one-quarter of the population (23.8 percent) in 1996 but for over two-thirds (67.6 percent) of those who experienced persistent low income over the next six years (Hatfield 2004, 20). To these five vulnerable groups, we add a sixth — youths ages 20 to 24 who are not in school — in light of growing concerns that youths' initial experiences might have a longer-run legacy of more permanent scarring effects.

Although individuals in these groups are more at risk of persistent poverty, ultimately they are not all affected by it. Indeed, some never experience poverty,

while others lapse into poverty only temporarily. Recognizing the differences between these various states is important for policy purposes because they call for different types of interventions. For instance, prevention policies can reduce the likelihood of *entering* poverty, while adjustment policies can facilitate *leaving* poverty and help people avoid being *trapped* in poverty for an extended period of time. Understanding the tradeoffs involved in these different types of policies is also important, since they interact with one another. For example, passive income-maintenance programs that alleviate some of the damaging effects of financial poverty can reduce the incentive to work, but they can also provide the means to search for better jobs that, in turn, reduce the likelihood of entering or remaining in poverty.

Persistent poverty, the focus of this analysis, is of particular concern for policy-makers because it is not simply a matter of being temporarily in negative circumstances. As Hatfield (2004, 20) reminds us, "Many of the factors associated with persistent low income reflect absent, disrupted, or ineffective social networks, particularly those types of networks that enable access to earnings from stable paid employment."

The Survey of Labour and Income Dynamics

Or Analysis is based on five multi-year panels of Statistics Canada's Survey of Labour and Income Dynamics (SLID): panel 1 (1993-98), panel 2 (1996-2001), panel 3 (1999-2004), panel 4 (2002-07) and panel 5 (2005-10). Since we use annual data from the SLID and our focus is on year-to-year transitions, we combine the data from overlapping years. For example, 1996, 1997 and 1998 are in both panels 1 and 2, but since the data come from different panels, they involve different individuals, so this is an effective way to increase the sample size. The SLID is well suited for our analysis for a number of reasons. It is a longitudinal dataset that follows the same individuals over time, and there is now a series of panels available. It is a rich dataset, which combines income information from Statistics Canada's discontinued Survey of Consumer Finances (SCF) with more detailed labour market information. It provides detailed income information — for example, it includes market income plus government transfers such as Old Age Security, employment insurance, workers' compensation and social assistance, which are important

sources of income for persons in poverty — that enables us to determine whether the respondent falls below a LICO, an obviously important feature for the study of poverty. Finally, the SLID also contains information on a wide range of socio-demographic variables, allowing us to identify all six of our vulnerable groups as well as the benchmark nonvulnerable group. It should be noted, however, that Aboriginal persons living on-reserve are not included in the SLID and that Statistics Canada does not estimate LICOs for reserves. As such, the poverty rate for Aboriginal persons living off-reserve understates the poverty rate for all Aboriginal persons, since low-income rates are even higher for those living on-reserve than for those living off-reserve (Hatfield 2004, 20).

The Incidence of Poverty and Characteristics of Vulnerable Groups

VULNERABLE GROUPS CONSTITUTED A LARGER SHARE OF THE POPULATION LIVING IN poverty in 2010 than they did of the overall population (see table 1). This was especially the case for unattached older individuals, who represented 21.5 percent of the poor but only 7.2 percent of the overall population, and disabled persons, who represented 39.1 percent of the poor but 31.2 percent of the population. Youths not in school were the exception: their share of the poor was about the same as their share of the overall population. As the fourth row of table 1 indicates, the probability of individuals in a vulnerable group being poor was highest for older unattached individuals at 30.6 percent, and it ranged between 10 and 15 percent for the other groups — rates vastly higher than the 3.9 percent probability for nonvulnerable individuals.

These figures highlight the distinction between the incidence of poverty (that is, the percentage of each group that has income that falls below the LICO) and the distribution of poverty (that is, the percentage of the poor in each group). It is possible for a particular group to have a high incidence of poverty but not to constitute a large share of the poor simply because the group represents a small share of the population. Disabled persons, for example, had a mid-level incidence of poverty (12.7 percent were poor in 2010), but because they constituted a large share of the population (31.2 percent), they made up the largest share of the poor (39.1 percent). Conversely, nonvulnerable persons had a low probability of being poor (only 3.9 percent were poor), but because they constituted a large share of the population (54.9 percent), they made up a fairly large share of the poor (20.9 percent).

Characteristics of vulnerable groups most at risk of persistent poverty, Canada, 2010 (percent) Table 1

	Not	Aboriginal	Recent	Lone	Youths	Disabled	Unattached
Variables	vulnerable	persons ¹	immigrants²	parents	ages 20-24³	persons	ages 45-64 ⁴
Share of population	54.9	3.8	4.0	3.2	3.7	31.2	7.2
Share of poor	20.9	4.5	5.9	4.7	3.5	39.1	21.5
Not in poverty	96.1	87.8	85.0	84.9	90.2	87.3	69.4
In poverty ⁵	3.9	12.1	15.0	15.1	8.6	12.7	30.6
Characteristics							
Male	51.4	43.3	43.6	18.6	54.1	47.1	50.8
Female	48.6	56.7	56.4	81.4	45.9	52.9	49.2
Not visible minority	86.4	95.0	19.1	82.1	83.8	86.0	92.3
Visible minority	13.2	5.0	80.9	17.1	16.1	13.5	7.3
Ages 20-24	ı	6.8	5.0	2.1	100.0	2.3	ı
Ages 25-34	21.5	18.2	31.4	23.2	I	7.8	ı
Ages 35-44	22.4	22.5	35.0	43.1	ı	11.3	ı
Ages 45-54	23.0	24.2	17.3	29.2	ı	20.6	47.0
Ages 55-64	16.7	17.1	4.2	2.3	I	22.6	53.0
Ages 65 +	16.4	11.1	7.1	1	ı	35.4	1
Single, never married	13.8	23.7	13.8	32.3	84.5	16.3	I
Married, common law	78.1	56.8	79.2	2.7	14.0	58.4	1
Separated	1.9	6.9	1.9	33.1	1.4	4.3	ı
Divorced	2.9	8.6	2.4	26.9	I	9.4	47.0
Widowed	3.3	4.1	2.7	4.9	ı	11.5	53.0
Number of children	1.78	1.96	1.72	2.08	0.14	2.18	1.27
Less than high school graduation	13.4	24.7	8.9	10.6	16.9	27.1	17.9
High school graduate	24.5	26.0	26.9	28.4	43.1	25.8	25.5
Nonuniv. postsec. certificate	31.0	33.6	18.0	39.7	26.2	27.7	29.4
University degree or certificate	27.0	11.7	43.5	18.9	8.2	14.4	23.2
Health poor	0.2	5.8	4.4	3.3	0.7	15.1	11.0
Health fair	3.7	15.4	8.8	10.3	5.3	28.6	15.8
Health good	26.8	28.7	31.3	29.9	23.4	33.4	30.4
Health very good	43.2	33.9	31.3	35.1	38.4	18.5	27.5
Health excellent	25.6	15.8	23.8	21.4	30.3	4.3	14.8

Characteristics of vulnerable groups most at risk of persistent poverty, Canada, 2010 (percent) Table 1 (cont.)

