

Labour Force Growth and Labour Market Gap in Canada: 2011 to 2032

May 2023

The firm that businesses trust with their most complex legal matters.



Labour Force Growth and Labour Market Gap in Canada: 2011 to 2032

By Richard Dion and David Dodge

Over the last eight years for which we have data on job vacancies, labour demand as measured by the sum of employment and job vacancies has converged on a slower-growing supply as measured by the labour force (Chart 1). On average, labour demanded increased at an annualized rate of 1.7% between Q2 2015 and Q1 2023 and labour supplied at a rate of 1.2%. By 2022 the surplus of labour supplied had virtually disappeared, with low unemployment and high job vacancies attesting to an unusually tight labour market. In this context the adequacy of the future labour force in meeting labour demanded with adequate margin has become an issue of interest to both businesses and governments.

In this paper, we develop scenarios for growth in the Canadian labour force from 2023 to 2032 after examining the sources of this growth in the last decade, and we provide estimates of the gap between labour supply and labour demand in the medium term under various assumptions concerning growth in potential output and trend productivity, the unemployment rate and the ratio of job vacancies to labour force. We conclude that labour supply is most likely to accommodate labour demand in the medium term without overheating developing in the market. But first, a quick overview of the framework to trace the sources of labour force growth is in order.

Chart 1:



Source: Statistics Canada, tables 14-10-0406-01 and 14-10-0287-01.

Tracing the Sources of Labour Force Growth

Labour force is that portion of the working-age population, i.e., 15+ years of age, that is willing and able to work. By that definition, labour force growth adds up to the growth rate of total population plus that of the ratio of population 15+ to total population plus that of the aggregate labour force participation rate. Population growth is the prime driver of labour force growth. As shown in Table 1, its most important component by far is immigration, which accounted for 69% of total population growth in the last five years as opposed to 24% (and falling) coming from births less deaths. Net non-permanent residents, which include persons with temporary work or study permit with their family as well as refugees, accounted for another 17%, and net emigration for -10%.

Table 1:

SOURCES OF INCREASE IN CANADA'S TOTAL POPULATION

| | Increase in population | Births | Deaths | Births- deaths | Immigrants | Emigrants | Returning emigrants | Net temporary emigrants | Net non- permanent residents |
|------|------------------------|---------|----------|-------------------|----------------|-----------|------------------------|-------------------------------|------------------------------------|
| | | | | (000's pei | rsons) | | | | |
| 2018 | 519,848 | 376,750 | -283,760 | 92,990 | 303,325 | -50,580 | 39,117 | -27,294 | 162,290 |
| 2019 | 536,146 | 372,868 | -282,891 | 89,997 | 313,601 | -47,337 | 39,091 | -27,687 | 168,501 |
| 2020 | 405,936 | 371,059 | -296,806 | 74,253 | 284,157 | -34,835 | 30,126 | -25,109 | 77,344 |
| 2021 | 219,332 | 361,613 | -306,465 | 55,148 | 226,308 | -35,838 | 34,933 | -18,842 | -42,377 |
| 2022 | 703,404 | 368,792 | -323,221 | 45,571 | 492,984 | -49,769 | 40,326 | -30,946 | 205,238 |
| | | | Averag | e share of incr | ease in popula | tion (%): | | | |
| | 2011-2022 | 89.3 | -65.0 | 24.3 | 69.3 | -13.1 | 8.9 | -6.1 | 16.7 |

Source of data: Statistics Canada, table 17-10-008-01.

Growth in the aggregate participation rate reflects the evolving structure of the population 15+ by age and sex as well as changes over time in the individual participation rates by age-sex group. What we call the aging effect on the aggregate participation rate is the change in that rate that is obtained when the population shares by age-sex group are kept constant at their values in the initial year of a period while the corresponding individual participation rates change over that period. For a while now, the aging effect has been reducing the aggregate participation rate significantly because population has been shifting over time toward older age groups which have much lower participation rates than average. The drop in participation as workers move through the 55+ age groups largely reflects their retirement from the labour force. Indeed, retiring would have accounted for 75% of the exit from the labour force in the 55+ age groups from 2011 to 2022, the rest being mostly due to illness or disability.



