



Future Canadian workers: more educated and more culturally diversified

About the Brief

This research brief is based on the paper "The Future Composition of the Canadian Labour Force: A Microsimulation Projection" by Alain Bélanger and Nicolas Bastien. It was published in *Population Development Review*, Volume 39, Number 3 (September 2013), pages 509-525.

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Target Audience

- ◆ Researchers
- ◆ Policy Makers
- ◆ Graduate Students

Summary

This article charts the future transformations of the Canadian labor force population using a microsimulation projection model. The model takes into account differentials in demographic behavior and labor force participation of individuals according to their ethnocultural and educational characteristics. Results of the microsimulation show that Canada's labor force population will continue to increase, but at a slower rate than in the recent past. By 2031, almost one third of the country's total labor force could be foreign-born, and almost all its future increase is expected to be fuelled by university graduates, while the less-educated labor force is projected to decline. All projection scenarios show that Canada's overall participation rate will decline due to the retirement of the Boomers and the slow growth of the workforce. The analyses suggest that the most pertinent driver to be addressed is the differential in the labor force participation rates of the Canadian-born white population and immigrants and visible minorities.

Key Findings

- In 2031, the Canadian labor force population will be generally older, more educated, and more ethnoculturally diversified.
- The size of Canada's labor force is not expected to decrease; a steady increase is forecast over the next decades but at a slower rate than in the recent past. According to the reference scenario, it would grow from 17.6 million persons in 2006 to approximately 21.5 million in 2031.
- Due to the aging of the Canadian population, the overall labor force participation rate (ages 15+) is bound to decrease from 67% to between 64% and 60% depending on the projection scenarios.
- Demographic drivers have an important impact on total labor force size but a minimal effect on the future labor force participation rate.
- A better economic integration of immigrants and visible minorities would have the highest policy leverage on Canada's future overall participation rate. Increasing immigration has no effect on the participation rate if immigrants continue to show lower work force participation.



Background

As a result of a rapid fall in fertility, the Canadian population has been undergoing a rapid demographic aging. This aging process has now reached a critical turning point as Boomers start to retire from the labor market in large numbers. In response to declining fertility, Canada raised its immigration intake at the end of the 1980s, and immigration is now the main driver of population growth. In fact, net immigration is currently responsible for approximately two-thirds of the demographic growth, leaving the remaining third to the natural increase (births minus deaths).

Meanwhile, immigrants to Canada are becoming more culturally diversified. Over the last half century, the main source regions have shifted from Europe to Asia. As a result, the 2006 Census showed a growing proportion of immigrants, of people belonging to visible minority groups and of people with a “nonofficial” language as their mother tongue.

In parallel, the literature on labor market outcomes demonstrates a deterioration of economic conditions of immigrants (Aydemir & Skuterud, 2004; Picot & Sweetman, 2005). Despite their higher educational attainment, immigrants have lower participation rates in the labor market, higher unemployment rate, and lower income compared to the Canadian-born working-age population. Moreover, immigrants need more time on average than in past decades to reach non-immigrants’ economic outcomes in terms of income, employment and participation rate (Zietsma, 2007).

Other studies show that the economic gap between the Canadian-born and immigrant workers is wider among visible minority groups (Bélanger, Bingoly-Liworo, & Ledent, 2010; Tran, 2004) and for women also (Statistics Canada, 2008; Zietsma, 2007). Finally, the overqualification rate is higher among immigrants than among non-immigrants (Galarneau & Morissette, 2008) and reaches worrying levels for highly educated people (Gilmore, 2009).

Objectives

1. Project the Canadian labor force population up to 2031 by age, sex, educational attainment and ethnocultural composition.
2. Analyze projection scenarios to assess the impact of demographic drivers (fertility and immigration rate), of participation rates, and of barriers to economic integration of immigrants on the future size and composition of labor force population and on overall participation rates.