Variables	Not vulnerable	Aboriginal persons ¹	Recent immigrants ²	Lone	Youths ages 20-24 ³	Disabled persons	Unattached ages 45-64 ⁴
Not stressful	8.2	8.6	18.2	4.7	14.2	12.9	10.0
Not very stressful	19.1	19.5	16.7	11.9	29.8	37.4	19.7
Somewhat stressful	52.7	47.3	46.0	57.7	43.7	17.7	20.0
Very stressful	8.9	17.0	14.4	25.4	9.6	26.6	18.9
Unemployment rate	8.08	7.93	8.02	8.06	7.99	8.09	8.07
No family member employed	15.4	19.4	5.5	11.5	2.9	40.6	33.2
Family member employed	80.5	76.6	90.1	84.9	90.4	56.4	8.99
No negative life event	98.3	97.0	99.4	89.0	96.0	97.8	95.5
Negative life event	1.7	3.0	9.0	11.0	4.0	2.2	4.5
Rural	12.5	16.6	1.4	9.6	10.8	13.0	10.4
Urban pop. 0-99,999	18.6	28.3	4.0	21.7	20.7	21.9	20.3
Urban pop. 100,000-499,999	18.3	18.8	7.7	19.8	18.9	20.2	20.1
Urban pop. 500,000 and over	50.6	36.3	86.9	49.0	49.6	45.0	49.2
Ontario	38.0	29.2	20.7	37.3	40.9	40.4	35.2
Newfoundland/Labrador	1.7	3.5	0.2	1.1	1.7	1.6	1.4
Prince Edward Island	0.4	0.2	0.04	0.7	0.5	0.5	0.5
Nova Scotia	2.8	2.4	0.5	2.7	2.8	3.4	3.0
New Brunswick	2.3	2.1	0.2	2.5	2.0	2.5	2.9
Quebec	24.4	25.7	17.7	27.6	17.8	22.1	28.2
Manitoba	3.1	7.4	3.6	3.4	4.0	3.8	3.1
Saskatchewan	2.7	4.8	1.6	1.9	3.8	3.3	3.3
Alberta	11.1	11.9	10.6	11.2	14.5	14.5	9.2
British Columbia	13.6	12.8	14.8	11.7	12.1	12.1	13.1
Sample size	21,204	1,703	550	1,077	1,413	12,900	2,440

Note: The categories in italics are the omitted reference categories in our regression analysis. The proportions do not always sum to 1 because of non-responses on some of the questions. Also, the shares in the first two rows can sum to more than 100 percent since the groups are not mutually exclusive. Source: Statistics Canada, Survey of Labour and Income Dynamics, 2010.

Living off-reserve. ² Ten years or less since arrival. ³ Not in school. ⁴ Living on their own (that is, not living with a spouse, children, parents or relatives).

⁵ Based on Statistics Canada's low-income cut-off (LICO).

From a policy perspective, both indicators are informative. Some policies might be directed at groups that, even though they constitute only a small portion of the poor, have a high incidence of poverty because of their disadvantaged position, while different policies might be directed at groups that constitute a large portion of the poor in order to help reduce the overall poverty rate.

The particular characteristics of each vulnerable group are best illustrated by comparing their distribution in each category with the corresponding distribution in the nonvulnerable group (table 1, column 1). For example, individuals belonging to vulnerable groups (except youths) are more likely to be female. The gender differences are not large, but the high proportion of female lone parents is notable. Aboriginal persons are disproportionately young (under age 24), have high rates of separation and divorce and tend to have lower levels of educational attainment in general. As expected, recent immigrants tend to be young and are more likely to live in Ontario, Quebec and British Columbia. They are also disproportionately likely to belong to visible minorities and to have a university degree, which suggests a racialization of poverty related to the difficulty recent visible minority immigrants have in integrating into the Canadian labour market. Lone parents are considerably more likely than nonvulnerable individuals to be female, to be middle-aged and to have experienced a negative life event. They are also slightly more likely to have a family member (such as a parent, relative or older child) who is employed. Persons with a disability tend to be older — an issue of growing concern as the population ages — with high rates of separation and divorce and lower levels of education. Overall, individuals in vulnerable groups are more likely to have poorer health, to have experienced a negative life event and to consider their life to be stressful.

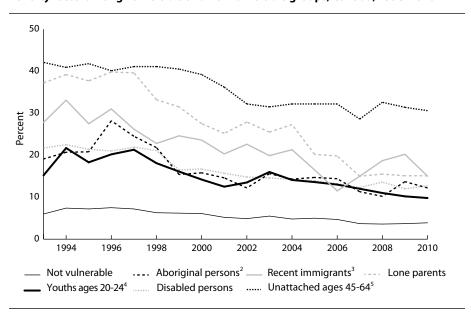
Poverty Trends

POVERTY TRENDS AMONG BOTH VULNERABLE AND NONVULNERABLE GROUPS SHOULD be considered in the context of long-term trends in the overall poverty rate in Canada since the mid-1970s. As table A1 indicates, the LICO-based poverty rate hovered around 12 to 13 percent in the late 1970s and 1980s, although with significant yearly fluctuations, before climbing by a couple of percentage points to 14 to 15 percent for several years during the 1990s (see the appendix). Beginning in 1997, however, there was a relatively steady pattern of decline from 15 percent to less than 9 percent in 2011.

This sharp decline in Canada's overall poverty rate is for the most part also reflected among the nonvulnerable and vulnerable groups we examined, although the patterns differ somewhat (see figure 1). As shown in table 2, all groups experienced significant reductions in poverty rates between 1993 and 2010, although the groups that had the highest poverty rates in 1993 also saw the largest drops. In particular, the poverty rate among lone parents fell by 22.1 percentage points, from 37.2 percent to 15.1 percent. Over the same period, recent immigrants and unattached older individuals saw their poverty rates decline by 12.8 and 11.5 percentage points, respectively. The poverty rate among immigrants fluctuated considerably over time, however, dropping from 33.1 percent in 1994 to 11.5 percent in 2006, before climbing back up to 20.2 percent in 2009 and declining again to 15 percent in 2010. The poverty rate among the nonvulnerable group also fell fairly steadily from 6 percent in 1993 to 3.9 percent in 2010.

Figure 1

Poverty rates¹ among vulnerable and nonvulnerable groups, Canada, 1993-2010



Source: Authors' calculations based on Statistics Canada, Survey of Labour and Income Dynamics, panels 1-5, 1993-2010.

Based on Statistics Canada's low-income cut-off (LICO).

² Living off-reserve.

³ Ten years or less since arrival.

⁴ Not in school.

⁵ Living on their own (that is, not living with a spouse, children, parents or relatives).

Poverty rates among vulnerable and nonvulnerable groups, Canada, 1993-2010 (percent) Table 2