The complement to the aging effect is what we call the activity effect, which is the change in the aggregate participation rate that is obtained when the individual participation rates by age-sex group are held constant at their values in the initial year of a period while the corresponding population shares change over that period. The activity effect has been raising the aggregate participation rate because virtually all age-sex groups have been experiencing some increase in their participation rate. By far the most rapid increases have been experienced in the 65-69 and 70+ age groups, especially for women.

| LABOU | JR FORCE G | ROWTH ANI | D ITS SO | URCES: 2011 TC | D 2022 | | | | | |
|---------|-----------------|----------------|-----------|--------------------------|-----------------------|--------------------|-----------------|--------------------|----------|---------------------|
| | | | Populat | ion on July 1st | | Participation rate | | | | |
| | Labour force | LFS pop 15+ | Total | Of which: immigration | Pop 15+/ total pop | Total | Aging effect | Activity effect | Residual | Memo: Retirement |
| | (1)=(2)+(6) | (2)=(3)+(5) | (3) | (4) | (5) | (6)=(7)+(8)+(9) | (7) | (8) | (9) | (10) |
| | | (| Contribut | ions to average | annual grov | wth in labour for | ce (p.p.) | | | |
| 2011-19 | 1.03 | 1.20 | 1.12 | 0.78 | 0.07 | -0.17 | -0.39 | 0.25 | -0.03 | -0.26 |
| 2020-22 | 0.84 | 1.16 | 1.16 | 0.88 | -0.01 | -0.35 | -0.47 | 0.18 | -0.06 | -0.47 |
| 2011-22 | 0.98 | 1.19 | 1.13 | 0.81 | 0.05 | -0.21 | -0.41 | 0.23 | -0.04 | 0.32 |
| | | | | Average annua | al floq equiv | valents (000's) | | | | |
| 2011-19 | 198.3 | 346.5 | 399.6 | 278.2 | | -148.2 | -344.5 | 219.1 | -22.8 | 230.0 |
| 2020-22 | 171.9 | 359.1 | 442.9 | 334.5 | | -187.2 | -249.7 | 96.6 | -34.0 | 250.5 |
| 2011-22 | 191.7 | 349.7 | 410.4 | 292.3 | | -158.0 | -302.3 | 170.4 | -26.1 | 235.1 |

Table 2:

Sources of data: 14-10-0327-01, 17-10-0005-01, 17-10-0008-01, 14-10-0126-01.

Labour Force Growth: 2011 to 2022

Table 2 provides an account of labour force growth and its sources over the last decade or so based on the framework just described.

From 2011 to 2022, labour force grew on average by 1% or 192,000 workers a year. This was more than accounted for by 1.1% growth in total population, of which 0.8% was due to immigration, which averaged 292,000 persons a year. The ratio of population 15+ to total population increased slightly over the period, adding another 0.05% a year to potential labour force growth. What brought back

labour force growth to its actual 1% pace was a -0.2% annual decline in the aggregate participation rate, essentially due to a -0.41% a year aging effect more than offsetting a 0.23% activity effect. Thus, the increase in individual participation rates, which averaged 0.6% a year based on the mean population weights of the corresponding age-sex groups, was clearly insufficient to offset the negative impact of population aging. Table 3 shows the values of the individual participation rates and population 15+ shares as of 2022 and their average growth rates over 2012 to 2022.

Table 3:

| | 15-24 | | 25-44 | | 45 | 64 | 65- | 69 | 70+ | |
|------------------|------------|------------------|------------|------------------|------------|------------------|------------|------------------|------------|------------------|
| | Part. rate | Pop 15+ share |
| MALES | | | | | | | | | | |
| 2022 values | 64.5 | 7.3 | 92.4 | 16.5 | 81.4 | 15.3 | 33.8 | 3.5 | 11.2 | 6.9 |
| 2012-2022 growth | -0.15 | -1.03 | 0.09 | 0.12 | 0.11 | 0.16 | 0.94 | 2.54 | 1.41 | 2.54 |
| FEMALES | | | | | | | | | | |
| 2022 values | 66.1 | 6.8 | 85.3 | 16.3 | 72.6 | 15.7 | 23.6 | 3.7 | 5.2 | 8.1 |
| 2012-2022 growth | 0.07 | -1.25 | 0.34 | -0.10 | 0.28 | -0.86 | 2.70 | 2.59 | 3.94 | 2.12 |

Source of data: Statistics Canada, table 14-10-0327-01.