Data and Methods

The authors project the Canadian labor force population by age, sex, education level, and ethnocultural composition using *DemoSim*, a microsimulation projection model. This model is dynamic in the sense that each simulated individual ages according to a life-cycle behavioral model. *DemoSim* accounts for changes in population composition over the projected period and simulates internal migrations between the different regions of Canada. A full description of the model and its demographic assumptions can be found in the projection reports by Statistics Canada (Bélanger & Caron Malenfant, 2005; Caron-Malenfant, Lebel, & Martel, 2010).

The base population corresponds to the nearly 7 million respondents to the 2006 Canadian Census long-form questionnaire, adjusted through reweighting for net under coverage by age, sex, and place of residence. The model projects the evolution of this base population up to 2031. Aggregate tables are then produced by taking a snapshot of the resulting projected population at different times.

Projection scenarios

Five different projection scenarios are built to assess the impact of demographic drivers, of participation rates, and of barriers to economic integration of immigrants on the projected population (Table 1).

Table 1. Assumptions of the five scenarios

Scenario	Imm. rate (per 1000)	Fertility (TFR)	Participation rate	Differentials between Canadian-born whites and immigrants/visibles minorities
Low Growth	6.0	1.5	Increasing	Yes
Med. Growth (Ref.)	7.5	1.7	Increasing	Yes
High growth	9.0	1.9	Increasing	Yes
Constant Participation rate	7.5	1.7	Constant	Yes
No differentials	7.5	1.7	Increasing	No



Tomorrow's Canadian Labor force

The reference scenario assumes a medium demographic growth, an increase of the participation rates based on recent trends, and the persistence of participation rates differentials between Canadian-born whites and immigrants and visible minorities.

The low-growth and the high-growth scenarios with respectively low and high assumptions on immigration and fertility rates reflect the plausible uncertainty of the forecasts of the demographic drivers.

The fourth scenario keeps the participation rates constant at the 2010 levels in order to measure the impact of these rates on the projected labor force population. The other four scenarios assume that the observed recent trends will hold true in the future, where female participation rates and older workers participation rates are increasing.

Finally, the fifth scenario assumes that immigrants and visible minority groups have the same age-, sex-, and education-specific labor force participation rates as the Canadian-born white population.

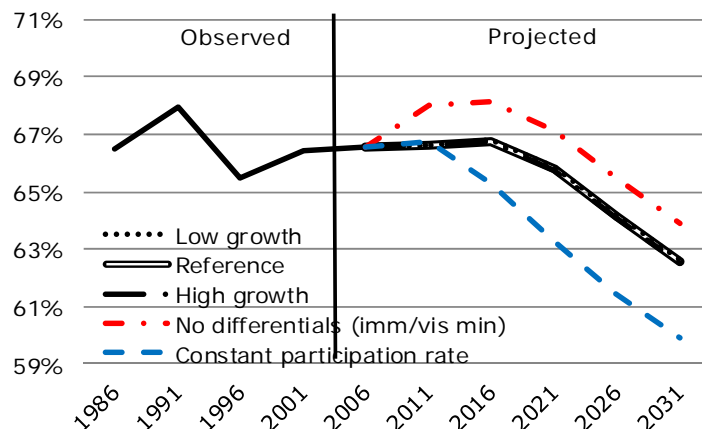
Results

All scenarios project that the country's labor force will grow steadily. Under the reference (medium-growth) scenario, the labor force will increase from 17.6 million persons in 2006 to 21.5 million in 2031. This represents an increase of 3.9 million over the next 25 years, which corresponds to an average annual growth rate of 0.8%. The low-growth scenario projects a workforce of about 1 million smaller than the reference scenario; the high-growth scenario generates a total about 1 million larger.

If the participation rates were to remain constant at the 2010 level, the labor force population would be reduced in 2031 by about 915,000. Hence, the increasing trend in age-specific participation rates generates a workforce 5% larger compared to the constant participation rate scenario. Furthermore, under the assumption of no differential in labor force participation between immigrants and visible minority groups, there would be half a million more workers in 2031.

Given the aging of the Canadian population, the decline of the overall labor force participation rate (ages 15+) is virtually unavoidable. Currently at around 67% (see Figure 1), the rate could decline to between 64% and 60% according to the different scenarios.