193 60 191 278 37.2 152 217 421 194 74 207 33.1 39.2 21.7 225 40.9 195 72 37.7 18.3 21.4 41.8 41.8 196 7.5 28.2 31.0 38.6 21.3 21.4 41.8 199 7.2 24.5 26.2 38.6 21.3 21.9 41.1 199 6.3 21.8 26.2 31.5 16.1 41.1 41.1 1999 6.2 15.4 24.6 31.5 16.1 41.1 41.1 2000 6.1 15.4 24.6 27.5 14.2 14.1 41.1 2002 6.2 14.6 20.3 25.5 14.2 14.2 31.2 2004 4.9 12.2 22.6 27.5 14.2 14.2 31.2 2004 4.8 14.3 14.3 14.1 14.2	Year	Not vulnerable	Aboriginal persons ²	Recent immigrants³	Lone parents	Youths ages 20-24 ⁴	Disabled persons	Unattached ages 45-64 ⁵
74 207 33.1 39.2 21.7 225 72 208 27.5 37.7 18.3 21.4 7.5 28.2 31.0 39.8 20.2 21.0 6.3 24.5 26.2 39.6 21.3 21.0 6.3 21.8 26.2 39.6 21.3 21.0 6.1 15.8 22.8 18.1 21.1 6.1 15.8 23.6 27.5 14.2 16.7 6.2 14.6 20.3 25.2 12.5 14.8 6.2 15.6 20.3 25.2 15.6 14.8 6.3 15.6 20.3 25.5 16.0 14.8 6.4 14.3 11.3 27.3 14.1 14.2 6.5 15.6 20.2 13.6 13.2 7 14.4 11.5 15.8 13.0 8.7 14.2 15.3 12.0 13.2 9.8 10.2 12.3 12.3 12.3 9.8 10.2 12.0	1993	0.9	19.1	27.8	37.2	15.2	21.7	42.1
7.2 20.8 27.5 18.3 21.4 7.5 28.2 31.0 39.8 20.2 21.0 7.2 24.5 26.2 39.6 21.3 21.9 6.3 21.8 22.8 31.5 18.1 21.9 6.1 15.4 24.6 31.5 16.1 21.1 6.1 15.8 24.6 14.2 16.7 16.7 6.1 15.8 27.5 14.2 16.7 6.5 15.6 27.5 14.8 14.8 6.6 15.6 27.5 14.8 14.8 7.8 14.3 21.3 27.3 14.8 14.8 8.0 14.7 16.5 20.2 13.6 13.2 8.7 14.4 11.5 15.8 13.0 13.2 8.7 14.4 11.5 15.0 12.3 13.2 8.8 10.2 12.3 12.3 12.3 13.2 8.8 10.2 12.0 12.3 12.3 12.3 8.9 12.3 </td <td>994</td> <td>7.4</td> <td>20.7</td> <td>33.1</td> <td>39.2</td> <td>21.7</td> <td>22.5</td> <td>40.9</td>	994	7.4	20.7	33.1	39.2	21.7	22.5	40.9
7.5 28.2 31.0 39.8 20.2 21.0 7.2 24.5 26.2 39.6 21.3 21.9 6.3 21.8 22.8 33.2 18.1 21.9 6.1 15.4 24.6 31.5 16.1 16.5 6.1 15.8 23.6 27.5 14.2 16.7 6.2 14.6 20.3 27.9 14.8 14.8 6.3 15.6 15.9 14.8 14.8 14.8 6.0 14.3 21.3 27.3 14.1 14.2 6.0 14.3 21.3 27.3 14.1 14.2 6.0 14.7 16.5 20.2 13.6 13.2 7.0 14.4 11.5 15.8 13.0 13.2 8.7 11.3 15.0 12.0 13.2 9.8 10.2 15.0 12.0 13.6 9.8 10.2 15.0 12.0 12.3	995	7.2	20.8	27.5	37.7	18.3	21.4	41.8
7.2 24.5 26.2 39.6 21.3 21.9 6.3 21.8 33.2 181 21.1 6.1 15.4 24.6 31.5 16.1 16.1 6.1 15.8 23.6 27.5 14.2 16.7 6.1 14.6 20.3 25.2 14.8 15.7 6.5 15.6 22.6 27.9 14.8 14.8 6.0 14.3 21.3 14.1 14.8 6.0 14.7 16.5 16.0 14.2 6.0 14.7 16.5 16.0 13.9 7.2 14.4 11.5 19.8 13.0 13.2 8.7 14.2 15.0 15.0 12.0 13.2 8.7 11.3 15.0 15.0 12.0 13.5 8.8 10.2 15.0 15.0 12.0 13.6 8.9 12.2 15.0 15.1 15.0 12.0 8.9 12.1 15.0 15.1 15.0 12.0 8.9 12.1 <td>966</td> <td>7.5</td> <td>28.2</td> <td>31.0</td> <td>39.8</td> <td>20.2</td> <td>21.0</td> <td>40.1</td>	966	7.5	28.2	31.0	39.8	20.2	21.0	40.1
6.3 21.8 33.2 18.1 21.1 6.2 15.4 24.6 31.5 16.1 16.5 6.1 15.8 23.6 27.5 14.2 16.7 5.2 14.6 20.3 25.2 12.5 15.7 4.9 12.2 22.6 27.9 14.8 14.8 5.5 15.6 27.9 16.0 14.8 5.0 14.3 21.3 27.3 14.1 14.2 6.7 14.3 16.5 20.2 13.6 13.9 7.1 14.4 11.5 19.8 13.6 13.9 8.7 11.3 15.0 12.0 13.6 8.6 10.2 15.0 12.0 13.6 8.7 11.7 10.2 12.3 12.3 8.7 12.1 10.2 12.0 12.0 8.7 15.1 10.2 12.0 12.0 8.9 12.1 15.1 15.1 12.7	266	7.2	24.5	26.2	39.6	21.3	21.9	41.1
6.1 15.4 24.6 31.5 16.1 16.5 6.1 15.8 23.6 27.5 14.2 16.7 5.2 14.6 20.3 25.2 15.7 15.7 4.9 12.2 22.6 15.6 14.8 5.5 15.6 15.9 14.8 14.8 5.0 14.7 16.5 16.1 14.2 6.0 14.7 16.5 13.6 13.9 7.0 14.4 11.5 15.0 13.0 13.2 8.7 11.3 15.0 15.0 12.3 13.2 9.8 10.2 15.1 10.2 13.6 13.6 9.8 10.2 15.7 15.0 12.0 12.0 9.8 13.7 15.1 15.1 15.7 12.7	866	6.3	21.8	22.8	33.2	18.1	21.1	41.1
6.115.823.627.514.216.75.214.620.325.212.515.74.912.222.627.913.514.85.515.619.925.516.014.65.014.716.520.213.613.94.714.411.519.813.013.23.711.315.015.012.33.613.720.215.110.212.03.713.720.215.110.212.03.912.215.015.19.812.7	666	6.2	15.4	24.6	31.5	16.1	16.5	40.5
5.214.620.325.215.715.74.912.225.613.614.85.515.619.925.516.014.64.814.321.327.314.114.25.014.716.520.213.613.94.714.411.519.813.013.23.711.315.015.015.110.213.63.713.720.215.110.212.03.912.215.015.19.812.7	000	6.1	15.8	23.6	27.5	14.2	16.7	39.2
4.9 12.2 22.6 27.9 13.5 14.8 5.5 15.6 19.9 25.5 16.0 14.6 4.8 14.3 21.3 27.3 14.1 14.2 5.0 14.7 16.5 20.2 13.6 13.9 4.7 14.4 11.5 19.8 13.0 13.2 3.7 11.3 15.0 15.0 12.0 13.6 3.7 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.0 15.1 9.8 12.7	1001	5.2	14.6	20.3	25.2	12.5	15.7	36.2
5.5 15.6 19.9 25.5 16.0 14.6 4.8 14.3 27.3 14.1 14.2 5.0 14.7 16.5 20.2 13.6 13.9 4.7 14.4 11.5 19.8 13.0 13.2 3.7 11.3 15.0 15.0 12.3 3.6 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.0 15.1 9.8 12.7	005	4.9	12.2	22.6	27.9	13.5	14.8	32.2
4.8 14.3 21.3 27.3 14.1 14.2 5.0 14.7 16.5 20.2 13.6 13.9 4.7 14.4 11.5 19.8 13.0 13.2 3.7 11.3 15.0 15.0 12.3 3.6 10.2 15.1 10.2 13.6 3.7 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.0 15.1 9.8 12.7	003	5.5	15.6	19.9	25.5	16.0	14.6	31.5
5.0 14.7 16.5 20.2 13.6 13.9 4.7 14.4 11.5 19.8 13.0 13.2 3.7 11.3 15.0 15.0 12.3 3.6 10.2 18.7 15.1 10.2 13.6 3.7 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.1 9.8 12.7	004	4.8	14.3	21.3	27.3	14.1	14.2	32.2
4.7 14.4 11.5 19.8 13.0 13.2 3.7 11.3 15.0 15.0 12.3 3.6 10.2 18.7 15.5 11.0 13.6 3.7 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.0 15.1 9.8 12.7	900	5.0	14.7	16.5	20.2	13.6	13.9	32.2
3.7 11.3 15.0 15.0 12.0 12.3 3.6 10.2 18.7 15.5 11.0 13.6 3.7 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.1 9.8 12.7	900	4.7	14.4	11.5	19.8	13.0	13.2	32.2
3.6 10.2 18.7 15.5 11.0 13.6 3.7 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.0 15.1 9.8 12.7	200	3.7	11.3	15.0	15.0	12.0	12.3	28.6
3.7 13.7 20.2 15.1 10.2 12.0 3.9 12.2 15.0 15.1 9.8 12.7	800	3.6	10.2	18.7	15.5	11.0	13.6	32.6
3.9 12.2 15.0 15.1 9.8 12.7	600	3.7	13.7	20.2	15.1	10.2	12.0	31.4
	010	3.9	12.2	15.0	15.1	8.6	12.7	30.6

