



Labour Market Matters

Special points of interest:

- Shifting immigrant source countries as well as emphasis on university-educated immigrants may contribute to an increased shortage of skilled trades people in Canada.
- Study finds that the more education an individual has before starting an apprenticeship program, the better the chances he or she will complete the program.

“[D]eclining numbers of workers holding an apprenticeship in Canada raises the question about whether enough emphasis is currently being placed on apprenticeships and other vocational training in the selection of immigrants”



Christopher Worswick
(Carleton University)

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Immigration Policy and Apprenticeship in Canada

In the coming decades, immigration will play a vital role in building and replenishing Canada's workforce and tax-base as the Baby Boomers retire and pressure increases on Canada's healthcare and social welfare systems. Skilled tradespersons entering Canada as immigrants have been a historically important source of skilled labour supply for the Canadian labour market. In a new CLSRN study, **“Incidence and Returns to Apprenticeship Training in Canada: the Role of Family Background and Immigrant Status”** ([CLSRN Working Paper no. 72](#)) Ted McDonald (University of New Brunswick) and Christopher Worswick (Carleton University), investigate the importance of immigrant labour market background and country of origin in determining several important dimensions of apprenticeship training including: likelihood of completing an apprenticeship, earnings of individuals holding an apprenticeship obtained in Canada compared to other forms of post-secondary education, and likelihood of employment of individuals with apprenticeships obtained in Canada compared to those individuals with other types of education.

Using detailed parental immigrant status information in the 2006 Census file, the researchers investigate whether there is an inter-generational ‘echo effect’ on attitudes towards apprenticeship programs among the adult children of immigrants. Specifically, they examine whether the likelihood of apprenticeship completion by

first and second generation Canadians is affected by apprenticeship rates of their parents’ generation. The study found that a second generation man is more likely to have completed an apprenticeship if his father’s generation of immigrant men in Canada (of the same source country) also had a high probability of apprenticeship completion. This ‘echo effect’ is even larger for first generation men who arrived in Canada as children.

In terms of earnings, the study found that for 1st generation male immigrants, those with an apprenticeship make nearly 20 percent more per week than those with only a high school education. Numbers are similar for 2nd generation males: those with an apprenticeship make over 15 percent more per week than those with only a high school education. Individuals with apprenticeship credentials obtained in Canada are also more likely to be employed than are their counterparts with no more than a high school diploma.

Despite the significant earnings and employment advantage of having an apprenticeship, the study found that immigrants 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 Canadian-born individuals. The researchers attribute this decline in the supply of immigrants who have apprenticeships to the shift in the composition of immigrants coming to Canada away from traditional source countries such as the UK and countries in Western Europe



Ted McDonald
(University of New Brunswick)

towards new source countries such as those in Asia.

The study's findings raise concern for the supply of individuals in the Canadian labour market with apprenticeship training. The shift away from traditional source countries in Canada's immigrant intake may mean that Canada will both receive fewer immigrants with apprenticeship training in the coming decades than in the past and that a lower proportion of their Canadian-born children will choose to undertake apprenticeship training in the future. The 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. Given the strong labour market returns to apprenticeship training (particularly for men), the declining numbers of workers holding an apprenticeship in Canada raises the question about whether enough emphasis is currently being placed on apprenticeships and other vocational training in the selection of immigrants.



Benoit Dostie
(HEC Montreal)

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Allowing self-paced training schedules for apprentices could help to improve apprenticeship completion rates.

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Apprenticeship completion rates in Canada and what can be done to improve them

Certified skilled tradespersons are cornerstone of a thriving economy. A well-functioning apprenticeship system is vital to ensuring that the supply of skilled labour can meet demand. Low and slow apprenticeship completion rates are a major road block to Canada's apprenticeship system. In a new CLSRN study entitled **“A Competing Risks Analysis of the Determinants of Low Completion Rates in the Canadian Apprenticeship System”** (CLSRN Working Paper no. 67) Benoit Dostie (HEC Montreal) attempts to estimate the determinants of low (and slow) apprenticeship completion rates in Canada.

The study uses data from the National Apprenticeship Survey (NAS) 2007 to estimate the determinants of low (and slow) completion rates in the Canadian apprenticeship system. The NAS, classifies each apprentice into three categories: (1) Long-Term Continuers, (2) Completer and (3) Discontinuer. Dostie creates a model to estimate the impact of various demographic and apprenticeship characteristics on the probabilities of being classified into each one of the three status.

The study finds that apprentices with more education pre-apprenticeship are much more likely to be classified as Completers. For example, an individual who has completed high school is 44 percent more likely to be a Completer than an

individual whose highest education level is less than high school. The positive relationship between higher levels of education and the higher probability of being an apprenticeship Completer could be attributed to unobserved ability, or could also reflect a general propensity of individuals who have completed high school to have better decision-making behaviour.

Interestingly however, is that individuals, who have some post high-school education, were found to be more likely to be classified as either Completer and Discontinuer, and therefore less likely to be classified as Long-Term Continuers. This indicates that such individuals are more likely to either complete an apprenticeship program or discontinue, but are less likely to be a “slow” apprenticeship completer.

In the case of ability, the study found that high-ability individuals are more likely to complete and less likely to drop out. However, the magnitudes of this impact are smaller than in the case of education.

Older apprentices are less likely to transit toward completion after age 28. The study also found that probability of apprenticeship completion generally increases with apprenticeship duration. However, the study notes that there are large increases in the probability of discontinuation around years 3 and 4 and at years 6 and 7 of an apprenticeship. Therefore, policies to prevent dropping out would be most

effective when introduced during these time windows over the course of an apprenticeship.

While new apprenticeship registrations can swell, particularly during recessionary times, whether or not these registrants can complete their apprenticeships is in many ways just as important as the number of new registrants. As the study found that individuals who completed high school are more likely to complete an apprenticeship, it could mean that restricting entry into apprenticeship programs to individuals with a high school diploma would help increase completion rates. Allowing apprentices greater flexibility, can also help improve completion rates, as the study also found that the probability of apprenticeship completion improves if technical training is taken on a self-paced basis. This could indicate that learning by block (one week or more) could help increase completion rates.

To ensure that the supply of skilled labour meets demand in light of declining numbers of skilled tradespersons coming to Canada as immigrants, it is important to improve apprenticeship completion rates in Canada. Shortages of skilled tradespersons can lead to increased costs of labour and project delays that can act as a drag on the economy.

Endnotes

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