**Exiting Poverty in Canada**

### About the Brief

This research brief is based on Lori J. Curtis and Kate Rybczynski, "Exiting Poverty: Does Sex Matter?", *Canadian Public Policy* 40, no. 2 (June 2014): 126-142.

For further information please contact Lori J. Curtis, University of Waterloo.

The research brief was written by Carmina Ravanera.

### Summary

This study investigates the determinants of poverty duration in Canada, and examines which factors may affect women and men differently. It specifically focuses on poverty exit destinations: exits to just above the poverty line versus exits to further above the poverty line. Results show that nearly 25% of poverty spells end within 110% of the poverty line, meaning near poverty. The study also indicates that receiving social assistance, being an immigrant, being disabled, and having pre-school aged children are strongly associated with both a lower probability of exiting poverty, and a lower probability of exiting to higher income levels. Finally, gender differences in the probability of exiting poverty spells appear mainly in terms of education, employment, and changes in marital status.

### Key Findings

- Data show that when poverty spells end:
  - Over 23% exit to within 1.1 times the poverty line (near poverty)
  - 61% exit to within 1.1 to 2 times the poverty line (mid-range exit)
  - 16% exit to over twice the poverty line

- In general, participating in social assistance, being an immigrant, being disabled, and having pre-school aged children are strongly associated with a lower probability of exiting poverty, and a lower probability of exiting to higher income levels.

- The probability of exiting further above the poverty line, relative to no exit, decreases substantially as years spent in poverty increase.

- Characteristics that increase the odds of exiting poverty to the middle range are being male, being employed full year, living in a household with more earners, being a high school graduate, and having some college education.

- There are only a few significant gender-related determinants to exiting poverty:
  - Having a bachelor’s degree (or more) increases the odds of exit to mid-range by 40 per cent for females, but decreases it by 35 percent for males. A bachelor’s degree therefore seems to be more beneficial for a female than a male when exiting poverty.
  - Men who enter poverty due to a loss of full-year employment are more likely to exit poverty to the mid-range category or above. For females, those who are employed full-year before the start of the spell have a higher chance of exit to the mid-range category.
  - Changes in marital status, in particular marriage dissolution for women, hinder poverty exits.

### Target Audience

- Researchers
- Policy Makers
- Graduate Students
The Canadian experience of poverty has been relatively easy to document, given access to cross-sectional data with an abundance of measures (market income, net income, consumption) and demographic variables repeated over long periods. However, examining the persistence of poverty spells in Canada has been more difficult because of data limitations. Prior studies have shown that low levels of education, work limitations, family type, and employment status are major factors associated with long-term poverty (Morissette and Drolet 2000). Nevertheless, we still know relatively little about the characteristics, and the gender differences in characteristics, associated with poverty duration. Furthermore, these characteristics may be very different for those who exit to near poverty and those who exit to further above the poverty line. Indeed, many studies consider exits that are within 10 percent of the poverty line to not be true exits (Bane and Ellwood, 1986). It is important for policymakers to understand which factors result in both the ability to escape poverty, and the ability to move beyond near poverty.

This study therefore investigates how certain characteristics, such as education, employment status, and disability status, impact the chance of exit from poverty. It is particularly valuable in that it examines which of these characteristics are associated with the probability of exiting to near poverty versus exiting to further above the poverty line.

Data and Method

The study uses data from the Survey of Labour and Income Dynamics (SLID) from five complete panels (1993-1998, 1996-2001, 1999-2004, 2002-2007, 2005-2010). Variables of interest to this study include after-tax family income, as well as several socio-demographic characteristics associated with longer-term poverty, including household type, education, presence of children, employment status, marital status, and more (see full paper for all variables).

To examine poverty duration, there must be a poverty line. Here, it is half of the median equivalent family income as the poverty line in any given year. (Equivalent family income is family income adjusted using the square root of family size.) In addition, the unit of analysis is the poverty spell. A spell starts if equivalent family income is above the poverty line in one year and below the poverty line the next year. A spell ends when the equivalent family income moves from below the poverty line to above the poverty line. The study restricts analysis to poverty spells of heads of households, the family member with the highest earnings. Overall, the resulting sample contains 3426 poverty spells, 1821 experienced by women and 1605 by men.

The research method uses a competing risks framework. In other words, it investigates the determinants of poverty spell duration by finding the probability of exiting a poverty spell given a set of several characteristics (the socio-demographic characteristics mentioned above). Furthermore, the study not only examines the probability of exiting, but also the probability of exiting to 1.1 times the poverty line, between 1.1 and 2 times the poverty line, and 2 times the poverty line. The technical details of the methodology can be found in the full paper.

