

Comparing Median Employment Income in the Atlantic Region to the Rest of Canada

by Ben Eisen and
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SUMMARY

- Past research from the Fraser Institute's Atlantic Canada Prosperity Initiative has shown that the Atlantic region is generally an economic laggard within Canada.
- When comparing Gross Domestic Product (GDP) per capita, a broad measure of income, we see that GDP per person in the rest of the country was 18.4 percent higher than in the Atlantic region in 2019 (the final year before data may have become skewed by the COVID-19 recession).
- This backgrounder focuses primarily on the gap in median employment income between the Atlantic provinces and the other provinces.

We find that the four Atlantic provinces had the lowest median employment income levels in Canada in 2019.

- In 2019, median employment income in PEI was \$30,100. In Newfoundland & Labrador, it was \$32,000. In Nova Scotia, it was \$33,100. In New Brunswick, it was \$33,500. By comparison, median employment income in the rest of Canada was \$36,850.
- We also examine other indicators which similarly suggest a weaker labour market in the Atlantic region than the rest of the country. Specifically, the employment rate in all four provinces has been consistently lower than in the rest of the country over the past decade, while the unemployment rate has been consistently higher.

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Introduction

Atlantic Canada is and has been for some time a lagging economic region in the country. Generally, overall economic production and living standards are significantly lower than the national average.

A recent study documented the evolution of the prosperity gap between Atlantic Canada and the rest of the country using Gross Domestic Product per capita, which is a broad measure of income (Eisen et al., 2019).

This short backgrounder examines one indicator of economic success that is closely linked to the broader prosperity gap described above—employment income. Specifically, it focuses on the median income¹ for individuals in each of the Atlantic provinces and compares it to the median income in the other Canadian provinces and to the rest of the country more generally.

There are many factors potentially contributing to the outcomes discussed in this paper. Labour productivity per hour, the number of hours worked, the industry mix, seasonal employment, and demographics are amongst them. For instance, seasonal employment is 30 percent higher in Atlantic Canada than the rest of the country (Nichols, 2022, March 21). Atlantic Canada's population is older than it is in the rest of Canada, which effects the employment rate significantly (Statistics Canada, 2022b).

This paper does not attempt to decompose the gaps that it presents to show the role of each of the contributing factors, but rather, to illustrate the existence and nature of the gaps in perfor-

mance between the Atlantic region and the rest of the country for these labour market indicators. A more detailed exploration of the extent of each factor's contribution is a possible avenue for future research.

The plan of this backgrounder is as follows. The first section compares the median employment income in the Atlantic region and its component provinces to that in the rest of the country. The next section briefly examines two other indicators of labour market strength, the unemployment rate and the employment rate. A brief discussion concludes the bulletin.