Table 4:

| LAB | | CE BY EDUC | ATION | AL LEVEL - BC | OTH SI | EXES | | | | | | |
|------|-----------|-----------------------------|-------|-----------------------------|-------------|-----------------------------|-----------------------------|-----------------------------|----------------|-----------------------------|-------------------|-----------------------------|
| | All educ | ation levels | No | degree or diploma | High school | | H.school and some post-sec. | | Post-secondary | | University degree | |
| | | | | | | Labour | force | | | | | |
| | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years |
| | 000's | persons | | | | % | ofall | education leve | els | | | |
| 2011 | 18,670.20 | 589 | 12.6 | 8.4 | 19.9 | 14.7 | 7.3 | 5.7 | 35.3 | 23.0 | 25.0 | 48.1 |
| 2012 | 18,870.60 | 602.2 | 12.0 | 7.6 | 19.9 | 13.3 | 6.9 | 4.5 | 35.3 | 23.6 | 25.9 | 51.0 |
| 2013 | 19,074.70 | 608 | 11.5 | 7.9 | 20.3 | 13.3 | 6.7 | 4.1 | 35.1 | 23.6 | 26.4 | 51.2 |
| 2014 | 19,126.40 | 619.4 | 11.0 | 7.6 | 20.5 | 14.6 | 6.4 | 4.0 | 35.2 | 24.2 | 26.9 | 49.5 |
| 2015 | 19,242.40 | 634.1 | 10.5 | 7.0 | 19.9 | 14.2 | 6.0 | 4.1 | 35.5 | 24.1 | 28.0 | 50.7 |
| 2016 | 19,372.00 | 630.8 | 10.3 | 8.3 | 19.4 | 13.4 | 6.0 | 5.2 | 35.3 | 22.9 | 28.9 | 50.2 |
| 2017 | 19,658.30 | 662.6 | 10.0 | 6.2 | 19.5 | 13.6 | 6.1 | 5.0 | 35.1 | 23.3 | 29.4 | 51.9 |
| 2018 | 19,883.80 | 727.6 | 9.6 | 7.3 | 19.0 | 11.9 | 6.1 | 4.8 | 35.4 | 22.7 | 30.0 | 53.3 |
| 2019 | 20,274.90 | 758.9 | 9.3 | 7.7 | 18.3 | 11.3 | 5.7 | 4.3 | 35.5 | 21.1 | 31.2 | 55.7 |
| 2020 | 19,972.60 | 731.7 | 8.5 | 5.2 | 18.1 | 11.8 | 5.9 | 3.6 | 34.6 | 19.3 | 32.9 | 60.1 |
| 2021 | 20,484.10 | 793.9 | 8.2 | 5.7 | 17.8 | 10.5 | 5.4 | 3.4 | 34.6 | 20.9 | 34.0 | 59.6 |
| 2022 | 20,790.60 | 861.1 | 8.3 | 5.5 | 17.8 | 10.5 | 5.0 | 2.9 | 34.4 | 19.5 | 34.4 | 61.5 |

Source: Statistics Canada, table 14-10-0087-01.



The flow of **retiring** workers from the labour force, about equally shared by the 54-64 and 65+ age groups over 2011-2022 (but declining in the former and rising in the latter as a proportion of total retirement), has increased relative to the workingage population from 0.7% in 2011 to 0.9% in 2022. This reflects the net effect of two factors: population aging, which has a positive effect, and an increase in the average age of retirement, from 62.5 years old in 2010 to 64.6 years old in 2022, which has a negative effect.

It is worth noting that the average educational level of **recent immigrants in the labour force** is significantly higher than that of the total labour force, reflecting a much larger proportion of immigrants that have a university degree.