Results

Spell Characteristics and Exit Destinations

Below are some general characteristics of the sample of poverty spells:

- The average duration of a poverty spell in the main sample is 1.9 years. Longer-duration spells represent smaller fractions of the sample.
- Over 1/3 of poverty spells are experienced by those who have had, or will have, another poverty spell.
- Couples with children experience just over 40% of the spells, followed by unattached households, couples without children, and lone parents.
- Close to 1/5 of spells are experienced by social assistance recipients.
- Gender differences among the unattached and lone-parent household types are significant, with more male-unattached poverty spells than female-unattached spells, and fewer male-lone-parent spells than female-lone-parent spells.
- Female-headed poverty spells are also 31% more likely than male-headed spells to have a change in household head (i.e. a change in marital status) as the spell began.

Figure 1 shows the distribution of poverty exit destinations by ratio of income to the poverty line. It demonstrates that 23% of poverty spells exit to 1.1 times the poverty line. About 2/3 of poverty spells exit to 1.1 to 2 times the poverty
line, and only 16% of spells exit to over twice the poverty line. It further shows that although the rate of exit to 1.1 times the poverty line is higher for males, gender differences in exit destinations are generally insignificant.

**Important Variables for Exit Probabilities**

The study examines the probabilities of exiting poverty based on several variables such as gender, marital status, immigrant status, number of children, education, employment, and disability status. It finds that the characteristics strongly associated with a decrease in the probability of exiting poverty are being unattached, receiving social assistance, having pre-school age children, being an immigrant, and being disabled.

Conversely, being a male household head or having one additional earner in the household increases the probability of exit by just over 10%. Spells of household heads who are employed full year or have high school or college education are also more likely to end.

It is further important to notice dynamic variables, i.e., those that change during the data period. For instance, data show that spells that start with the household head transitioning out of full-year employment have a significantly higher probability of exiting poverty, particularly for male samples. These poverty spells usually result from short-term low-income shocks caused by reduced employment. Two other important dynamic variables are marital dissolution and loss of earners in the first year of the spell, which reduce the likelihood of exit by 17% and 29%, respectively.

However, with the exception of getting married, any change in characteristics occurring after the first but before the last year of the spell, including becoming employed full-year or gaining earners, decreases the probability of exiting poverty. This result may seem counter-intuitive; however, these changes usually mean that the increased income is not sufficient to raise the household out of poverty. Further, these jobs tend to have relatively low earning trajectories (Green and Ferber 2005).

**Probabilities of Exiting to Near Poverty vs. Exiting to Further Above the Poverty Line**

Results indicate that the probability of exiting further above the poverty line, relative to no exit, decreases substantially as years spent in poverty increase. The chances of a poverty spell exiting to the highest range drops by 98% at four or
more years in poverty, whereas the probability of exiting to mid-range drops by 91%. Even the probability of exiting to near poverty drops by 86%.

Certain characteristics play an important role in determining whether a household head exits poverty between 1.1 and 2 times the poverty line. In general, characteristics that decrease the odds of exiting to the middle range, relative to non-exit, are:
- Being unattached (by 35%)
- Being married with no children (by 28%)
- Being an immigrant (by 26%)
- Being disabled (by 15%)
- Receiving social assistance (by 30%)
- Having preschool children in the household (by 24%)

Conversely, characteristics that increase the odds of exiting to the middle range are:
- Being male (by 18%)
- Being employed full year (by 18%)
- Living in a household with more earners (by 34%)
- Being a high school graduate (by 25%)
- Having some college education (by 16%)

Additionally, if we create subsamples by gender, we see some differences in probabilities of exiting poverty. For example, being employed full year before the start of the spell is more significant for female spells exiting to the mid-range category, whereas for males, no longer being employed full year is associated with a higher probability of exits to mid-range and to twice the poverty line. Furthermore, having some college education is associated with increased odds of exit to the middle range for males, but not for females. However, having a bachelor’s degree (or more) increases the odds of exit to mid-range by 40 percent for females, but decreases it by 35 percent for males. Indeed, it has been previously shown that returns to higher education are diminishing for males (Conference Board of Canada 2013). Overall, it may be that differences in the labour market conditions, attachment, and/or preferences among men and women differentially influence poverty exit rates across the sexes.

**Conclusion**

The study found that, with the exception of having a bachelor’s degree, being employed full year, and changes in marital status, gender differences in the results were generally small and insignificant.

Nevertheless, results of the study show that policies directed at increasing education and improving employment opportunities for the poor may be useful both for transitioning out of poverty and for allowing individuals to exit above the poverty line. Further, since social assistance participation is a consistently strong barrier to exiting poverty, it seems that social assistance benefits are too low relative to median incomes. A combination of policies that provide more generous incomes for individuals who are not able to work, while assisting those who are able to work to re-enter the labour force, might address this concern. Additionally, changes in marital status, particularly marital dissolution for women, hinder poverty exits. Fairer redistribution of family resources and stronger penalties for non-payment of child support payments may be remedies.

Finally, results indicate that exiting poverty is not the same for all Canadians. When reporting on poverty incidence and duration, researchers should distinguish between exits to near the poverty line versus exits to further above the poverty line, as exit destinations represent very different experiences for individuals and their families.

**References**