Employment income in Atlantic Canada

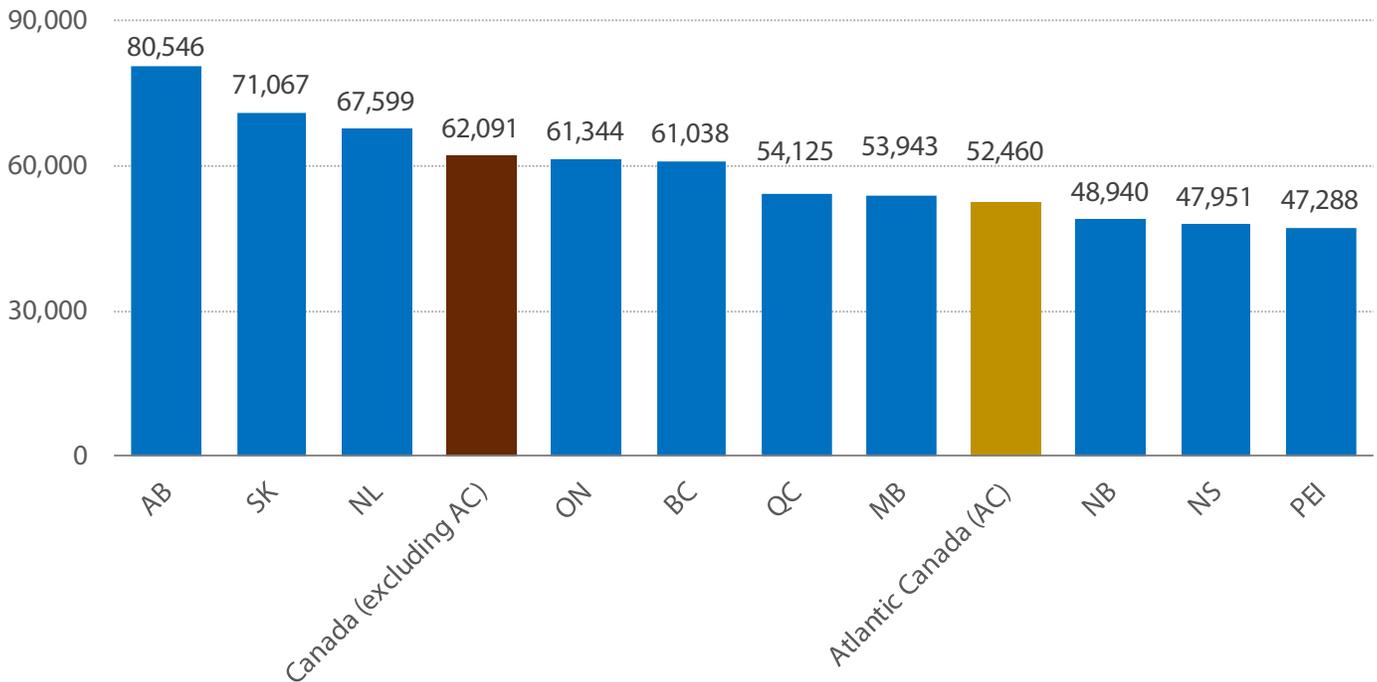
The inaugural publication of the Fraser Institute's Atlantic Canada Prosperity Initiative (following the Institute's merger with the Atlantic Institute for Market Studies or AIMS), showed that from 2002 to 2017, GDP per capita steadily remained approximately 20 percent higher in the rest of Canada than in the Atlantic region. Figure 1 shows that this situation persisted in 2019. In this backgrounder, we use 2019 as our year of analysis because it is the final year before the onset of the COVID-19 pandemic and the related recession. The year 2020 was extraordinary and had different impacts in different regions of the country, some of which appear to have spilled over into 2021. It is too early to tell whether these changes are permanent, so we rely on 2019 data as the most recent year that is not influenced by the effects of the COVID pandemic and recession which may prove to be wholly or partly transitory.

In 2019, per-capita GDP in the Atlantic region was \$52,460. At \$62,091, GDP per capita in the rest of the country that same year was 18.4 percent higher. Figure 1 shows that the three Maritime provinces had the lowest per-capita GDP in the country.

¹ Median refers to the value in the middle of a data set, meaning that 50 percent of the data points have a value smaller or equal to the median and 50 percent of the data points have a value higher or equal to the median.

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Figure 1: GDP per Capita, 2019 (in \$)



Sources: Statistics Canada, 2022a, 2022b; and calculations by the authors.

Gross Domestic Product is a broad measure of income and productivity. Higher GDP is positively correlated with a wide range of positive social and economic outcomes (International Monetary Fund, 2016).

Statistics Canada data demonstrate that employment income for a typical working resident of Atlantic Canada is generally considerably lower than for typical working residents in other parts of the country. Employment income includes wages, salaries, and commissions as well as income from self-employment.

Figure 2 shows the median employment income in all 10 Canadian provinces. All figures are adjusted and expressed in \$2020 dollars. Median employment income is a useful indicator of la-

