



Canadian Labour Market and Skills Researcher Network

Working Paper No. 72

Incidence and Returns to Apprenticeship Training in Canada: the Role of Family Background and Immigrant Status

James Ted McDonald
University of New Brunswick

Christopher Worswick
Carleton University

January 2011

CLSRN is supported by Human Resources and Skills Development Canada (HRSDC) and the Social Sciences and Humanities Research Council of Canada (SSHRC). All opinions are those of the authors and do not reflect the views of HRSDC or the SSHRC.

Incidence and Returns to Apprenticeship Training in Canada:
The Role of Family Background and Immigrant Status*

by

James Ted McDonald
Department of Economics
University of New Brunswick

and

Christopher Worswick
Department of Economics
Carleton University

* This project was supported through the CLSRN Apprenticeship program. We have benefited from comments and suggestions made by Jennifer Hunt, anonymous referees and participants at a workshop held in Vancouver in January, 2010, as well as seminar participants at Monash University, University of New Brunswick and University of Waterloo. The authors are solely responsible for the opinions expressed and any errors.

ABSTRACT

Immigrant men and women in Canada from recent arrival cohorts have especially low rates of having an apprenticeship credential when compared to either their counterparts from earlier arrival cohorts or the Canadian born. Among the native born, a second generation man is more likely to have completed an apprenticeship if his father's generation of immigrant men in Canada (from the same source country) have a high probability of apprenticeship completion. The same effect is present for first generation men who arrived in Canada as children. However, this effect is not found for either first generation or second generation women. An analysis of earnings indicates a strong wage return from the completion of an apprenticeship in Canada is found for men. However, women who have completed an apprenticeship in Canada actually have lower weekly earnings than women with only a high school diploma. The empirical results suggest that the increased emphasis on university education in the selection of economic immigrants is creating an imbalance between the supply of both first and second generation immigrants with an apprenticeship, and the demand for workers with these credentials.

JEL Code: J1 and I2

Keywords: Apprenticeships, Education, Immigration, and Second Generation

Executive Summary

Historically, Canada has relied upon skilled tradespersons entering as immigrants to provide an adequate supply of labour services in the Canadian labour market. However, changes in immigration policy over the past number of decades have had implications for the extent to which immigration can meet labour shortages in the skilled trades. For immigrants, one relevant issue is the extent of intergenerational connections in occupational attainment among immigrants. It may be the case that the Canadian-born adult children of the immigrants from earlier arrival cohorts (many of whom came to Canada in search of employment as skilled tradespersons) may be more likely to complete apprenticeships and work in the trades. This could be due to different attitudes about this type of education and work determined in part by the attitudes of their parents and possibly by other members of their ethnic communities. Alternatively, this could be due to a greater knowledge of the returns to this type of training in the labour market. Another possibility is that employers interested in taking on apprentices may look first to members of their own family or community networks.

In this paper, we investigate the importance of immigrant status and country of origin in determining three important dimensions of apprenticeship training: 1) incidence of completion of an apprenticeship, 2) earnings of individuals holding an apprenticeship obtained in Canada compared to other forms of post-secondary education, and 3) the incidence of employment of individuals with apprenticeships obtained in Canada compared to those individuals with other types of education. As part of our analysis, we explore these issues separately for men and women to investigate whether differences in immigrant status vary by gender.

We are able to undertake an analysis of these issues because, unlike what was the case for earlier Censuses of Canada, the 2006 Census specifically asks respondents whether they have completed an apprenticeship. Using the detailed parental immigrant status information in the confidential 2006 Census file, we investigate whether there is an inter-generational 'echo effect' on attitudes towards apprenticeship programs between the adult children of immigrants when compared to the incidence of apprenticeship completion of immigrants of their parent's generation and source country. We do this by first analyzing the relationship between immigrant status and the completion of an apprenticeship for individuals who would have completed their educational training in the 1950s, 1960s and 1970s. The idea is to identify immigrant groups by source country and arrival cohort who were more likely to have completed an apprenticeship (likely in their home countries) and then work in Canada. Next, we analyze the probability of completion of an apprenticeship program for younger individuals in the 2006 Census allowing us to see which groups of immigrants and the Canadian born are more likely to follow this educational path. We carry out simple logit and

multinomial logit estimation models of the decision to complete an apprenticeship.

Immigrant men and women from more recent arrival cohorts have especially low rates of having an apprenticeship credential when compared to either their counterparts from earlier arrival cohorts or the Canadian born. The shift in the distribution of immigrants coming to Canada away from traditional source countries such as the UK and countries in Western Europe towards new source countries such as those in Asia have been associated with a decline in the supply of immigrants who report their highest educational credential as being an apprenticeship.

A second generation man is more likely to have completed an apprenticeship if his father's generation of immigrant men in Canada (from the same source country) have a high probability of apprenticeship completion. The same effect is present for first generation men who arrived in Canada as children. However, this effect is not found for either first generation or second generation women.

A strong wage return from the completion of an apprenticeship in Canada is found for men. However, women who have completed an apprenticeship in Canada actually have lower weekly earnings than women with only a high school diploma. For both men and women, the returns to an apprenticeship are not found to vary significantly between the first generation (arriving as children), the second generation or the third (and higher) generation.

For both men and women, individuals with apprenticeship credentials obtained in Canada are more likely to be employed than are their counterparts with no more than a high school diploma. The magnitude of this effect does not vary between the first, second and third generation groups within each gender.

Taken together, these findings raise concerns for the supply of individuals with apprenticeship training in the Canadian labour market. The shift away from traditional source countries in Canada's immigrant intake means that, in the coming decades, Canada will receive fewer immigrants with apprenticeship training than was the case in past decades. The evidence for men of an inter-generational echo effect indicates that this shift in source country composition may lead to both a lower share of immigrants having apprenticeship training and a lower proportion of their Canadian-born children choosing to undertake apprenticeship training in the future. Given the strong labour market returns to apprenticeship training, at least for men, this raises the question as to whether enough emphasis is currently being placed on apprenticeships and other vocational training in the selection of immigrants.