# FRASER BULLETIN



August 2022

# An Aging Population: The Demographic Drag on Canada's Labour Market by Tegan Hill, Alex Whalen, and Milagros Palacios

#### **S**UMMARY

- Many point to Canada's low unemployment rate (5.5%) as an indication of the strength of our economic recovery from the pandemic. Yet by other indicators it would appear that Canada's labour market has not yet fully recovered.
- For instance, the 2022 employment rate is 0.2 percentage points lower than in 2019 and the labour force participation rate is 0.4 percentage points lower. At the same time, Canada is experiencing a historic labour shortage with 958,000 vacant positions.
- Canada's aging population is one factor that may be contributing to the conflicting statistics, so this bulletin reviews labour statistics segregated by "working age" individuals (aged 15 to 64) and "seniors" (aged 65 and older).
- In 2022, the working age labour market participation rate is 0.9 percentage points higher than in 2019 and their employment rate is 1.1 percentage points higher than in 2019. In

- contrast, the labour force participation rate for seniors is 0.2 percentage points below 2019 levels and their employment rate is 0.6 percentage points lower.
- More specifically, seniors' labour force participation and employment rates have not grown at the same pace as their population growth. Moreover, seniors-who have lower labour force participation and employment rates than working age individuals-make up a larger share of the population (21.9%) in 2022 than they did in 2019 (20.3%). These factors have created a drag on the overall labour market recovery.
- If seniors accounted for the same share of the population in 2022 as they did in 2019, both the employment rate and the labour force participation rate would be fully recovered. Moreover, job vacancies would be reduced by nearly half to 521,941 vacant positions.
- Canada's labour market challenges will only compound as the population continues to age.

#### Introduction

Many people have pointed to Canada's low unemployment rate as an indication of the strength of our economic recovery from the pandemic. While a low unemployment rate is an important and positive measure of the labour market, it doesn't tell the whole story. For instance, at the same time, job vacancies have reached a record high (Statistics Canada, 2022a, June 21), which is not necessarily a sign of a well-functioning labour market. As this bulletin will demonstrate, it is necessary to take a closer look at specific labour statistics to truly understand the state of Canada's labour market since the pandemic.

This analysis provides a detailed look at several labour market indicators in aggregate and segregated by age group. The aim of this bulletin is to provide Canadians with better context and information to understand the current state of the labour market beyond simply the unemployment rate, as well as broader trends that will put pressure on the labour market in the years ahead.

#### **Definitions**

Before delving into the analysis, its helpful to review the definitions<sup>1</sup> for various labour market statistics.

Importantly, within the context of labour statistics, "the population" does not refer to the total population. Instead, it includes the number of persons of working age, 15 years and over, in Canada during the reference period.<sup>2</sup>

The "labour force" is the number of civilian, non-institutionalized persons 15 years of age and over who, during the reference week, were employed or unemployed. Put differently, it is the sum of those persons deemed either employed and unemployed.

The "participation rate" refers to the number of labour force participants (those deemed employed or unemployed) expressed as a percentage of the population aged 15 years and over.

"Employment" is the number of persons who, during the reference week, worked for pay or profit (including self-employed), or performed unpaid family work, or had a job but were not at work due to their own illness or disability, personal or family responsibilities, a labour dispute, vacation, or other reason. Those persons on layoff and persons without work but who had a job to start at a definite date in the future are not considered employed. The employment rate is calculated as the number of employed persons divided by the population 15 years of age or over (the "population").

In contrast, "unemployment" refers to the number of people who, during the reference week, were without work, had looked for work in the past four weeks, and were available for work. Those on layoff or who had a new job to start in four weeks or less are considered unemployed. The unemployment rate is calculated as the

includes the 15th of the month, except for November and December, when the reference week is often one week earlier. As Statistics Canada noted, "from December 2000 to January 2001, there is a slight level shift in the population series. This is due to the 2015 population rebasing, which was revised back to 2001. This level shift is evident for certain age groups and in two provinces (Manitoba and Saskatchewan). These shifts are minor for labour force estimates and rates" Statistics Canada (2022e).

<sup>&</sup>lt;sup>1</sup> All labour force statistic definitions are taken from Statistics Canada's 2020 Guide to the Labour Force Survey.

<sup>&</sup>lt;sup>2</sup> The reference period is the calendar week that

number of unemployed persons divided by the labour force.