It is also worth noting that the labour force participation rate of recent immigrants is markedly higher than for the population in general, and this at all levels of education and especially after 2019. Moreover, the participation rate of recent immigrants has increased much faster than for the working-age population in general at all levels of education. Thus, recent immigrants have disproportionately contributed to labour force growth not only through a larger contribution to population growth than indigenous sources but also through a faster increase in participation rates than the working-age population in general.

| LABOU | IR FOF | RCE PARTICIP | ATION | I RATE BY EDU | JCATI | ONAL LEVEL | BOTH | H SEXES | | | | |
|---------|--------|-----------------------------|-------|-----------------------------|-------------|-----------------------------|-----------------------------|-----------------------------|-------|-----------------------------|-------------------|-----------------------------|
| | All ed | ucation levels | No | degree or diploma | High school | | H.school and some post-sec. | | Pos | t-secondary | University degree | |
| | | | | | | Participa | tion ra | ate | | | | |
| | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years | Total | Immigrants for 0-5 years |
| | | % | | % of all education levels | | | | | | | | |
| 2011 | 66.9 | 66.7 | 40.5 | 39.1 | 67.2 | 64.1 | 69.9 | 64.8 | 75.6 | 74.5 | 78.7 | 73.4 |
| 2012 | 66.8 | 68.7 | 40 | 36.9 | 66.6 | 65.7 | 70 | 58.1 | 75.1 | 75.5 | 79 | 77.6 |
| 2013 | 66.8 | 68.1 | 39.8 | 38.8 | 66.2 | 64.1 | 69.3 | 62.4 | 75.1 | 75.2 | 78.5 | 75.3 |
| 2014 | 66.3 | 67.5 | 38.9 | 37.6 | 65.3 | 65.6 | 68 | 57.2 | 74.5 | 77.6 | 78.1 | 73.4 |
| 2015 | 66.2 | 67.3 | 38.5 | 36.4 | 63.8 | 61.7 | 68.1 | 58.9 | 74.3 | 75.5 | 78.1 | 75 |
| 2016 | 65.9 | 67.8 | 38.2 | 39.3 | 63.5 | 61.7 | 67 | 66.4 | 73.6 | 76.9 | 77.9 | 74.8 |
| 2017 | 66 | 68.9 | 38.6 | 32.6 | 63.3 | 64.1 | 67.5 | 63.5 | 73 | 76.6 | 78 | 77.8 |
| 2018 | 65.8 | 71.1 | 38.4 | 38.9 | 61.9 | 61.2 | 66.5 | 74.1 | 72.8 | 79.6 | 77.6 | 79.1 |
| 2019 | 66.1 | 71.6 | 38.4 | 40.8 | 61.8 | 64.6 | 66.7 | 72.1 | 72.9 | 78.7 | 77.3 | 78.8 |
| 2020 | 64.3 | 71.7 | 36.3 | 35 | 59.6 | 62.7 | 64.3 | 66.3 | 70.1 | 75.2 | 76.3 | 80.4 |
| 2021 | 65.4 | 77 | 37.2 | 46.2 | 59.5 | 66.2 | 65.4 | 75.1 | 70.5 | 81.4 | 78 | 83.2 |
| 2022 | 65.4 | 77.9 | 38 | 43.8 | 60 | 70.5 | 66.6 | 71.8 | 69.8 | 81.2 | 77.4 | 84.6 |
| ANNUA | L GRO | WTH (%): | | | | | | | | | | |
| 2022/11 | -0.21 | 1.42 | -0.58 | 1.04 | -1.02 | 0.87 | -0.44 | 0.94 | -0.72 | 0.79 | -0.15 | 1.30 |

Table 5:

Source: Statistics Canada, table 14-10-0087-01.

To close this discussion of labour supply growth over 2011-22, we may add that the average number of hours worked per job for the economy as a whole has been on a downward trend since at least 2010, at a slow average rate of -0.16% per year (Table 6). The decline has been far more pronounced for self-employed workers, especially after 2019. While average hours per worker are influenced by demand conditions, their downward trend indicate that the effective labour supply in terms of total hours of work has grown by about 0.2% less than in terms of labour force in the last decade.