Source: Authors' calculations based on Statistics Canada, Survey of Labour and Income Dynamics, panels 1-5, 1993-2010.

¹ Based on Statistics Canada's low-income cut-off (LICO). ² Living off-reserve. ³ Ten years or less since arrival. ⁴ Not in school. ⁵ Living on their own (that is, not living with a spouse, children, parents or relatives).

Looking at the yearly changes in poverty rates, it is evident that some groups are more affected than others by the business cycle. Years of recession, post-recession and economic slowdown, in which the unemployment rate was unusually high, were also marked by reversals in the broad trend of decline in the overall poverty rate (see table A1 in the appendix). As table 2 shows, however, the poverty rate among the nonvulnerable group did not change much during those more difficult years for the economy, but it increased substantially among certain vulnerable groups: for example, for Aboriginal persons in 1994, 2003 and 2009, for immigrants in 1994, 2002 and 2007-09, for youths in 1994 and 2003 and for unattached older individuals in 2008.

The persistence of poverty

One way to measure the persistence of poverty is to look at the probability of remaining in low income for one year out of a six-year period, two years out of six and three or more years out of six — the latter constitutes our measure of long-term poverty (see table 3). Morissette and Zhang (2001), in contrast, define their measure of long-term poverty as being in a low-income state for four or more years out of six. Confidentiality restrictions because of the small size of some of our vulnerable groups precluded our using such a measure, but our three-ormore-years indicator likely approximates it.

Table 3

Duration of poverty among vulnerable and nonvulnerable groups, Canada, 20052010 (percent)

Duration of poverty	1 of 6 years	2 of 6 years	3 or more of 6 years
Not vulnerable	6.0	2.4	2.8
Aboriginal persons ¹	7.3	4.3	8.9
Recent immigrants ²	9.7	2.1	12.4
Lone parents	8.7	5.6	13.8
Youths ages 20-24 ³	21.8	10.9	8.8
Disabled persons	7.0	3.5	9.9
Unattached ages 45-64 ⁴	11.5	5.7	24.9

Source: Authors' calculations based on Statistics Canada, Survey of Labour and Income Dynamics, panels 4-5, 2005-2010.

¹ Living off-reserve.

² Ten years or less since arrival.

³ Not in school

⁴ Living on their own (that is, not living with a spouse, children, parents or relatives).

As expected, not only was the nonvulnerable benchmark group less likely to experience poverty, but any poverty this group did experience was likely to be temporary — usually for only one out of six years. Vulnerable groups, in contrast, were much more likely to experience persistent poverty. For example, although only 2.8 percent of the nonvulnerable group experienced poverty for three or more of the six years, such persistent poverty was much more prevalent among vulnerable groups, ranging from 8.9 percent among Aboriginal persons to 24.9 percent among unattached individuals ages 45 to 64.²

Transitions into and out of poverty

Tables 4 and 5 illustrate the trends in the rates of entry into and exit from poverty of individuals in the vulnerable and nonvulnerable groups over the 1993-2010 period. Figure 2 shows average transition rates for the initial (1993-98) and final (2005-10) five-year periods. In the case of the nonvulnerable benchmark group, the probability of entering poverty in a given year declined fairly steadily over the period: only 3.3 percent who were not poor in 1993 saw their incomes fall under the LICO in 1994; by 2009-10, that proportion had declined by almost half, to 1.7 percent. Among this nonvulnerable group, the probability of falling into poverty in the final five-year period was less than 64 percent of what it was in the initial five-year period.

Despite their greater incidence of poverty, all vulnerable groups also saw a decline in their probability of entering poverty between the initial and final five-year periods, and for most groups (particularly immigrants, Aboriginal and disabled persons), the decline in their risk of poverty was even greater than that experienced by the nonvulnerable group (see table 4 and figure 2a). Unattached older individuals and lone parents had the highest risk of entering poverty in both periods.

For most vulnerable groups, however, the risk of poverty spiked upward during years of high unemployment (the shaded rows in table 4). For example, for most vulnerable groups, rates of entry into poverty were considerably higher between 1993 and 1994 than between 1994 and 1995, whereas the rate remained about the same for the nonvulnerable group. The rate of entry into poverty increased abruptly for immigrants in 1993-94 and 2002-03, for Aboriginal persons in 2002-03 and 2008-09, for lone parents in 1993-94 and 2008-09 and for unattached older individuals in 1993-94 and 2008-09. In essence, the

Transition rates into poverty among vulnerable and nonvulnerable groups, Canada, 1993-2010 (percent)

Transition	Not vulnerable	Aboriginal persons ²	Recent immigrants ³	Lone parents	Youths ages 20-24 ⁴	Disabled persons	Unattached ages 45-64 ⁵
1993-94	3.3	8.2	12.8	10.9	6.1	7.7	12.4
1994-95	3.1	7.0	3.7	7.1	6.4	5.8	9.2
1995-96	2.3	3.9	9.9	8.7	5.4	4.6	7.7
1996-97	2.9	9.9	7.4	8.2	9.8	4.5	7.4
1997-98	2.1	6.8	6.4	6.1	6.8	4.9	6.4
1998-99	2.6	6.1	6.6	6.9	5.6	5.6	7.8
1999-2000	2.4	5.5	8.1	7.2	6.4	4.2	6.8
2000-01	1.8	3.8	7.0	5.1	4.3	3.5	6.9
2001-02	2.1	3.6	4.2	5.7	6.4	4.5	7.9
2002-03	2.0	7.2	7.3	7.0	5.5	4.1	4.7
2003-04	1.7	3.9	8.4	5.8	5.0	3.1	6.7
2004-05	1.6	3.5	4.4	3.5	4.6	2.8	2.0
2005-06	1.9	4.5	2.5	4.7	5.3	3.4	6.3
2006-07	1.4	2.3	2.9	4.8	5.5	3.3	3.7
2007-08	2.1	2.5	3.2	3.1	3.7	2.6	6.1
2008-09	1.6	4.7	4.1	5.6	4.0	3.1	6.3
2009-10	1.7	3.6	4.5	6.4	5.6	2.8	5.6
5-year average 1993-98	2.7	6.5	7.4	8.2	6.7	5.5	8.6
5-year average 2005-10	1.7	3.5	3.4	4.9	4.8	3.0	5.6
Ratio: 2005-10/1993-98	0.635	0.542	0.466	0.600	0.724	0.553	0.650

Source: Authors' calculations based on Statistics Canada, Survey of Labour and Income Dynamics, panels 1-5, 1993-2010.

The percentage of individuals who were not living in poverty in year 1 and who were living in poverty in year 2.