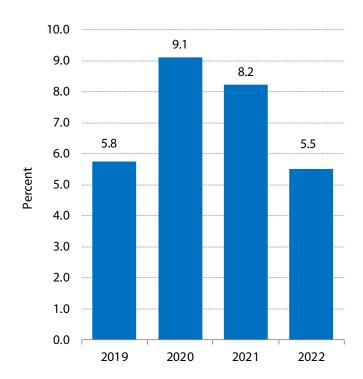
These definitions are important because labour statistics can be more complex than they first appear. For instance, the unemployment rate can be the same in two periods, but the labour market may be in worse condition in one period due to changes in the denominator (i.e., the labour force). As Clemens and Palacios (2018) explain, the unemployment rate can decrease for two reasons: 1) people are finding work, which is positive; or 2) potential workers are dropping out of the labour force and not looking for work anymore, which is usually negative. The unemployment rate and employment rate can tell very different stories as a result.<sup>3</sup> Put simply, it's necessary to take a detailed look at each statistic and review various indicators to truly understand the state of Canada's labour market.

#### Reviewing labour market statistics, 2019 to 2022

The first step to understanding the state of Canada's labour market since the pandemic is to review aggregate labour statistics. Due to data limitations, the analysis in this bulletin compares various labour market statistics based on the average monthly (seasonally adjusted) rate (or level) from January to May of each year from 2019 to 2022.

Figure 1 illustrates the national unemployment rate from 2019 to 2022. As shown, the unemployment rate was 5.8% in 2019. It peaked at

Figure 1: Canada's Unemployment Rate, 2019 to 2022



Note: The unemployment rate is the number of unemployed persons expressed as a percentage of the labour force.

\*The data presented is the average monthly (seasonally adjusted) rate (or level) from January to May of each year.

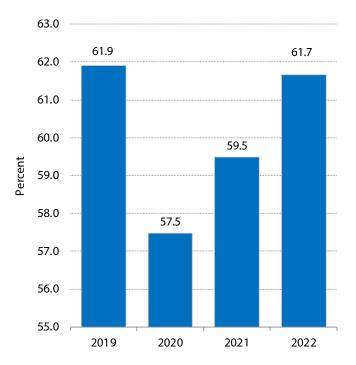
Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

9.1% during the pandemic in 2020, declining to 8.2% in 2021. The unemployment rate was 5.5%in 2022–0.3 percentage points lower than in 2019. In other words, if one only considers the unemployment rate, it would appear that Canada's labour market has more than recovered from the pandemic.

Figure 2 shows the national employment rate from 2019 to 2022. In 2019, the national employment rate was 61.9%. It declined to 57.5% in 2020, increasing to 59.5% in 2021. The employ-

<sup>&</sup>lt;sup>3</sup> Between the 2008/09 recession the start of CO-VID, the unemployment and employment rates were both decreasing. While the former reflects positive labour market performance, the latter is generally not indicative of a well-functioning, positive labour market. See Clemens and Palacios (2018) for more information.

Figure 2: Canada's Employment Rate, 2019 to 2022



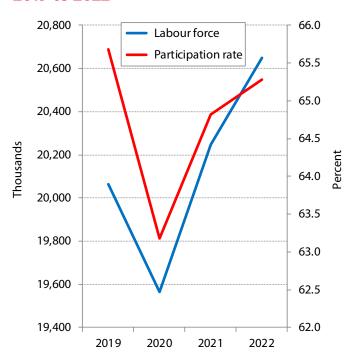
Note: The employment rate is the number of persons employed expressed as a percentage of the population age 15 and over.

\*The data presented is the average monthly (seasonally adjusted) rate (or level) from January to May of each year. Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

ment rate was 61.7% in 2022–0.2 percentage points lower than in 2019. Put differently, if one only considers the employment rate, it would appear that Canada's labour market has almost fully recovered from the pandemic.

Figure 3 shows both the absolute growth in the labour force and the percentage of Canadians participating in the labour force. As figure 3 illustrates, the labour force declined from 20.1 million people in 2019 to 19.6 million in 2020. It reached 20.2 million in 2021 and 20.6 million in

Figure 3: Labour Force Participation, 2019 to 2022



Note: The labour force is the number of civilian, non-institutionalized persons 15 years of age and over who, during the reference week, were employed or unemployed. The participation rate is the number of labour force participants expressed as a percentage of the population 15 years of age and over.

\*The data presented is the average monthly (seasonally adjusted) rate (or level) from January to May of each year. Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

2022–585,000 more people than in 2019. Put simply, the labour force has more than fully recovered to its pre-pandemic level.

