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Earnings Mobility of Canadian Immigrants: A Transition Matrix Approach

Michael G. Abbott
Queen's University

Charles M. Beach
Queen's University

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Charles M. Beach

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Abstract

This Study examines the earnings mobility of Canadian immigrants using the large IMDB microdata file. We examine earnings transition matrices of immigrants over ten years after landing in Canada for three landing cohorts – 1982, 1988, and 1994. Immigrants also arrive under four separate admission classes: independent economic, other economic, family class, and refugees.

The study reports five major empirical findings. First, overall earnings mobility was slightly greater for male immigrant earners than for male workers as a whole in the Canadian labour market, but was considerably greater for female immigrant earners than for all female earners in Canada. But both male and female immigrants over their first decade in Canada were much more likely to experience downward earnings mobility than were all earners of the same gender in Canada. Second, across the four immigrant admission classes, independent economic immigrants have markedly the highest average probability of moving up and the lowest probability of moving down the earnings distribution. Third, overall earnings mobility is slightly higher for female than male immigrants – opposite to the situation for workers as whole in Canada. Fourth, the degree of immigrant earnings mobility declines over immigrants' first ten post-landing years in Canada as they integrate into the Canadian labour market. Fifth, overall earnings mobility across landing cohorts has shown only minor changes between the 1982 and 1994 cohorts, where the average probability of moving up has significantly increased and the average probability of moving down has significantly decreased. The early 1990s economic recession is seen to have had substantial negative or dampening effects on immigrant earnings mobility for the 1988 landing cohort.

Executive Summary

This study examines the earnings mobility of Canadian immigrants between 1982 and 2005 using the large IMDB microdata file of immigrants to Canada. The distinguishing – indeed novel – feature of the study is its analysis of earnings mobility in terms of earnings transition matrices which divide the immigrant earnings distribution into six earnings categories (defined in terms of immigrants' median earnings levels from less-then-25%-of-the-median up to more-than-200%-of-the-median) and then show how the immigrants in a given earnings category experience earnings change over a specified period of time. In our analysis, we follow immigrants for a ten-year period beginning with their first full year after landing in Canada.

There are several key dimensions to the analysis. Male and female immigrants are treated separately so their possibly different labour market experiences can be allowed for. The paper examines the earnings transitions of three different landing cohorts – immigrants landing in the years 1982, 1988, and 1994 – in order to identify robust common patterns of earnings adjustment. Immigrants are followed for ten full years in each of these landing cohorts. Thus the analysis focuses on nine-year earnings transitions (i.e., over a ten-year period), though the paper also provides results for four-year and even one-year transitions (i.e., over five and two years respectively) in order to see how immigrants' earnings mobility varies with years since landing in Canada. Further, immigrants arrive under different admission programs. The study distinguishes among four major admission classes – independent economic immigrants (i.e., principal applicants who are evaluated under a skills-based point system screen), other economic immigrants (i.e., other family members accompanying the principal applicant), family class immigrants (who are sponsored by a resident family), and refugee class immigrants (who are admitted on humanitarian grounds). So a policy-relevant question is whether and how much better immigrants in one admission class do relative to those arriving in other classes.

The paper makes several contributions. It offers a novel empirical framework for the study of immigrant earnings adjustment, and provides a comparison of immigrant earnings mobility with that for workers as a whole in the Canadian labour market. It also provides a comparison of immigrant earnings mobility patterns across the major immigrant admission classes, and hence offers a framework for a similar analysis of specific immigration programs. The study also compares immigrant earnings mobility outcomes over time (from the 1980s to the early 2000s) in Canada.

This paper can be viewed as a companion piece to an earlier CLSRN study by Abbott and Beach (2011) which uses the same data over the same period and the same major breakdowns. The earlier paper, however, looked at immigrant (real) earnings levels and growth rates over the immigrants' first ten years in Canada, whereas the current paper examines their earnings *mobility patterns* over the same periods.

The study reports five major empirical findings. First, overall earnings mobility over their first decade in Canada was slightly greater for male immigrant earners than for male workers as a whole in the Canadian labour market, but was considerably greater for female immigrant earners than for all female earners in Canada. But both male and female

immigrants over their first ten years in Canada were much more likely to experience downward earnings mobility than were all earners of the same gender in Canada.

Second, in terms of earnings mobility patterns across the four immigrant admission classes, the study has found that, for both men and women and across the three landing cohorts, independent economic immigrants have markedly the highest average probability of moving up one or more earnings categories over their first ten years in Canada and the lowest probability of moving down, whereas family class immigrants display the lowest average probability of moving up and the highest average probability of moving down. As a result, the net average probability of moving up is markedly the highest among independent economic immigrants and the lowest among family class immigrants.

Third, there are a number of differences in the earnings mobility patterns between male and female immigrants. Measures of total or overall mobility (the Prais index and the average probability of moving between earnings categories) are both higher for female than for male immigrants on average by 2-7 percent. Interestingly, this is opposite to the case for male and female workers as a whole in the Canadian labour market. The higher overall mobility among female as compared to male immigrants is due both to a higher average probability of moving up one or more earnings categories and to a higher average probability of moving down across categories. This suggests the need for further investigation of the earnings adjustment process that female immigrants experience after landing in Canada.

Fourth, the degree of immigrant earnings mobility declines over immigrants' first ten post-landing years in Canada as they integrate into the Canadian labour market, consistent with conventional economic theory.

Fifth, the overall earnings mobility across landing cohorts has shown only minor changes between the 1982 and 1994 cohorts of immigrants which, in a regression framework, show up as only marginally significant increases. Where the trend changes in mobility patterns do show up as highly statistically significant (and quite large in the case of male immigrants) are a rise in the average probability of moving up, a fall in the average probability of moving down, and thus an increase in the net probability of moving up. That is, while average initial earnings levels of immigrants have fallen or worsened over the period, the speed of their upward earnings mobility after landing has indeed increased. The early 1990s economic recession is seen to have had substantial negative or dampening effects on immigrant earnings mobility for the 1988 landing cohort. For example, both measures of overall earnings mobility are lower by 4.9 percent for men and by 7.1 percent for women in the 1988 cohort compared to the averages of the other two landing cohorts. The dampening effect of the recession is evident across all four immigrant admission classes.