Table 6:

| ANNUA | L AVERAGE NUM | BER OF HOURS V | VORKED |
|-----------|---------------|----------------|---------------|
| | All jobs | Paid workers | Self-employed |
| 2010 | 1,715 | 1,718 | 1,687 |
| 2011 | 1,711 | 1,716 | 1,663 |
| 2012 | 1,721 | 1,725 | 1,674 |
| 2013 | 1,714 | 1,718 | 1,665 |
| 2014 | 1,709 | 1,716 | 1,634 |
| 2015 | 1,710 | 1,716 | 1,646 |
| 2016 | 1,701 | 1,710 | 1,614 |
| 2017 | 1,689 | 1,699 | 1,582 |
| 2018 | 1,702 | 1,715 | 1,570 |
| 2019 | 1,691 | 1,703 | 1,557 |
| 2020 | 1,653 | 1,676 | 1,375 |
| 2021 | 1,685 | 1,706 | 1,443 |
| | Average ar | inual growth | |
| 2011-2019 | -0.16 | -0.10 | -0.89 |
| 2011-2021 | -0.16 | -0.06 | -1.41 |

Source: Statistics Canada, table 36-10-0489-01.

Labour Force Growth: 2023 to 2032

We present two scenarios of labour force growth, each based on the medium-growth population projection¹ released by Statistics Canada in August 2022, but incorporating different assumptions about immigration and net non-permanent residents. The selection of a medium-growth projection as opposed to high-growth projection, also produced by Statistics Canada, has not much bearing over the 10-year horizon of our labour force scenarios if one uses independent profiles for immigration and net non-permanent residents, as we do. To start with, higher projected births in the high-growth projection have no effect on the growth of the population 15+ over our 10-year horizon. Moreover, the smaller number of deaths and emigrants in the high-growth projection would boost average annual population growth by only 0.05 percentage points relative to the medium-growth projection. Finally, over our 10-year horizon the structure of the population 15+ by age and sex groups is much the same in the high-growth projection as in the medium-growth projection, thus causing the aggregate participation rate to fall over 2023-32 by only 0.03 percentage points per year less on average than with the mediumgrowth projection. Thus, given our independent scenarios for immigration and net non-permanent residents, relying on the high-growth projection rather than the medium-growth projection would result in an average annual labour force growth higher by something like 0.08 percentage point over 2023-32, that is 1.34% compared with 1.26% in our base scenario-the same story for all intents and purposes. What really matters is our assumptions about immigration.

1. Statistics Canada produced six medium-growth projections, which differ from each other only by their assumption about internal migration. Thus, given our exclusive focus on Canada as a whole in this exercise, it does not matter which one of the six medium-growth projections we use.



In the base scenario, immigration is set at 500,000 a year from 2023 to 2032 whereas in the alternative scenario it is set at 500,000 from 2023 to 2025 and then gradually declines to 440,000 by 2032, the same level as in the medium-growth projection. Moreover, in the base scenario the surge in net non-permanent residents in 2022 is assumed to converge gradually on the lower levels set in the medium-growth projection whereas in the alternative scenario they track those levels starting in 2023. Each scenario also assumes that average annual growth in individual participation rates by age and sex is the same as that prevailing over 2012-22, except that in the alternative scenario the average growth rates for the 65-69 and 70+ age groups are set to be only half those prevailing over 2012-22. Even after such cuts, however, they remain much higher than for the other age groups. Table 7 compares the projected participation rates for each age-sex group in 2022 and 2032 in the base and the alternative scenarios.

Given these assumptions, the base projection exhibits significantly faster growth for the labour force than the alternative projection over 2023-32: 1.3% a year versus 1.1%, or an average net addition of 276,000 workers each year versus 228,000 (Chart 2). This compares with 1% or 192,000 additional workers each year over 2011-22.