In contrast, the labour force participation rate has not fully recovered. As shown, it declined from 65.7% in 2019 to 63.2% in 2020. The labour force participation rate increased to 64.8% in 2021 and 65.3% in 2022, however, that is still 0.4 percentage points lower than in 2019.



Figure 4: : Job Vacancies and Job Vacancy Rate, Quarterly, 2015 to 2022

Note: Data is adjusted for seasonality. Data for the second and third quarters of 2020 are unavailable due to some Statistics Canada operations being temporarily suspended during the COVID-19 pandemic.

Sources: Statistics Canada, CANSIM Table 14-10-0398-01; calculations by authors.

At the same time, Canada is experiencing a historic labour shortage. Figure 4 illustrates the number of job vacancies and the job vacancy rate—the number of job vacancies expressed as a percentage of labour demand (occupied and vacant jobs)—since the first quarter of 2015.<sup>4</sup> For context, job vacancies and the job vacancy rate have generally trended upwards since the first quarter of 2016. Pre-pandemic, in the fourth quarter of 2019,<sup>5</sup> there were 523,000 vacant positions. By the first quarter of 2022, job vacancies reached 958,000—the highest level of quarterly job vacancies on record (Statistics Canada, 2022a). Similarly, the job vacancy rate increased

#### **Explaining the inconsistencies**

Based on aggregate statistics, there are some inconsistent results with respect to the state of Canada's labour market. While a low unemployment rate and labour force growth are positive indicators of Canada's recovery, a lower employment rate and reduced labour force participation are generally not considered positive, particularity when combined with high job vacancy rates.

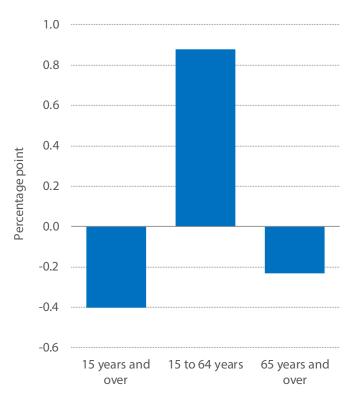
Canada's aging population is one factor that may be contributing to the conflicting statistics. As various studies have detailed, seniors

sharply from 3.1% in the fourth quarter of 2019 to 5.6% in the first quarter of 2022.

<sup>&</sup>lt;sup>4</sup> The earliest year of comparable data.

<sup>&</sup>lt;sup>5</sup> Data is seasonally adjusted.

Figure 5: Percentage Point Change in Labour Force Participation Rate by Age Group, 2019 to 2022

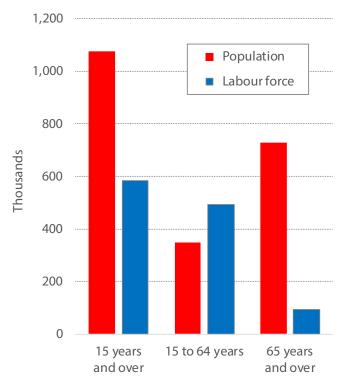


\*The data presented are based on the average monthly (seasonally adjusted) rate (or level) from January to May of each year.

Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

have significantly lower labour force participation rates than other age groups, which has contributed to a general decline in Canada's overall participation rate over the last decade and a half (Fields, Uppal, and LaRochelle-Cote, 2017; Clemens and Palacios, 2018; Cross, 2021; Statistics Canada, 2022c). To explore this idea

Figure 6: : Change in Population and Labour Force by Age Group, 2019 to 2022



\*The data presented is based on the average monthly (seasonally adjusted) rate (or level) from January to May of each year.

Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

further, this section reviews labour statistics from 2019 to 2022, segregated by "working age" individuals (aged 15 to 64) and "seniors" (aged 65 and older).

Figure 5 shows the percentage point change in the overall labour force participation rate (15 years and older) and the change by age group

man, 2020; Globerman, 2021a; Globerman, 2021b; and Eisen and Emes, 2022.

