Study: A Canada–US Comparison of the Economic Outcomes of STEM Immigrants

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In both Canada and the United States, immigrants are a large source of labour supply with training in science, technology, engineering and mathematics (STEM). In Canada, adult immigrants accounted for 44% of all individuals aged 25 to 64 with a university degree in a STEM field in 2016, compared with 24% in the United States.

While the supply of STEM-educated immigrants is relatively larger in Canada than in the United States, the two countries also differ in how STEM-educated immigrants are selected. In the United States, high-skilled immigrants were generally selected and sponsored by employers. Until the early 2010s, economic immigrants in Canada were mostly admitted directly from abroad through the points system, in which employers do not play a direct role. The differences in the supply and selection of economic immigrants could affect STEM-educated immigrants' relative performance in the labour market in the two countries.

A new Statistics Canada study, "A Canada–US Comparison of the Economic Outcomes of STEM Immigrants," compares the two countries in terms of the occupational skill utilization and earnings of immigrants with at least a bachelor's degree in a STEM field. This study was conducted in collaboration with Immigration, Refugees and Citizenship Canada.

In both countries, close to one-half of STEM-educated immigrant workers held jobs in STEM occupations, according to the 2016 Census of Canada and the American Community Survey from 2015 to 2017. With similar demographic characteristics, STEM-educated immigrants with STEM jobs in Canada earned 17% less than their Canadian-born counterparts, while such immigrants in the United States earned slightly more than their US-born counterparts.

Among STEM-educated immigrant workers not working in a STEM occupation, labour market outcomes were better in the United States than in Canada. In Canada, 20% of these immigrants held jobs requiring a university degree, compared with 48% in the United States. With similar characteristics, these immigrants in Canada earned 34% less than their Canadian-born counterparts, compared with 7% less in the United States.

In Canada, the skill utilization and earnings of STEM-educated immigrants differed considerably by admission program. Among STEM-educated immigrants in the Canadian Experience Class (CEC), two-thirds found a STEM job, and they earned on average 9% less than STEM-educated Canadian-born workers. The CEC, introduced in 2008, resembles employer-based selection in the United States.

By comparison, among STEM-educated immigrants admitted via the Provincial Nominee Program, 45% found a STEM job, and they earned 20% less than STEM-educated Canadian-born workers. A higher share of STEM-educated immigrants in the Federal Skilled Worker Program worked in STEM occupations, but they had slightly lower average earnings than provincial nominees.

The study "A Canada–U.S. Comparison of the Economic Outcomes of STEM Immigrants," part of the Analytical Studies Branch Paper Series (11F0019M), is now available.

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