² Living off-reserve.

³ Ten years or less since arrival.

⁴ Not in school.

 $^{^{\}rm S}$ Living on their own (that is, not living with a spouse, children, parents or relatives).

Transition rates out of povert $y^{
m j}$ among vulnerable and nonvulnerable groups, Canada, 1993-2010 (percent) **Table 5**

Transition	Not vulnerable	Aboriginal persons ²	Recent immigrants ³	Lone parents	Youths ages 20-24 ⁴	Disabled persons	Unattached ages 45-64 ⁵
1993-94	33.2	29.9	15.5	28.3	33.3	18.2	13.0
1994-95	40.9	27.8	31.2	27.7	47.4	26.0	16.9
1995-96	38.4	16.8	16.8	22.3	28.6	21.5	16.7
1996-97	37.7	26.1	30.8	21.8	42.9	17.4	16.5
1997-98	41.5	35.7	34.2	28.1	49.4	19.0	16.7
1998-99	38.3	38.1	39.3	40.2	35.5	19.3	14.4
1999-2000	42.9	27.9	30.1	31.7	42.7	24.5	19.2
2000-01	45.5	41.5	33.7	39.1	9.09	25.0	23.9
2001-02	40.5	38.4	16.8	20.9	47.8	26.1	21.2
2002-03	40.0	26.1	39.1	23.7	40.4	23.5	17.9
2003-04	38.7	34.5	27.7	31.7	46.9	24.7	14.1
2004-05	33.6	36.6	39.0	37.5	58.2	22.6	20.0
2005-06	43.5	35.7	38.4	37.6	6.09	25.8	17.9
2006-07	52.6	37.3	37.1	46.5	60.5	30.8	23.9
2007-08	37.8	44.3	38.1	51.8	59.1	32.4	12.7
2008-09	45.0	34.4	34.3	34.3	34.6	26.7	19.8
2009-10	39.6	24.2	41.5	30.7	41.0	25.4	17.7
5-year average 1993-98	38.3	27.3	25.7	25.6	40.3	20.4	16.0
5-year average 2005-10	43.7	35.2	37.9	40.2	51.2	28.2	18.4
Ratio: 2005-10/1993-98	1.140	1.291	1.47.4	1.56.7	1.270	1.382	1.153

Source: Authors' calculations based on Statistics Canada, Survey of Labour and Income Dynamics, panels 1-5, 1993-2010.

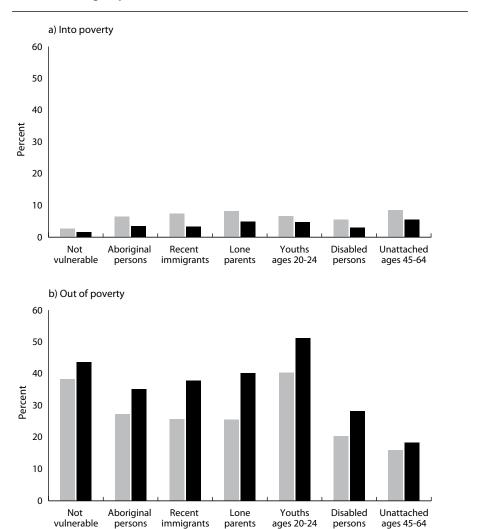
¹ The percentage of individuals who were living in poverty in year 1 and who were no longer living in poverty in year 2.

³Ten years or less since arrival. ² Living off-reserve.

 $^{^4 \}mbox{Not in school.}$ $^5 \mbox{Living on their own (that is, not living with a spouse, children, parents or relatives).$

Figure 2

Five-year average rates of transition into and out of poverty among vulnerable and nonvulnerable groups, Canada, 1993-1998 and 2005-2010



Source: Authors' calculations based on Statistics Canada, Survey of Labour and Income Dynamics, panels 1-5, 1993-2010.

■ 5-year average rate 2005-10

■ 5-year average rate 1993-98

long-term trend of declining rates of entry into poverty was interrupted during periods of economic downturn and high unemployment, and vulnerable groups were affected the most. This highlights the importance of having a growing, full-employment economy as the first line of defence against poverty.

As table 5 and figure 2b show, the long-term trend of exiting poverty was more or less the opposite of the trend of entering poverty, except that exit rates fluctuated more from year to year. Nonetheless, the long-term trend in the probability of leaving poverty was generally upward overall, and when the probability of entering poverty was low, the probability of leaving tended to be high and vice versa. For all groups, the probability of leaving poverty in the final five-year period (2005-10) was higher than in the initial five-year period (1993-98), particularly for lone parents and immigrants. As well, years of high unemployment (the shaded rows in table 5) generally saw lower rates of leaving poverty, again indicating that vulnerable groups are disproportionately harmed by downturns in the economy relative to the nonvulnerable group. It appears that economic factors that increase the probability of entering poverty also tend to decrease the probability of leaving poverty and vice versa.

Regression Analysis of Transitions into and out of Poverty

In table 6 we present the coefficient estimates from a linear probability regression equation that measures the effect of being in a particular vulnerable group, relative to not being in that group, on the probability of entering poverty.³ (Note that the mean values of the dummy variables between zero and one, and not percentages, are used for purposes of the analysis and in calculating the results reported in tables 5 and 6.) We conducted transition regressions for the full 1993-2010 period and for the more recent 2005-10 period, with and without controlling for the effect of other variables on the transition into and out of poverty. The regressions based on estimating differences in gross transition probabilities without controlling for the effect of other determinants reflect an amalgam of characteristics, such as age and education, of vulnerable groups that could affect their risk of poverty, as well as what could be considered a pure at-risk group effect. This is a meaningful portrayal, since, for some purposes, what is of interest is what happened overall to a vulnerable group, reflecting both changes in its characteristics and the vulnerable-group

Table 6

Determinants of probability of transitioning into and out of poverty among vulnerable groups, Canada, 1993-2010

_	No co	ntrols	With co	ontrols
Vulnerable groups	1993-2010	2005-2010	1993-2010	2005-2010
a) Transitions into poverty				
Mean of dependent variable	0.023	0.018	0.023	0.018
Not Aboriginal persons				
Aboriginal persons ¹	0.009***	0.0004	0.005	- 0.001
	(0.004)	(0.928)	(0.137)	(0.782)
Not recent immigrants				
Recent immigrants ²	0.025***	0.010**	0.023***	0.005
	(0.000)	(0.024)	(0.000)	(0.267)
Not lone parents				
Lone parents	0.027***	0.022***	0.016***	0.011**
	(0.000)	(0.000)	(0.000)	(0.018)
Not youths ages 20-24				
Youths ages 20-24 ³	0.019***	0.017***	0.013***	0.008**
Not disabled a success	(0.000)	(0.000)	(0.000)	(0.023)
Not disabled persons	0.009***	0.008***	0.005***	0.003**
Disabled persons	(0.000)	(0.000)	(0.000)	(0.042)
Not unattached ages 45-64	(0.000)	(0.000)	(0.000)	(0.042)
Unattached ages 45-64 ⁴	0.032***	0.029***	0.025***	0.020***
Offactached ages 43-04	(0.000)	(0.000)	(0.000)	(0.000)
Sample size	645,482	194,509	645,482	194,509
•		,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
b) Transitions out of povert	•	0.244	0.220	0.244
Mean of dependent variable	0.239	0.241	0.239	0.241
Not Aboriginal persons				
Aboriginal persons ¹	0.008	0.024	- 0.004	0.013
	(0.667)	(0.424)	(0.841)	(0.681)
Not recent immigrants				
Recent immigrants ²	- 0.052***	- 0.045	- 0.023	- 0.022
	(0.000)	(0.191)	(0.169)	(0.552)
Not lone parents	0.041***	0.005	0.000	0.000
Lone parents	- 0.041***	- 0.005	- 0.009	- 0.008
Not youths ages 20-24	(0.000)	(0.826)	(0.400)	(0.757)
Youths ages 20-24	- 0.001	0.0006	0.012	0.011
10uti 13 ayes 20-24	(0.904)	(0.981)	(0.357)	(0.718)
Not disabled persons	(0.704)	(0.501)	(0.557)	(0.710)
Disabled persons	- 0.084***	- 0.058***	- 0.023***	- 0.003
pe	(0.000)	(0.000)	(0.001)	(0.814)
Not unattached ages 45-64	()	(=====	(====,	(=.0)
Unattached ages 45-64 ⁴	- 0.117***	- 0.130***	- 0.075***	- 0.105***
3	(0.000)	(0.000)	(0.000)	(0.000)
Sample size	51,795	11,665	51,795	11,665

Source: Authors' estimates.