Chart 2:



| LABOUR FORCE PARTICIPATION RATES BY AGE-SEX GROUP (%) | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|--|
| | | | Male | | | Female | | | | | |
| | 15-24 | 25-44 | 45-64 | 65-69 | 70+ | 15-24 | 25-44 | 45-64 | 65-69 | 70+ | |
| BASE SCENARIO | | | | | | | | | | | |
| 2022 | 0.645 | 0.924 | 0.814 | 0.338 | 0.112 | 0.661 | 0.853 | 0.726 | 0.236 | 0.052 | |
| 2032 | 0.635 | 0.932 | 0.823 | 0.371 | 0.129 | 0.666 | 0.882 | 0.747 | 0.308 | 0.077 | |
| ALTERNATIVE SCENARIO | | | | | | | | | | | |
| 2022 | 0.645 | 0.924 | 0.814 | 0.338 | 0.112 | 0.661 | 0.853 | 0.726 | 0.236 | 0.052 | |
| 2032 | 0.635 | 0.932 | 0.823 | 0.354 | 0.120 | 0.666 | 0.882 | 0.747 | 0.270 | 0.063 | |

Source of data: Statistics Canada, table 14-10-0327-01.

Table 7:

Table 8:

| LABOUR FORC | LABOUR FORCE GROWTH AND ITS SOURCES: 2023 TO 2032 | | | | | | | | | | | | |
|--|---|-----------------|----------------|---------|--------------------------|-----------------------|-----------------|-----------------|--------------------|----------|--|--|--|
| | | | | P | opulation | | P | articipatio | n rate | | | | |
| SCENARIO | | Labour force | LFS pop 15+ | Total | Of which: immigration | Pop 15+/ total pop | Total | Aging effect | Activity effect | Residual | | | |
| | | (1)=(2)+(6) | (2)=(3)+(5) | (3) | (4) | (5) | (6)=(7)+(8)+(9) | (7) | (8) | (9) | | | |
| Contributions to growth in labour force (p.p.) | | | | | | | | | | | | | |
| ACTUAL | 2011-22 | 0.98 | 1.19 | 1.13 | 0.81 | 0.05 | -0.21 | -0.41 | 0.23 | -0.04 | | | |
| BASE | 2023-32 | 1.26 | 1.46 | 1.32 | 1.21 | 0.14 | -0.19 | -0.43 | 0.27 | -0.04 | | | |
| ALTERNATIVE | 2023-32 | 1.05 | 1.31 | 1.18 | 1.08 | 0.14 | -0.26 | -0.44 | 0.21 | -0.04 | | | |
| | | | Aver | age anr | ual flow equival | ents (000's) | | | | | | | |
| ACTUAL | 2011-22 | 191.7 | 349.7 | 410.4 | 292.3 | | -158.0 | -302.3 | 170.4 | -26.1 | | | |
| BASE | 2023-32 | 276.2 | 493.8 | 544.5 | 500.0 | | -217.5 | -490.9 | 313.9 | -40.6 | | | |
| ALTERNATIVE | 2023-32 | 228.3 | 442.6 | 482.6 | 469.0 | | -214.3 | -357.4 | 172.1 | -29.0 | | | |

Sources of data: Statistics Canada, tables 17-10-0057-01 and 14-10-0327-01.

In the base scenario, population growth increases to 1.3%, of which 1.2% arises from immigration compared to 0.8% over 2011-2022 (Table 8). Working-age population increases faster than total population and this adds 0.14% a year to the pool of potential workers, thrice the pace of 2011-2022. In addition, the aggregate participation rate declines at a rate of -0.19% a year, a slightly slower rate than the -0.21% rate experienced over 2011-2022.

The average -0.19% fall in the aggregate participation rate reflects an aging effect of -0.43% more than offsetting an activity effect of 0.27%. It also incorporates the assumption that the average negative growth residual of -0.04% obtained over 2011-22 will persist over 2023-32.

The slightly smaller fall in the participation rate than in 2011-22, as the individual participation rates by age-sex group are assumed to grow at the same rates as over 2012-22, is attributable to a somewhat larger activity effect: 0.27 versus 0.23. In turn, this stems from larger population weights in 2022 for the faster-growing participation rates of older age groups.

In the alternative scenario, the working-age population increases at a slower pace than in the base scenario, 1.31% versus 1.46%, because of smaller immigration flows, which average 469,000 instead of 500,000. The aggregate participation rate declines at an average annual rate of -0.26% instead of -0.19% due to a smaller activity effect stemming from assumed lower growth in the participation rates of the 65-69 and 70+ age groups than in the base scenario. The aging effect, on the other hand, remains the same as in the base scenario because the evolving age-sex structure of the population is identical in both scenarios, being based on the same Statistics Canada projection.