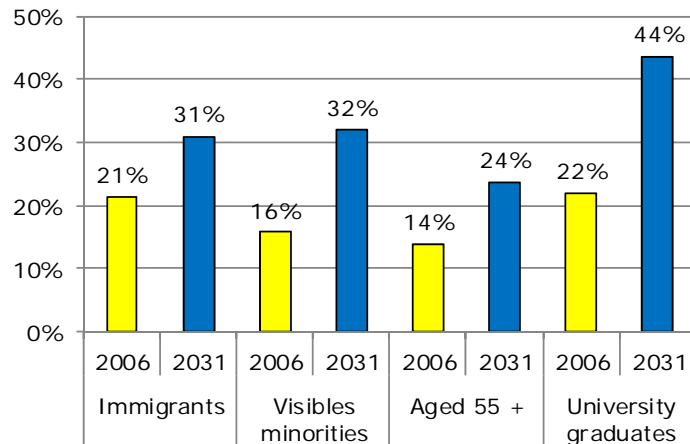
Figure 1. Overall labor force participation rate, observed and projected, Canada, 1986-2031



The scenario that attributes to immigrants and visible minorities the same participation rates as the Canadian-born white population produces the highest overall participation rate (64%) in 2031. Demographic drivers have little impact on the projected participation rate.

According to the reference scenario, the projected labor force population will be older in 2031 than it is today. The projections also show that tomorrow's Canadian workers will have a higher level of education and will contain a larger share of foreign born individuals and of visible minorities (see Figure 2).

Figure 2. Share of selected characteristics of the labor force population of Canada in 2006 and 2031 according to the medium-growth demographic scenario





Most of the projected labor force growth is expected to occur among university graduates, while the less educated labor force is projected to decline. The workforce population with a university degree is projected to increase from 3.9 million to 9.4 million, and its share of the total labor force is expected to increase from 22% in 2006 to 44% in 2031. On the other hand, the workforce with a high school diploma or less is expected to decline from 7.3 million to 5.3 million, its share of the total declining from 41% to 25%.

Discussion

In light of the projection results, the authors question the mainstream view suggesting that Canada faces an important future labor shortage which should be addressed by increasing immigration intake. They argue that the actual high-immigration policies keep labor costs low rather than allowing the competitive market to raise labor compensation. As a result, immigrants themselves suffer the most from the growing economic vulnerability caused by such sustained high-immigration levels (Green & Green, 2004).

Furthermore, since the projection scenarios demonstrate the minimal impact of demographic variables on future labor force participation rates, the authors argue that increasing immigration cannot alleviate the decline of the overall participation rate (from 67% to 63%) due to population aging. Instead, a greater economic integration of immigrants would not only increase the size of the labor force, but would also significantly mitigate the declining overall participation rate. Rather than admitting more immigrants to Canada, the authors argue that it would be more effective to encourage people to postpone retirement, improve work-family balance, and better integrate immigrants and visible minorities.

Although projections show no sign of labor shortages, they show high risks of skills imbalances. For instance, Canada's labor market is likely to simultaneously face an oversupply of university graduates and a shortage of low-skilled workers. As a result, over qualification of Canadian workers is likely to increase. A solution proposed by the authors would be to adapt immigration policies in order to recruit more immigrants with transferrable skills. Programs helping to upgrade the immigrants' education skills to obtain Canadian certification and employment should also be put in place.

The authors also identify language barriers as main obstacles preventing newcomers to integrate into the Canadian labor market. In order to improve immigrants' language skills, two solutions are put forward. First, language training should be offered to immigrants already working in Canada, and second, the language skills criteria should be made stronger when admitting newcomers under the economic category. Economic integration of immigrants admitted under the family or refugee categories or as a dependent of an economic immigrant is also desirable as they represent 75% of all immigrants selected yearly by the government.

Finally, the authors suggest that Canadian policymakers should adapt the human capital model on which the immigrants' selection is based. For example, in Australia, the government now favors immigrants with higher potential for employability in terms of age, language skills, and work skills corresponding to specific in-demand jobs. This recent Australian immigration policy has met with success as major improvements following the reforms were observed in terms of immigrants' economic integration (Hawthorne, 2008).

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