<sup>&</sup>lt;sup>6</sup> For more information on the broader implications of Canada's aging population, see Ragan, 2012; Jackson, Clemens, and Palacios, 2017; Fuss and Glober-

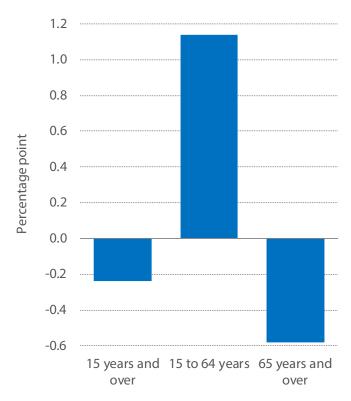
from 2019 to 2022. As discussed, the overall 2022 labour force participation rate is 0.4 percentage points lower than in 2019. However, the working age participation rate increased from 78.6% in 2019 to 79.5% in 2022—an increase of 0.9 percentage points. In other words, the participation rate for working age individuals exceeds pre-pandemic levels. In contrast, seniors' labour force participation rate fell from 14.9% in 2019 to 14.7% in 2022-a decrease of 0.2 percentage points.

The participation rate is a function of both the population and the labour force. Figure 6 shows the nominal change in the aggregate labour force and population (15 years and older) as well as by levels by age group from 2019 to 2022.

Recall that the population in this context refers to the number of people aged 15 years and older. Overall, the population grew from 30.5 million in 2019 to 31.6 million in 2022-an increase of 1.1 million people. As shown, 347,000 of those individuals were working age, while a vast majority (729,000 people) were seniors. For context, the seniors' share of the population increased from 20.3% in 2019 to 21.9% in 2022. At the same time, seniors make up a comparatively small share of the labour force growth over the period. Overall, the labour force grew from 20.1 million in 2019 to 20.6 million in 2022-an increase of 585,000 people. Working age individuals accounted for 493,000 of additional workers, while seniors accounted for 92,000.

There are two key takeaways from these statistics. First and foremost, seniors—who have a lower labour force participation rate than working age individuals-make up a larger share of the population in 2022 than they did in 2019.

Figure 7: Percentage Point Change in **Employment Rate by Age Group, 2019 to** 2022



\*The data presented is based on the average monthly (seasonally adjusted) rate (or level) from January to May of each year.

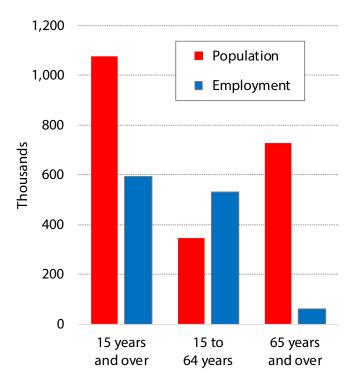
Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

In addition, labour force participation by seniors has not grown at the same pace as their population growth.8 As result, despite a robust labour force recovery for working age individuals, the participation rate has not recovered to pre-pandemic levels.

<sup>&</sup>lt;sup>7</sup> To be clear, the increase in the seniors' population will reflect working age individuals (15 to 64) moving into the seniors' population (65 and over) in addition to any positive net migration.

<sup>&</sup>lt;sup>8</sup> There are many potential reasons why a greater share of seniors has chosen to opt out of the labour force. While investigating such causes and prescribing solutions is beyond the scope of this paper, Gunderson (2022) provides some insight on potential barriers to seniors in the workforce.

Figure 8: Change in Employment and Population Levels by Age Group, 2019 to 2022

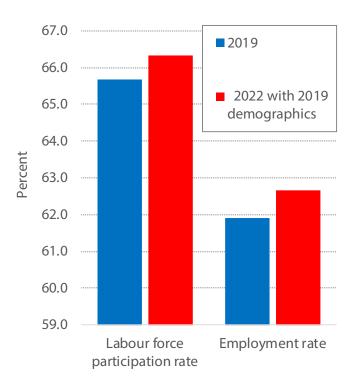


\*The data presented are based on the average monthly (seasonally adjusted) rate (or level) from January to May of each year.

Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

Figure 7 illustrates the percentage-point change in the overall employment rate and the employment rates by age group. Recall that the overall employment rate in 2022 is 0.2 percentage points lower than in 2019. However, the working age employment rate increased from 74.1% in 2019 to 75.2% in 2022—an increase of 1.1 percentage points. In other words, the employment rate for working age individuals has more than recovered to pre-pandemic levels. In fact, the 2022 employment rate for working age individuals is the highest on record since 1976

Figure 9: Labour Force Participation and Employment Rates, 2019 and 2022 Alternative Scenario



\*The data presented are based on the average monthly (seasonally adjusted)rate (or level) from January to May of each year.

Sources: Statistics Canada, CANSIM Table 14-10-0287-01; calculations by authors.

(Statistics Canada, 2022e). In contrast, the seniors' employment rate declined from 14.1% in 2019 to 13.5% in 2022–a decrease of 0.6 percentage points.

