

Session Number:
Session Title:
Paper Number:
Session Organizer:
Discussant:

**Paper Prepared for the 28th General Conference of
The International Association for Research in Income and Wealth
Cork, Ireland, August 22 – 28, 2004**

**EXPOSURE TO LOW INCOME AMONG IMMIGRANTS AND VISIBLE
MINORITIES**

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Since the 1950s, immigrants have accounted for a steadily increasing proportion of Canada's population. By 2001, 18.4% of Canadians were born in other countries, a level similar to that during Canada's first immigration boom in the early 1900s. However, the composition of Canada's current immigrant population is very different from that of a century ago. Regulations introduced in the 1960s based admission into Canada primarily on education, language skills and economic attributes rather than country of origin (Boyd & Vickers 2000). Prior to the 1960s, the vast majority of Canada's immigrants had come from Europe or the United States, but by 2001, more than half of Canada's immigrant population had come from other regions, principally Asia. Many were members of visible minority groups – between 1981 and 2001, the proportion of Canada's population made up of visible minorities almost tripled, from under 5% to 13.4%.

The vital contributions of immigrants to Canada's economy are well-established, yet the gap in well-being between immigrants and non-immigrants has increased in recent years. Census data indicate that low-income rates of immigrants relative to non-immigrants - as well as the earnings gap between immigrants and non-immigrants - rose substantially from 1980 to 2000, particularly for recent immigrants (Frenette & Morissette 2003, Picot & Hou 2003).

The goal of this study is to address two important gaps in the literature. First, immigrants' vulnerability to low income has not been examined from a longitudinal perspective. Second, because many immigrants are also members of visible minority groups, it has been difficult to disentangle the association between immigrant status and low income, and between visible minority status and low income. The question of whether visible minority immigrants are worse off than other immigrants has remained largely unanswered.

Previous studies of low income exposure using the longitudinal Survey of Labour and Income Dynamics (SLID - see *Data source and definitions*) have not been able to focus on immigrants or visible minorities, because the sample size was not sufficiently large (Drolet & Morissette 1999, Morissette & Zhang 2001). The recent completion of a second 6-year panel of SLID offers a larger sample by combining data from the second panel with the first, enabling a more detailed analysis of low income exposure among immigrants and visible minorities. In this article, individuals who were below one of Canada's low-income cut-offs (LICOs - see *Data source and definitions*) for at least one year are compared with those never exposed to low income. The article also looks at how individuals who were repeatedly exposed to low income (for at least three of six years) differed from those who had more limited exposure (one or two years).

Data source and definitions

The **Survey of Labour and Income Dynamics (SLID)** has been a source of longitudinal data since 1993. Respondents are surveyed twice a year – once on labour and once on income - for six consecutive years. Each six year period is called a panel, and new panels are begun every three years. Presently, longitudinal data are available from two complete panels, 1993 to 1998 and 1996 to 2001. A data file was created, consisting of observations from both panels. Because each panel represents the Canadian population at the time of sample selection, a panel identifier was added to the file to test for possible cohort effects. To ensure accurate variance estimation, bootstrap weights from the final year of each panel were added to the file.

Immigrants were divided into three groups, based on how many years they had been in Canada at the start of their panel. **Early immigrants** had been in Canada for at least 17 years, **midterm immigrants** from 7 to 16 years, and **recent immigrants** from 1 to 6 years. These time periods corresponded to those used by Morissette & Zhang (2001).

Visible minority status on SLID is derived from responses to questions on ethnic background, mother tongue, and country of birth, using a procedure developed by the Interdepartmental Working Group on Employment Equity Data (1993).

The present analysis is limited to individuals who were 16 years of age and older in the first year of their panel. Of the 46,905 individuals, 2,594 (5.5%) were excluded because fewer than six years of data were available for them. Attrition rates were higher for recent and midterm immigrants - 9.7% and 9.5% respectively - than for other Canadians (4.4%). Thus recent and midterm immigrants may be slightly under-represented. Nevertheless, over 90% of the original sample of recent and midterm immigrants were still in the survey 6 years after being selected. An additional 1,432 individuals were excluded because of missing or incomplete information on immigrant status, year of immigration, visible minority status, and/or education. The analysis that follows was conducted on the remaining 42,879 individuals.