Note: The categories in italics are the omitted reference categories in our regression analysis. Columns 3 and 4 include the control variables indicated in table 1.

¹ Living off-reserve. ² Ten years or less since arrival. ³ Not in school. ⁴ Living on their own (that is, not living with a spouse, children, parents or relatives).

^{**}p < .05 ***p < .10

effect. In contrast, the regressions that do control for the effect of other variables on the transition into and out of poverty provide what could be considered a cleaner estimate of the net effect of being in the target group after controlling for such factors as differences in education, health, age, marital status and region.

As indicated by the results for the 1993-2010 period in table 6a (column 1), the effects without controls are all positive and statistically significant, confirming that individuals in each of the vulnerable groups had a higher probability than individuals not in that particular group of entering poverty in any given year. For example, recent immigrants' probability of entering poverty in a given year was 2.5 percentage points higher than that of those who are not recent immigrants. The effects are all smaller in the more recent 2005-10 period (see column 2), reflecting the decline in the vulnerable groups' probability of entering poverty — that is, their higher rates of entry into poverty generally converged toward that of their nonvulnerable counterparts over time. The changes were small, however, except for recent immigrants, whose risk of falling into poverty declined by more than half in more recent years.

The coefficient estimates are also all smaller after controlling for the effect of other factors on the risk of entering poverty (compare columns 3 and 1, and columns 4 and 2). This indicates that vulnerable groups tend to have many of the other characteristics, such as being less educated and in poorer health, that increase the risk of poverty. Once we control for these other factors (columns 3 and 4), we find that the probability of entering poverty declined slightly for vulnerable groups relative to that of their nonvulnerable counterparts.

The control variables generally have the expected effects.⁴ For example, over the full period from 1993 to 2010, the probability of entering poverty in any given year was higher for females, visible minorities and people living in most provinces outside of Ontario and Alberta. Conversely, it was lower for each higher level of education, for each level of improved health and if a family member was employed. Each successive year was also generally associated with the reduced probability of entering poverty.

The results of our regression analysis of transitions out of poverty are reported in table 6b. The mean exit rates for the full period shown in the first row appear smaller than the rates in table 5. This reflects the relatively large share of the population in poverty accounted for by the disabled (39 percent) and the unattached (22 percent), both of which had significantly lower rates of

exit from poverty than did other vulnerable groups (see table 1). In addition, the exit rates of the unattached and the nonvulnerable group (21 percent of the poor) did not change significantly in the 2005-10 period compared with the 1993-2004 period.

Over the full 1993-2010 period, the effects without controls are negative and statistically significant for four of the six vulnerable groups, indicating that each group had a lower probability of leaving poverty in any given year than did persons not in that target group (see table 6b, column 1). For example, recent immigrants' probability of leaving poverty in a given year was 5.2 percentage points lower than that of those who are not recent immigrants. Aboriginal persons and youths had a probability of leaving poverty similar to that of individuals not in these two groups, suggesting that poverty is also for them a more temporary event. For youths, this likely reflects their initially precarious employment opportunities, which increase their likelihood of entering and leaving poverty, depending on their job situation. For Aboriginal persons, the results might also reflect a pattern of seasonal and precarious employment.

The coefficient estimates tend to be smaller for the more recent 2005-10 period, confirming that the vulnerable groups saw some improvement in the probability of their leaving poverty (column 2) — that is, the exit rates from poverty of vulnerable groups generally converged toward that of their nonvulnerable counterparts. In fact, for four vulnerable groups, the probability of leaving poverty in those years was not significantly less than that of persons not in their particular group. For persons with a disability, however, the probability of leaving poverty remained significantly lower than that of persons without a disability, despite improvements in their situation, while unattached individuals ages 45 to 64 saw their probability of leaving poverty decline.

The estimates for vulnerable groups are also generally smaller after controlling for the effects of other factors on the transition out of poverty (compare columns 3 and 1, and columns 4 and 2). Again, this reflects the fact that vulnerable individuals have fewer of the other characteristics, such as higher levels of education and better health, that increase the probability of leaving poverty. Once we control for these other factors, the vulnerable groups' probabilities of leaving poverty become similar to those of their non-vulnerable counterparts.

As with entering poverty, the control variables for leaving poverty generally have the expected effects. For example, over the full period from 1993 to 2010, the probability of leaving poverty in any given year was lower for visible minorities and for individuals living in most provinces outside of Ontario and Alberta. Conversely, the probability of leaving poverty was higher for each higher level of education and health, and if a family member was employed. Although each successive year was generally associated with a reduced probability of entering poverty, there was no obvious upward trend over time in leaving poverty. Rather, rates of exit from poverty were higher in years (such as 1994, 2000 and 2006) when the economy was growing and lower in years (such as 2001 and 2007) of slower growth or contraction.

Decomposition analysis

Our decomposition analysis is based on estimating separate regressions for the probability of being in poverty for the nonvulnerable benchmark group and for each of the six vulnerable groups for 2010, the most recent year for which SLID data are available. This enables the conventional Oaxaca (1973) decomposition,

$$\overline{Y}_{\rm v} - \overline{Y}_{\rm n} = (\overline{X}_{\rm v} - \overline{X}_{\rm n}) \; \boldsymbol{\beta}_{\rm n} + (\boldsymbol{\beta}_{\rm v} - \boldsymbol{\beta}_{\rm n}) \; \overline{X}_{\rm v},$$

where $(\overline{Y}_v - \overline{Y}_n)$ is the mean difference in poverty rates between each vulnerable group (denoted by subscript v) and those not in that group (denoted by subscript n). That difference consists of two component parts. The first represents differences that are "explained" by the observable characteristics or explanatory variables $(\overline{X}_v - \overline{X}_n)$ that influence being in poverty, weighted by the income returns that nonpoor persons receive for those characteristics, denoted by β_n . The second or "unexplained" component of differences in the regression coefficients $(\beta_v - \beta_n)$ reflects differences in the vulnerable groups' propensity to be poor even when they have the same observable characteristics as those not in that group.⁵

As indicated in column 1 of table 7, each of the vulnerable groups had a higher probability of being in poverty relative to those not in their group, with unattached older individuals having the highest probability, followed by lone parents and recent immigrants. There is, however, considerable variability across groups in the extent to which their higher probability of being in poverty is explained by their observable characteristics (see column 2). For persons with a disability, 85 percent of their higher probability of being in poverty is explained by their characteristics. This proportion

Table 7
Decomposition of vulnerable groups' probability of being in poverty compared with those
not in their group, Canada, 1993-2010