The employment rate is a function of both the population and employment levels. Figure 8 shows the change in aggregate employment and population as well as by levels by age group from 2019 to 2022. Remember that seniors disproportionately drove population growth from 2019 to 2022. However, seniors account for a relatively small share of total employment

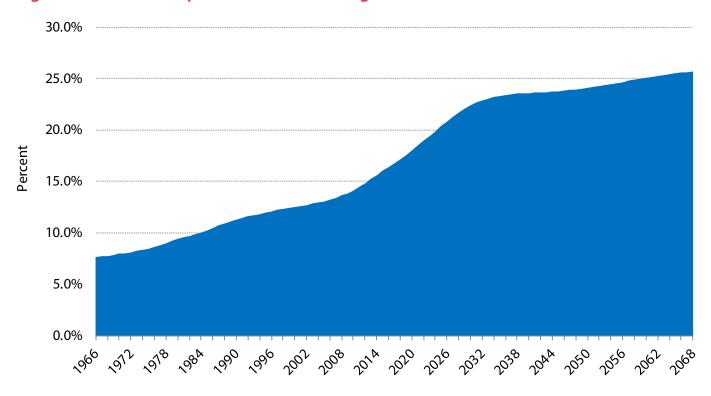


Figure 10: Share of Population 65 Years of Age or Older

Note: Data from 2022 to 2061 is a projection using the M1 medium-growth scenario.

Sources: Statistics Canada, CANSIM Tables 17-10-0029-01, 17-10-0005-01, and 17-10-0057-01; calculations by authors.

growth. Overall employment grew from 18.9 million in 2019 to 19.5 million in 2022-an increase of 596,00 people. As shown, 533,000 of those individuals were working age, while just 63,000 were seniors.

There are two key insights from these statistics. First and foremost, seniors-who have lower employment rates than working age individuals-make up a larger share of the population in 2022 than they did in 2019. Second, the growth in the employment of seniors has not kept up to their population growth. As a result, despite a robust recovery in employment for working age individuals—the employment rates are the highest on record-the overall employment rate is below the 2019 pre-pandemic levels.

For perspective, it's helpful to consider what the labour market would look like in 2022 had Canada's demographics remained the same as in 2019. In other words, if seniors still accounted for 20.3% of the population, rather than 21.9%. As figure 9 shows, all else being equalusing 2022 employment and participation rates for each age group-both the employment rate (62.7%) and labour force participation rate (66.3%) would be fully recovered in 2022. Moreover, job vacancies would be reduced by nearly half with 521,941 vacant positions in 2022.9

<sup>&</sup>lt;sup>9</sup> This is not to say changing demographics is the only contributor to Canada's labour shortage. For instance, lower immigration during the pandemic

Critically, Canada's aging population will have implications beyond the immediate recovery. As shown in Figure 10, the share of Canada's total population aged 65 or older is projected to grow from 19.0% in 2022 to 25.7% by 2068.<sup>10</sup> In other words, the demographic pressure on Canada's labour market will only intensify as the share seniors in the population increases.<sup>11</sup>

#### **Conclusion**

A single, aggregate labour statistic is not sufficient to understand the complex state of Canada's labour market. While the unemployment rate is currently below pre-pandemic levels, there are larger factors at play that are hampering a complete labour market recovery and will affect Canada's labour market in the years ahead. Specifically, Canada's growing aging population has created downward pressure on labour market participation and employment

also contributed to the current labour shortage (Statistics Canada, 2022d; Al Mallees, 2022, April 6).

<sup>10</sup> Please note that data presented here are yearly, in contrast to the data presented previously, which was the average from January to May for 2019 through 2022.

Although government policy cannot stop Canada's population from aging, there are policies that can help alleviate some of the demographic pressure on the labour market. For instance, immigration-which was reduced over the pandemic-could help reduce Canada's labour shortage. See Cross (2021) for more information on the importance of immigration for Canada's work force. Removing and reducing barriers to labour force participation of older workers in Canada is another important policy option (Gunderson, 2022; Statistics Canada, 2022e). Moreover, policies to support productivity-such as low and competitive taxes-will be increasingly critical to support high living standards.

<sup>11</sup> In this figure, the population in review is the standard population (i.e. the total number of persons in Canada).

rates, which have coincided with record job vacancies. As the population continues to age, it will only compound Canada's labour market challenges.

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#### **Acknowledgments**

The authors wish to thank the anonymous reviewers for their suggestions and feedback. Any remaining errors or oversights are the sole responsibility of the authors.

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#### ISSN 2291-8620

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