Table 9:

| AVERAGE ANNUAL GROWTH IN LABOUR FORCE BY AGE-SEX GROUP: 2023-2032 | | | | | | | | | | | | |
|---|-------|-------|-------|-------|------|-------|--------|-------|-------|------|--------|--|
| | Male | | | | | | Female | | | | | |
| | 15-24 | 25-44 | 45-64 | 65-69 | 70+ | 15-24 | 25-44 | 45-64 | 65-69 | 70+ | Groups | |
| BASE SCENARIO | | | | | | | | | | | | |
| Increase in labour force (000's) | 22.6 | 61.8 | 19.4 | 8.3 | 16.7 | 25.3 | 69.4 | 25.2 | 12.1 | 15.3 | 276.2 | |
| Share of increase in labour force (%) | 8.2 | 22.4 | 7.0 | 3.0 | 6.0 | 9.2 | 25.1 | 9.1 | 4.4 | 5.5 | 100.0 | |
| Growth in labour force (%) | 1.5 | 1.2 | 0.5 | 2.1 | 5.4 | 0.7 | 1.5 | 0.7 | 3.8 | 7.8 | 1.3 | |
| ALTERNATIVE SCENARIO | | | | | | | | | | | | |
| Increase in labour force (000's) | 20.1 | 54.0 | 13.6 | 5.7 | 13.3 | 22.9 | 62.1 | 19.8 | 6.8 | 9.9 | 228.3 | |
| Share of increase in labour force (%) | 8.8 | 23.6 | 6.0 | 2.5 | 5.8 | 10.0 | 27.2 | 8.7 | 3.0 | 4.3 | 100.0 | |
| Growth in labour force (%) | 1.3 | 1.1 | 0.4 | 1.5 | 4.5 | 1.5 | 1.4 | 0.6 | 2.3 | 5.7 | 1.1 | |

As shown in Table 9, the 65-69 and 70+ age groups experience much faster growth in labour force than the other groups, but each one accounts for significantly less of the increase in total labour force than every other group because the shares of working-age population and the levels of participation rate for these two eldest groups are much lower than for the other groups. In fact, the two 25-44 groups account for about half of the total increase in labour force, the 15-24 groups for about 18% and the 45-64 groups for another 15% or so, and this in both scenarios.

Over the ten years to 2032 the dependency ratio measuring the ratio of the population 65+ to the labour force rises from 34% to 41% in both scenarios: alternatively, the number of workers per person 65+ falls from 3 in 2022 to 2.5 by 2032.

Chart 3:



Labour Market Gap: 2023 to 2032

With the labour force scenarios described above, what gap between supply and demand for labour could emerge over the next decade? Labour demand, it must be recalled, covers both employment and job vacancies. The evolution of labour demand going forward depends on that of aggregated demand or real GDP, account taken of the paths taken by labour productivity, average hours worked, the unemployment rate and the ratio of vacancies to labour force. The labour market gap will thus vary according to the path taken by all these variables, including our scenarios for the labour supply.

Table 10 summarizes four illustrative cases of labour market gap over 2026-32 under both the base and the alternative scenarios for labour supply. Case 1 can be taken as our benchmark. It rests on the assumptions that trend productivity growth for the total economy averages 1.0% per year, the same as over 2012-19, and that both the unemployment rate and the job vacancies ratio settle on their values as of 2019 (5.7% and 2.8% respectively) when aggregate demand and supply in the economy were roughly in balance. The resulting labour market gap averages 2.9% of labour force under the base scenario and 2.8% under the alternative scenario with an unemployment rate of 5.6%. Chart 4 depicts the profile of labour demand and labour supply under Case 1 of the base scenario of labour supply.

In Case 2, trend productivity growth is weaker than in Case 1 (0.7% vs 1.0%) and trend employment growth a little stronger. As a result, the unemployment rate gets considerably lower and the labour market gap narrower, at 2.5% under the base scenario and 2.4% under the alternative scenario.