Individuals were considered to be in low income for a given year if their economic family had an income that fell below their **low-income cut-off (LICO)**, derived from the Survey of Household Spending. LICOs differ according to family size and community size. LICOs convey the income level at which a family may be in straitened circumstances because it has to spend a greater proportion of its income on necessities (food, shelter, and clothing) than the average family of similar size living in a similarly-sized community. There are two versions of LICO – before tax and after tax. The present study uses the latter version, since after-tax income is a better indicator of disposable income.

Recent immigrants are younger, more likely to be visible minorities, and have higher rates of low income than other Canadians

Immigrants differ markedly from other Canadians in a number of ways (Table 1). Early immigrants, having arrived at least 17 years prior to the start of the survey, were considerably older than non-immigrants, while recent immigrants were younger. Almost half of early immigrants were 55 or older at the start of the survey, compared with just over 20% of non-immigrants, and less than 10% of recent immigrants. In contrast, well over half of recent immigrants were under 35, compared with just under 40% of non-immigrants and only 15% of early immigrants.

More than three-quarters (78%) of married recent immigrants had children, compared with just over half (52%) of married non-immigrants and less than two-fifths (39%) of married early immigrants.

Recent waves of immigrants have tended to come predominantly from Asia rather than Europe (Boyd & Vickers 2000, Chui & Zietsma 2003). Three out of 4 recent immigrants and 3 out of 5 midterm immigrants were visible minorities, compared with only 1 out of 5 early immigrants and less than 1 out of 50 non-immigrants.

Compared with the rest of the population, a higher proportion of immigrants lived in Ontario or British Columbia, while a lower proportion lived in Quebec or in the smaller provinces; a lower proportion also lived in rural areas.

Compared with other Canadians, a higher proportion of recent and midterm immigrants experienced low income. Just over 40% of midterm immigrants and close to half (47%) of recent immigrants were below the low-income cut-off (LICO) for at least one of the six years they were surveyed. Of these, more than half of midterm immigrants and almost two-thirds of recent immigrants were below the LICO for three or more years. In contrast, only about 1 in 5 non-immigrants or early immigrants experienced low income for at least one year, and less than half of these experienced low income for three or more years.

In the next section, some of the factors associated with low income among immigrants are examined in greater detail. The goal is to compare specific groups of immigrants with their Canadian born counterparts. Are increased low income rates among recent and midterm immigrants a general trend – regardless of age, sex, marital status, education, or province of residence? Or are specific groups of recent and midterm immigrants – visible minorities for example - more likely to experience low income than other Canadians?

To answer these questions, two logistic regression models were used (see *Logistic regression models*). The first model compared individuals who had **some exposure** to low income (i.e. those who were below the low-income cut-off for at least one out of six years) with those who had **no exposure**. The second model compared those who had **limited exposure** to low income (below the LICO for one or two years) with those who had **repeated exposure** (below the LICO for at least three out of six years).

Interaction terms were added to both models to test whether the same factors were associated with low income for immigrants and non-immigrants. A panel identifier and panel interaction terms, added to both models to test for cohort effects, were found to be non-significant – so results from the two panels were combined.

Logistic regression models

Logistic regression estimates the probability that a particular outcome (here, experiencing low income) will occur as a function of several explanatory variables. The association between each explanatory variable and the outcome is examined while holding all other variables constant. In other words, the probability of experiencing low income can be compared for individuals identical in every respect but one. For instance, a comparison can be made between recent immigrants and non-immigrants of the same age, educational level, family type, visible minority status, etc. An F-statistic is computed for each explanatory variable, to determine whether a change in that variable is associated with a significant change in the probability of experiencing low income.

To account for the complex survey design, the analysis was conducted using SLID bootstrap weights and SUDAAN version 8.0. Global tests for possible interaction effects between immigrant status and other explanatory variables were included in the analysis. Interactions that were not significant at the global level were dropped, while globally significant interactions were examined further to see which of their individual components were significant. Similarly, cohort effects were examined in detail by interacting the panel identifier with every other explanatory variable.

Recent immigrants are more likely than non-immigrants to be in low income for at least one year

Some variables – sex, education, family type, and province – were linked with low income in the same way for immigrants and non-immigrants. For immigrants and non-immigrants alike, women, unmarried persons or lone parents, those with no high school diploma, and those living in a province other than Ontario were most likely to experience low income for at least one year. However, in each case recent immigrants were 2 to 3 times more likely to experience low income than their Canadian-born counterparts (Table 2). Even the least vulnerable group of recent immigrants – those with university degrees – were roughly as likely to be in low income as non-immigrants with no high school diploma. On the other hand, neither early nor midterm immigrants were generally more likely than non-immigrants to experience low income.