$\overline{Y}_{v} - \overline{Y}_{n}$	0/				eristics
	%	$(\overline{X}_{v} - \overline{X}_{n}) \beta_{n}$	%	$(\boldsymbol{\beta}_{v}-\boldsymbol{\beta}_{n})\overline{X}_{v}$	%
0.0487	100.0	0.0159	32.6	0.0328	67.4
0.1002	100.0	- 0.0059	- 5.9	0.1061	105.9
0.1369	100.0	- 0.0638	- 46.6	0.2007	146.6
0.0466	100.0	0.0066	14.2	0.0401	86.0
0.0735	100.0	0.0621	84.5	0.0114	15.5
0.2576	100.0	0.0786	30.5	0.1790	69.5
	0.0487 0.1002 0.1369 0.0466 0.0735	0.0487 100.0 0.1002 100.0 0.1369 100.0 0.0466 100.0 0.0735 100.0	0.0487 100.0 0.0159 0.1002 100.0 - 0.0059 0.1369 100.0 - 0.0638 0.0466 100.0 0.0066 0.0735 100.0 0.0621	0.0487 100.0 0.0159 32.6 0.1002 100.0 -0.0059 -5.9 0.1369 100.0 -0.0638 -46.6 0.0466 100.0 0.0066 14.2 0.0735 100.0 0.0621 84.5	0.0487 100.0 0.0159 32.6 0.0328 0.1002 100.0 -0.0059 -5.9 0.1061 0.1369 100.0 -0.0638 -46.6 0.2007 0.0466 100.0 0.0066 14.2 0.0401 0.0735 100.0 0.0621 84.5 0.0114

Source: Authors' estimates.

drops to about one-third for Aboriginal persons and for unattached older individuals, and to 14 percent for youths not in school. It is even negative for immigrants and lone parents, which indicates that these groups actually have characteristics that are poverty reducing. The converse applies to the portion of the higher probability of each vulnerable group's being in poverty that is unexplained or attributable to their propensity to be in poverty, even when they have the same observable characteristics as those not in their group (see column 3). The rank ordering in this instance is, by definition, the opposite of that of the explained portion. The unexplained portion ranges from 16 percent for persons with a disability to well over two-thirds for Aboriginal persons, unattached older individuals and youths not in school, and over 100 percent for immigrants and lone parents.

Hence, for all vulnerable groups except persons with a disability, their higher probability of being in poverty is for the most part due to unexplained factors or to a pure propensity to be in poverty. This makes finding an effective policy response more difficult, since the unexplained portion is a kind of "black box." It does not tell us what factors in particular give rise to this propensity to be poor after controlling for the effect of differences in observable characteristics that affect being in poverty. That "unexplained" component could reflect a variety of factors, such as discrimination,

¹ Living off reserve.

² Ten years or less since arrival.

³ Not in school.

⁴ Living on their own (that is, not living with a spouse, children, parents or relatives).

cultural differences, quality of education and credentials or unobserved characteristics, including legacy effects of initial bouts of poverty such as becoming dependent on income support programs. These results highlight the need to drill deeper into the underlying factors that determine the higher incidence of poverty among vulnerable groups and that are not explained by their observable characteristics.

Conclusion

As and unattached older individuals are at considerably higher risk of being trapped in persistent poverty than are individuals who do not belong to one of these groups. These vulnerable individuals have risk factors that contribute to their higher probability of being poor, such as having less education, poorer health, more stressful lives and recent experience of a negative life event.

Over the period from 1993 to 2010, LICO-based poverty rates trended downward for the population as a whole and even more so for the six vulnerable groups. The drop in the poverty rate was greatest for lone parents and recent immigrants and smallest for youths ages 20 to 24 who were not in school. Poverty rates among Aboriginal persons living off-reserve also declined significantly but fluctuated considerably over the years. Compared with the nonvulnerable population, vulnerable individuals nevertheless had higher poverty rates and remained in poverty over longer periods. Indeed, our analysis of transitions into and out of poverty revealed that, while the nonvulnerable group's rates of entry into poverty were low and rates of exit were high — reflecting the unlikely and temporary nature of poverty for individuals in this group — the opposite was the case for most vulnerable groups, for whom poverty was not a transitory phenomenon. The exception was youths not in school, whose probability of leaving poverty was even higher than that of the nonvulnerable group, suggesting that youth poverty is generally temporary.

In addition to declining poverty rates over the 1993-2010 period, we also found, for all groups, a downward trend in the probability of entering poverty and an upward trend in the probability of leaving poverty in any given year. In the case of vulnerable groups, however, this trend tended to stall and even reverse during years of economic slowdown and high unemployment. It thus appears that vulnerable groups tend to benefit more than the nonvulnerable group from

economic expansions in terms of the impact on their rates and risk of poverty, and they are also disproportionately harmed by downturns.

Our regression analysis of the transitions into and out of poverty between 1993 and 2010, conducted without controlling for the effect of other factors, confirms that individuals in vulnerable groups (especially unattached older persons, lone parents and recent immigrants) were generally more likely than those not in a vulnerable group to enter poverty, and that they were also less likely to exit poverty. The patterns were similar in the more recent 2005-10 period, although they do reflect the general improvement in poverty entry and exit rates for vulnerable groups that occurred during those years.

We also found that the patterns were similar when we controlled for the effect of other risk factors that can influence the probability of entering or exiting poverty, although the size of the net effects was generally smaller. This suggests that vulnerable groups have more of the characteristics that increase the probability of entering poverty and reduce the probability of leaving poverty, including being less educated, being in poor health and not having a family member who is employed. Our decomposition analysis reveals, however, that, except for persons with a disability, vulnerable individuals' higher probability of being in poverty is due for the most part to unexplained factors or to a pure propensity to be in poverty.

Policy directions

Our findings suggest that a "one-size-fits-all" policy response to the disproportionately high incidence and persistence of poverty among vulnerable groups would not be appropriate — indeed, it likely would be ineffective given the variety of risk factors that influence the poverty rates of vulnerable groups and the particular needs of groups as diverse as Aboriginal persons, recent immigrants, youths not in school, disabled persons and unattached older individuals. That said, the one factor that does help to reduce the rates and risk of poverty for the population in general and for vulnerable individuals in particular is a growing, full-employment economy. In that sense, a rising tide does seem to raise all boats. Moreover, increased labour demand could help to alleviate some of the discrimination that affects many of these vulnerable groups.

We also found, however, that, except for persons with a disability, vulnerable groups' higher probability of being poor is due for the most part to unexplained factors. This underscores the need to drill deeper into the "black box" to identify other factors at play, such as discrimination, cultural differences, quality of education and credentials, as well as unobserved characteristics such as

scarring effects of initial bouts of poverty. With this caveat in mind, we offer the following potential policy directions for each of the different vulnerable groups.

Persons with a disability are the one group whose observable characteristics most explain their probability of being in poverty. Such persons also happen to represent more than 39 percent of the population living in poverty and 32 percent of the population overall. Obviously, their health status, as affected by their disability, might be beyond the ability of any policy response to improve, but a functional limitation arising from a disability need not be a functional limitation at work if physical and attitudinal barriers do not make it so. As such, the ability of persons with a disability to earn income and escape poverty could be improved by requiring employers to accommodate the needs of such persons in the workplace. This runs the risk of deterring employers from hiring persons with a disability, but the risk could be offset somewhat by providing employers information on how technology can facilitate their integration into the workplace at reasonable cost. As well, increasing the educational attainment of persons with a disability could improve their income prospects.

Aboriginal persons have the highest school dropout rate of any group, so reducing that rate and improving the quality of the education they receive would be a good starting point, although this would need to be done in a culturally sensitive manner to offset the legacy of residential schools and the loss of Aboriginal culture.