In Case 3, trend productivity growth in stronger than in Case 1 (1.3% vs 1.0%) and trend employment growth somewhat weaker. As a result, the unemployment rate is higher and the labour market gap wider at 3.2% under both the base and the alternative scenarios.

Table 10:

| LABOUR MAR | LABOUR MARKET GAP SCENARIOS: 2026 TO 2032 | | | | | | | | | | | | | |
|-------------|---|-----------------------|--------------------------|---------------------------|---------------------|--------------------------|-----------------------------------|------------------------|-------------------------|--|--|--|--|--|
| | | Average | annual grow | /th rates (%) | : 2026-32 | | Average level (% of labour force) | | | | | | | |
| SCENARIO | Potential output | Trend productivity | Trend labour input | Trend average hours | Trend employment | Trend labour force | Unemploy. rate | Job vacancy rate | Labour market gap | | | | | |
| BASE | | | | | | | | | | | | | | |
| Case 1 | 2.2 | 1.0 | 1.2 | -0.1 | 1.3 | 1.3 | 5.7 | 2.8 | 2.9 | | | | | |
| Case 2 | 2.1 | 0.7 | 1.4 | 0 | 1.4 | 1.3 | 5.3 | 2.8 | 2.5 | | | | | |
| Case 3 | 2.3 | 1.3 | 1.0 | -0.2 | 1.2 | 1.3 | 6.0 | 2.8 | 3.2 | | | | | |
| Case 4 | 2.2 | 1.0 | 1.2 | -0.1 | 1.3 | 1.3 | 5.7 | 3.5 | 2.2 | | | | | |
| ALTERNATIVE | | | | | | | | | | | | | | |
| Case 1 | 2.0 | 1.0 | 1.0 | -0.1 | 1.1 | 1.1 | 5.6 | 2.8 | 2.8 | | | | | |
| Case 2 | 1.9 | 0.7 | 1.2 | 0 | 1.2 | 1.1 | 5.2 | 2.8 | 2.4 | | | | | |
| Case 3 | 2.1 | 1.3 | 0.8 | -0.2 | 1.0 | 1.1 | 6.0 | 2.8 | 3.2 | | | | | |
| Case 4 | 2.0 | 1.0 | 1.0 | -0.1 | 1.1 | 1.1 | 5.6 | 3.5 | 2.1 | | | | | |



In Case 4, the degree of skill mismatch in the labour market is considerably higher than in the other cases and consequently the job vacancies ratio settles at 3.5% instead of 2.8%. As a result, the labour market gap narrows to 2.2% under the base scenario and 2.1% under the alternative scenario.

Chart 4:



The limited list of illustrative cases presented in Table 10 above shows a range of values for the labour market gap varying between 2.1% and 3.2% of the labour force in the period 2026-32. For comparison, the labour market gap was 0.8% in 2022, 3.6% in 2021, 3.1% in 2019 and averaged of 4.1% over 2016-18. In light of this, our judgment is that labour supply is most likely to accommodate labour demand over the medium term without overheating developing in the market.

Conclusion

Our scenarios call for a modest acceleration of labour force growth over the next decade relative to the 2011-22 period, to between 1.3% per year in the base scenario and 1.1% per year in the alternative scenario from 1% experienced in the last decade. Larger immigration flows play the key role in the acceleration. Aging continues to cut labour force growth by about 0.4% per year while further increases in individual participation rates for virtually all age-sex groups of workers provide a partial offset.

Our judgment is that labour supply is most likely to accommodate labour demand over the medium term without overheating developing in the market.

Labour Force Growth and Labour Market Gap in Canada: 2011 to 2032 May 2023

Disclaimer

The analysis and perspectives in this document are developed by the <u>Governmental Affairs and Public Policy group</u> of Bennett Jones to stimulate discussion with clients on matters of importance for Canada's economy, public policy, and business and to assist with planning. The document does not constitute legal analysis nor offer legal advice. The views expressed in the document do not purport to represent the views of Bennett Jones LLP or of its individual partners, associates, advisors, or counsels. If you have questions or comments, please call one of the contributors listed.



The firm that businesses trust with their most complex legal matters.

BennettJones.com

Calgary

Edmonton M

Montréal Ottawa

Toronto

Vancouver New York