Visible minority immigrants are more likely than other immigrants to be in low income for at least one year

Visible minority status was linked with low income for immigrants, but not for non-immigrants. Canadian-born visible minorities were no more likely than others born in Canada to experience low income - if anything there was a tendency for visible minorities to be less likely than other non-immigrants to experience low income, though the difference was not statistically significant (Chart A). On the other hand, for each of the three groups of immigrants – early, midterm, and recent - visible minorities were significantly more likely to be exposed to low income than persons who were not members of visible minority groups. These results are consistent with previous findings that foreign-born men have a wage disadvantage if they are also visible minorities (Hum & Simpson 1998).

Seniors are less likely than other age groups to experience low income – except among midterm immigrants

Among non-immigrants and early immigrants, 16 to 24 year-olds had the highest likelihood of experiencing low income, while those aged 65 and over had the lowest likelihood. However, recent and midterm immigrants showed a different pattern (Chart B).

Midterm immigrants did not differ significantly from non-immigrants in most age groups, with the exception of seniors (65 and over) where they were five times more likely to experience low income than their Canadian-born counterparts.

Seniors in general are the group least likely to experience low income, probably because of programs such as the Canada and Quebec Pension Plans (C/QPP), Guaranteed Income Supplement (GIS) and Old Age Security (OAS), as well as private pensions (Myles 2000). Most seniors relied on pensions or government transfers – 80% had pensions or government transfers as their main source of family income for at least four of the six years. However, midterm immigrant seniors, having arrived in Canada in their 50s or late 40s, had not had much time to accumulate C/QPP or private pension benefits¹. Furthermore, those not in Canada for 10 years would not normally be eligible for OAS/GIS.² Over 80% of midterm immigrant seniors whose primary source of family income was pensions or government transfers experienced low income for at least one

¹ Most recent immigrant seniors were in their 60s when they arrived, and so had even less time to accumulate work-related benefits. However, the majority of them lived with family members rather than alone or in a couple, and so didn't have to rely on pensions and government transfers as their main source of family income.

² Canada has social security agreements with several countries, so some immigrant seniors may get international pension benefits even if they are not eligible for OAS/GIS (http://www.hrdc-drhc.gc.ca/isp/common/intind_e.shtml)

year, compared with only 15% of Canadian-born seniors and 17% of early immigrant seniors.

Although the youngest age group (16 to 24) generally had the highest likelihood of experiencing low income, recent immigrants were an exception. They had roughly the same likelihood of experiencing low income as the Canadian-born (Chart B), whereas in all other age groups, recent immigrants had a significantly greater probability than non-immigrants.

Most of the youngest recent immigrants came to Canada in their teens, probably with their parents. More than three-quarters continued to live with their parents for at least three of the six years, compared with 60% of other 16 to 24 year olds. No obvious characteristics clearly distinguish recent immigrant families with 16 to 24 year olds from other recent immigrant families.

Recent immigrants and visible minorities are more likely to have repeated exposure to low income

Among those in low income for at least one year, recent immigrants were more likely than non-immigrants to have repeated (three or more years) rather than limited (one or two years) exposure. Similarly visible minorities who were in low income at least once – including those born in Canada – were more likely than other Canadians with similar characteristics who were not visible minorities to experience low income repeatedly (Table 3).

Other groups who, having been in low income at least once, were at risk for repeated exposure included women, people in urban areas, those without a high school diploma, unattached individuals and lone parents, and those living in provinces other than Ontario or Alberta. Young people and seniors experiencing low income were more likely than 35 to 44 year olds to have only limited rather than repeated exposure. Similarly, among married people, those with no children had a lower risk of repeated exposure than those with children.

Summary

The majority of immigrants were no more likely than other Canadians to experience low income from 1993 to 1998, or 1996 to 2001. Nevertheless, three groups of immigrants – recent arrivals who had been in Canada for less than 7 years, visible minorities, and seniors who had come to Canada in their 50s or late 40s - were at greater risk of experiencing low income for at least one year.

Recent immigrants were two to three times more likely than non-immigrants to experience low income, regardless of sex, level of education, family type, or province of residence. Furthermore, they were more likely to experience it repeatedly.

