

The positive effects of immigration on firm productivity

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Increases in the share of immigrant workers in a firm are associated with increases in firm-level labour productivity in Canada, according to a new study, "Immigration and Firm-level Productivity: Evidence from the Canadian Employer-Employee Dynamics Database," published by Statistics Canada.

For the period from 2000 to 2015, immigrants who arrived in Canada after 1980 made up, on average, 13.5% of workers in firms with at least 20 employees. The average increase in this share across firms over 10-year periods was 0.58 percentage points. Changes in the share of immigrants in a firm's employment varied greatly, typically ranging from a 15 percentage point increase to a 15 percentage point decline.

The largest increase was for immigrants with official language skills and with university education. The smallest change was for immigrants who intended to work in science, technology, engineering, math and computer science (STEM) occupations.

Existing studies for other countries find both positive and negative effects of immigrants on firm productivity. For example, on one hand, a large increase in the supply of lower-skilled immigrants may encourage firms to become more labour rather than capital intensive, thus reducing labour productivity. On the other hand, if immigrants bring skills that are complementary to those of domestic-born workers, this may improve labour productivity.

This study finds that the impact of immigration on the productivity of Canadian firms is small. Over a 10-year period, a firm that increased its share of immigrant workers by 10 percentage points experienced on average a 1.9% increase in productivity. This result is obtained after controlling for industry, province, capital intensity and firm size. It is also found that immigration has little effect on capital intensity.

The effects of immigrants on firm productivity varied considerably by immigrant characteristics and by industry sectors. The effect was higher for low-skilled/less-educated immigrants as compared with highly-skilled/university-educated immigrants. Those differences were more pronounced in technology-intensive and knowledge-based industries.

The positive effect of immigration on productivity is consistent with the proposition that immigrants are complementary to native-born workers in terms of skills and firms increase job/task specialization to benefit from the comparative advantages of immigrants and native-born workers. It is also possible that technology-intensive or knowledge-based industries require a high degree of division of labour and specialization of functions.

The relatively small effect of highly-skilled/university-educated immigrants on productivity is consistent with the previous empirical evidence in Canada that recent immigrants with a university degree earned similar wages as Canadian-born workers with only a high school diploma, and over one-half of recent immigrants who were trained at the university level in the STEM fields did not work in STEM occupations and tended to work in low-skilled jobs.

The research article titled "[Immigration and Firm Productivity: Evidence from the Canadian Employer-Employee Dynamics Database](#)," part of the *Analytical Studies Branch Research Paper Series (11F0019M)*, is now available.

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