For youth out of school, a variety of policy initiatives could be considered. One of the most important would be to reduce their school dropout rate, since the returns to education are especially high for disadvantaged youth who are otherwise prone to dropping out (Riddell 2007). A reduced dropout rate is also associated with other positive long-term effects, such as better health, marital stability and reductions in delinquency, crime, substance abuse and early childbearing, all factors that can lead to persistent poverty. A wide range of policy instruments is available in this regard, including increasing the age of compulsory school attendance, improving funding assistance for postsecondary education, facilitating transfers from college to university, providing more counselling, running campaigns against dropping out and fostering apprentice-ships. Early childhood development policies could also have longer-run positive effects (see Foley and Green, in this volume). Timely and up-to-date labour market information is also particularly important for youths, given their need to obtain initial stable employment to avoid the scarring effects of being jobless for an extended period of time.

Recent immigrants have been experiencing greater difficulty integrating into the Canadian labour market for quite some time, and this issue has been

the subject of extensive research. Accordingly, several studies (see, for example, Abbott and Beach 2011; Picot and Sweetman 2012) propose a wide-ranging list of policies to address the problem, including improving the process of recognition of foreign credentials; introducing bridging and other programs to enable immigrants to obtain Canadian credentials; putting more emphasis on official-language ability in selection criteria; fine-tuning the education criteria to reflect differences in education quality and cognitive skills; increasing the emphasis on prearranged employment and taking into account occupational and skills shortages as part of admission criteria; prescreening applicants' qualifications and experience prior to arrival; and adopting a "taps-on, taps-off" policy in setting immigration levels that reflects the ability of the labour market to absorb new immigrants.

Finding a life partner could help lone parents avoid poverty, but this is largely beyond policy control, as are many other factors that lead to becoming a lone parent. However, since many lone mothers have not completed high school (Kapsalis and Tourigny 2002), any initiative to reduce dropout rates would be helpful for this group as well. In the same vein, many lone mothers are also likely to be recent immigrants, Aboriginal or disabled (Kapsalis and Tourigny 2002; Morissette and Ostrovsky 2007); therefore the policy initiatives aimed at providing support for these vulnerable groups should also help lone parents.

Older unattached individuals tend not to be as much on the policy radar, even though more than 30 percent of this segment of the population lives in poverty and they constitute more than 20 percent of the poor. In their case, factors such as being older, in poor health, under stress, living alone and having had a negative life experience pose a real challenge for policy-makers well beyond that of facilitating the active participation of these individuals in the labour market.

Clearly, a wide range of potential policy options exist that could alleviate the problem of persistent poverty among Canada's most vulnerable groups. Given the diversity of their poverty circumstances and needs, however, different initiatives and approaches would be appropriate for different groups, as would be the provision of coordinated access to these programs. Also needed are further rigorous evaluations of the *causal* effects of the various initiatives to assist in evidence-based policy-making in this important area. Finally, having a broader policy environment that fosters a growing, full-employment economy and greater labour demand remains the most effective first line of defence against poverty, particularly among vulnerable groups.

Appendix

Table A1
Unemployment and poverty rates, Canada, 1976-2011 (percent)

	Unemployment rate	Poverty rate ¹
976	7.1	13.0
1977	8.0	13.0
1978	8.4	12.2
1979	7.5	12.6
1980	7.5	11.6
1981	7.6	11.6
1982	11.0	12.4
1983	12.0	14.0
1984	11.3	13.7
1985	10.5	13.0
1986	9.6	12.1
1987	8.8	11.9
1988	7.8	10.8
1989	7.5	10.2
1990	8.1	11.8
1991	10.3	13.2
1992	11.2	13.3
1993	11.4	14.1
1994	10.4	14.0
1995	9.5	14.5
1996	9.6	15.2
1997	9.1	15.0
1998	8.3	13.7
1999	7.6	13.0
2000	6.8	12.5
2001	7.2	11.2
2002	7.7	11.6
2003	7.6	11.6
2004	7.2	11.4
2005	6.8	10.8
2006	6.3	10.3
2007	6.0	9.1
2008	6.1	9.3
2009	8.3	9.5
2010	8.0	9.0
2011	7.4	8.8

Source: Statistics Canada, CANSIM data (series V25745114, table 2020803).

¹ Living off-reserve.

Notes

- These patterns are also documented and discussed in Kapsalis and Tourigny (2007) and Picot and Hou (in this volume).
- Our estimate for youths ages 20 to 24 not in school should be downplayed simply because this group would not have had sufficient time to exhibit being at risk of persistent poverty.
- 3. The dependent variable is coded 1 if the individual moves from not being in poverty to being in poverty for a given year, and 0 if otherwise. The coefficient estimates are almost identical to the marginal effects from a Probit equation, so we report the more conventional regression coefficients, which also facilitate the decomposition analysis we discuss later.
- Results, with respect to both entering and exiting poverty, are available from the authors on request.
- 5. As indicated, we used conventional regressions of the linear probability function, since the resulting coefficients were similar to the marginal effects from Probit regressions. This enabled the decompositions at the mean, as outlined in the equation above, since a property of conventional regression is that the intercept adjustment ensures that the regressions pass through the mean of the data.
- 6. Our results are also consistent with other recent empirical work in Canada dealing with poverty among vulnerable groups, such as Hatfield (2004), Heisz and McLeod (2004), Kapsalis and Tourigny (2002, 2007), Morissette and Zhang (2001), Murphy, Zhang and Dionne (2012), Picot, Hou and Coulombe (2007) and Picot and Hou (in this volume).

References

- Abbott, M.G., and C.M. Beach. 2011. Do Admission Criteria and Economic Recessions Affect Immigrant Earnings? IRPP Study 22. Montreal: Institute for Research on Public Policy.
- Hatfield, M. 2004. "Vulnerability to Persistent Low Income." *Horizons* 7 (2): 19-26. Accessed September 3, 2015. http://www.horizons.gc.ca/eng/content/feature-article-vulnerability-persistent-low-income
- Heisz, A., and L. McLeod. 2004. Low-Income in Census Metropolitan Areas, 1980-2000.
 Trends and Conditions in Census Metropolitan Areas series. Ottawa: Statistics Canada.
- Kapsalis, C., and P. Tourigny. 2002. Profiles and Transitions of Groups at Risk of Social Exclusion: Lone Parents. Ottawa: Human Resources Development Canada.
- . 2007. Profiles and Transitions of Groups Most at Risk of Social Exclusion. Ottawa: Data Probe Economic Consulting.
- Morissette, R., and Y. Ostrovsky. 2007. *Income Instability of Lone Parents, Singles and Two-Parent Families in Canada, 1984-2004*. Analytical Studies Branch Research Paper 297. Ottawa: Statistics Canada.
- Morissette, R., and X. Zhang. 2001. "Experiencing Low-Income for Several Years." *Perspectives* on *Income and Labour* 2 (3): 5-13.
- Murphy, B., X. Zhang, and C. Dionne. 2012. Low Income in Canada: A Multi-line and Multi-index Perspective. Income Research Paper 1. Ottawa: Statistics Canada.
- Oaxaca, R. 1973. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review* 14 (3): 693-709.
- Picot, G., F. Hou, and S. Coulombe. 2007. Chronic Low Income and Low-Income Dynamics among Recent Immigrants. Analytical Studies Branch Research Paper 294. Ottawa: Statistics Canada.

- Picot, G., and A. Sweetman. 2012. Making It in Canada: Immigration Outcomes and Policies. IRPP Study 29. Montreal: Institute for Research on Public Policy.
- Riddell, W.C. 2007. "Investing in Human Capital: Policy Priorities for Canada." In A Canadian Priorities Agenda, edited by J. Leonard, C. Ragan, and F. St-Hilaire. Montreal: Institute for Research on Public Policy.