Most midterm and early immigrants were no more likely than non-immigrants to experience low income, suggesting that, after a period of adjustment, immigrants generally integrate well into Canada's economy. Nevertheless, the gap between recent immigrants and non-immigrants in both earnings and low income rates has been growing over the past two decades (Frenette & Morissette 2003; Picot & Hou 2003), perhaps indicating that the most recent groups of new arrivals will have a longer catching up period. The cohort of immigrants who arrived in the 1990s should be re-examined in future panels of SLID, to see if they are still more likely than non-immigrants to experience low income.

Canadian-born visible minorities were no more likely than others born in Canada to experience low income. However, visible minority immigrants were more likely than other immigrants to be exposed to low income, even among immigrants who had been in Canada for over 17 years. Once in low income, visible minorities (even those born in Canada) were more likely than other Canadians to experience it repeatedly.

The increased susceptibility of visible minority immigrants to low income suggests that they may have a more difficult transition than other immigrants. They may be less likely than other immigrants to have a working knowledge of one of Canada's official languages (English or French). They may also be less likely to have their educational credentials accepted by regulatory bodies and potential employers. Discrimination is another possible factor; results from the Ethnic Diversity Survey show that 1 in 5 visible minority individuals report discrimination or unfair treatment, particularly in a work setting or when applying for a job (Statistics Canada 2003). All of these possible factors need to be examined in greater detail, particularly because visible minorities now make up the majority of Canada's new arrivals.

Midterm immigrants make up a small (3%) but vulnerable proportion of Canada's seniors. They were roughly five times more likely than their Canadian born counterparts to experience low income. In general, seniors were less likely to experience low income than any other age group. However, midterm immigrant seniors, who came to Canada in their 50s or late 40s and found work may not have been able to build up sufficient pension wealth to stave off low income. More research is needed on older arrivals in general – they may be particularly susceptible to low income if they were initially sponsored by, and then separated from, a family member in Canada, or if they were admitted as refugees.

Table 1: Characteristics of immigrants and non-immigrants

	Panel 1 (1993-1998) + Panel 2 (1996-2001)				
	Total	Canadian born	Early immigrants (in Canada 17+ years)	Midterm immigrants (in Canada 7 to 16 years)	Recent immigrants (in Canada 1 to 6 years)
	100%	82.3%	11.7%	3.3%	2.7%
Sex					
Men	48.6	48.8	48.0	46.0	45.7
Women	51.4	51.2	52.0	54.0	54.3
Age in year 1					
16-24	15.4	17.0	3.3	16.6	19.5
25-34	21.2	22.1	11.3	22.4	36.1
35-44	22.5	23.0	16.4	28.6	26.5
45-54	17.0	16.3	23.8	17.2	9.3
55-64	11.2	10.2	21.5	4.5	*
65+	12.7	11.5	23.7	10.8	4.0
Visible minority status					
Visible minority	7.9	1.7	20.8	62.2	74.7
Not a visible minority	92.1	98.3	79.2	37.8	25.3
Level of education in year 1					
No high school diploma	29.0	29.0	30.1	27.5	26.2
High school diploma/no bachelor's degree	58.2	58.7	54.5	56.8	59.0
Bachelor's degree and higher	12.8	12.3	15.4	15.6	14.8
Family type in year 1					
Unattached	15.2	15.7	14.9	8.6	8.7
Married, with children	36.7	37.1	26.0	46.9	58.4
Married, no children	33.8	33.7	41.5	21.8	16.3
Lone parent	4.5	4.6	3.5	6.2	*
Other family type	9.8	8.9	14.1	16.5	11.7
Province of residence in year 1					
Quebec	26.3	28.9	12.6	18.4	16.1
Ontario	36.7	33.0	56.5	49.3	47.3
Alberta	8.9	8.8	7.9	11.4	11.0
British Columbia	12.8	11.8	17.5	15.0	23.0
Other province/territory	15.3	17.5	5.5	5.9	2.7
Urban/rural					
Urban (all 6 years)	77.2	74.7	88.1	90.3	91.5
Rural (at least 1 year)	22.8	25.3	11.9	9.7	8.5
*sample size too small to provide an accurate estimate (< 30)					
In low income at least 1 year	22.9	22.0	18.4	40.7	47.4
In low income at least 3 years	10.4	9.7	7.7	21.6	30.8

Table 2: Probability of being in low income for at least one year in six

	Canadian born	Recent immigrant
Reference person³ (female, 35-44, high school diploma, not a visible minority, married with children, residing in Ontario)	11.2%	34.3%
Male	8.9%	28.7%
Level of education in year 1		
No high school diploma	18.2%	48.0%
Bachelor's degree and higher	6.2%	21.4%
Family type in year 1		
Unattached	34.3%	68.4%
Married, no children	9.1%	29.3%
Lone parent	38.0%	71.7%
Other family type	16.1%	44.3%
Province of residence in year 1		
Québec	16.9%	45.8%
Alberta	15.2%	42.6%
BC	13.7%	39.7%
Other provinces	14.8%	41.8%

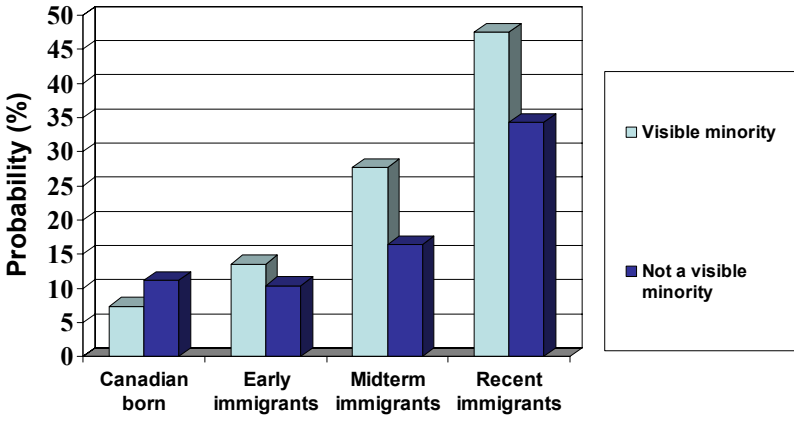
³ To illustrate how different variables are related to low income, a reference person with specific characteristics is selected. Then each characteristic is changed (while holding the others constant) and the effect on probability of being in low income is observed. Within each column, the reference person's probability of experiencing low income is significantly different from each of the other probabilities shown. A similar pattern of differences is found if a reference person with different characteristics is selected.

Table 3: Probability of repeated exposure to low income (three years or more) among those who experienced low income for at least one year

Reference person (Canadian-born female, 35-44, high school diploma, not a visible minority, married with children, residing in an urban area in Ontario)	30.8%
Male	26.5%
Immigrant status	
Recent immigrant	49.5%
Midterm immigrant	NS
Early immigrant	NS
Visible minority	41.6%
Level of education in year 1	
No high school diploma	41.3%
Bachelor's degree and higher	NS
Family type in year 1	
Unattached	54.7%
Married, no children	23.3%
Lone parent	46.5%
Other family type	NS
Rural	21.3
Province of residence in year 1	
Québec	50.5%
Alberta	NS
BC	39.2%
Other provinces	42.6%

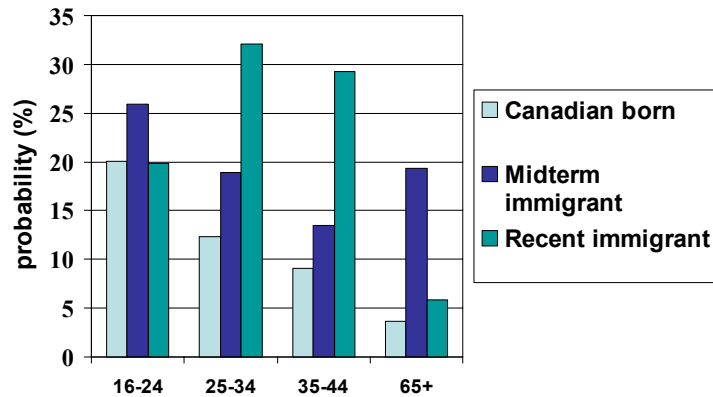
NS means that the probability is **not significantly** different from that of the reference person. A similar pattern of differences is found if a reference person with different characteristics is selected.

Chart A: Immigrant visible minorities are more likely than other immigrants to be in low income for at least 1 year



The illustrated probabilities pertain to women, 35-44, with high school diploma, married with children, residing in Ontario – a similar pattern would be evident for both sexes, different educational levels, family types, etc.

Chart B: Probability of being in low income for at least 1 year declines with age for the Canadian-born, but not for midterm or recent immigrants



The illustrated probabilities pertain to married women, with high school diplomas, no children, not visible minorities,, in Ontario – a similar pattern would be found for other groups

Early immigrants are not depicted because they were not significantly different from non-immigrants. Similarly, persons aged 45-54 and 55-64 are not shown because they are not significantly different from those aged 35-44.

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