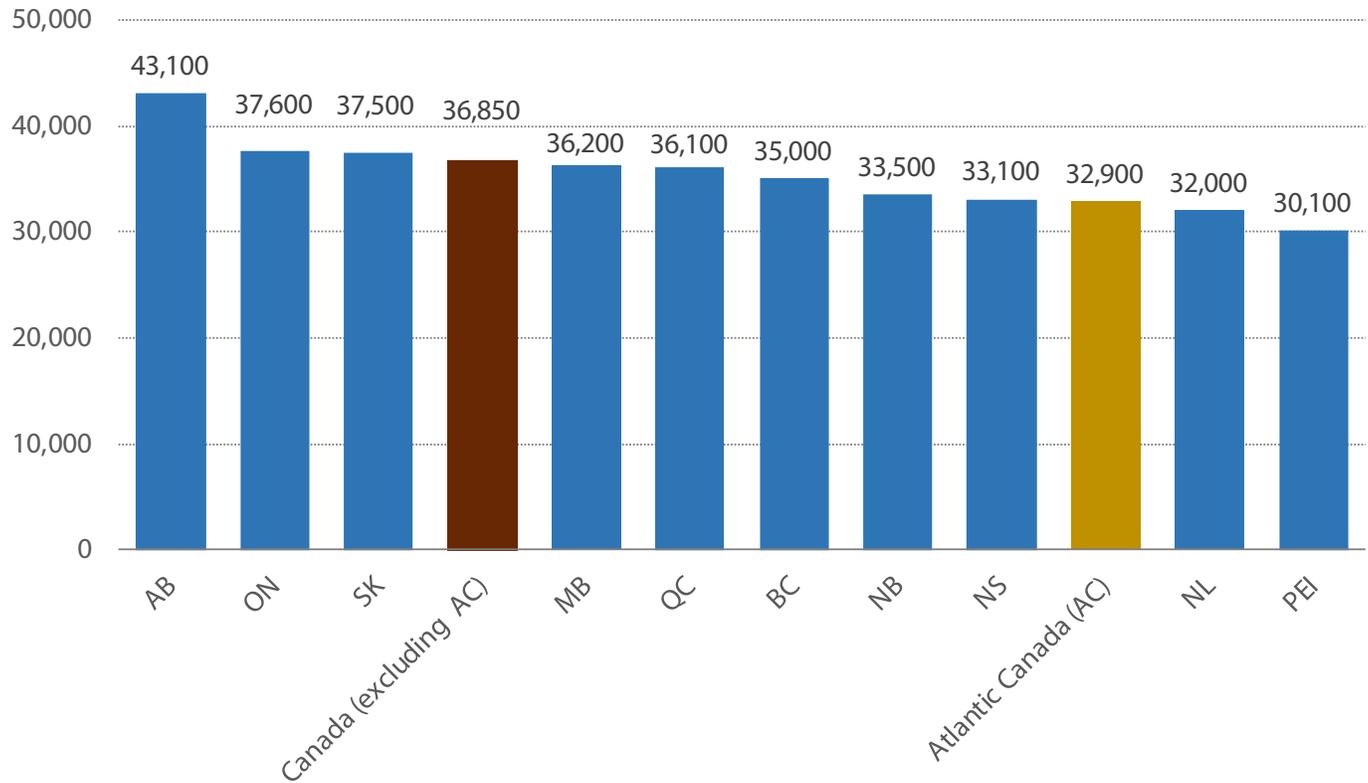
bour market strength and the economic well-being of working-age people in a jurisdiction.

Figure 2 also shows the regional median employment income in Atlantic Canada and for the rest of Canada excluding the Atlantic region. This indicator provides the median employment income for all individuals with any employment earnings. In other words, those with no employment earnings are not included.

Figure 2 shows that median employment income in Atlantic Canada is \$32,900. In the rest of Canada (ROC), median employment income is \$36,850. Median employment income in the rest of the country is 12.0 percent higher than in Atlantic Canada.

Median Employment Income in the Atlantic Region

Figure 2: Median Employment Income, 2019 (in 2020\$)



Note: Median employment income for Canada, excluding the Atlantic provinces, was calculated as the median of the values for the four Western provinces (BC, AB, SK and MB) plus Ontario and Quebec.

Sources: Statistics Canada, 2022c; calculations by authors.

The median employment income in all four Atlantic Provinces lags that in the rest of Canada. The gap is 10.0 percent for New Brunswick, 11.3 percent for Nova Scotia, 15.2 percent for Newfoundland & Labrador and 22.4 percent for Prince Edward Island.

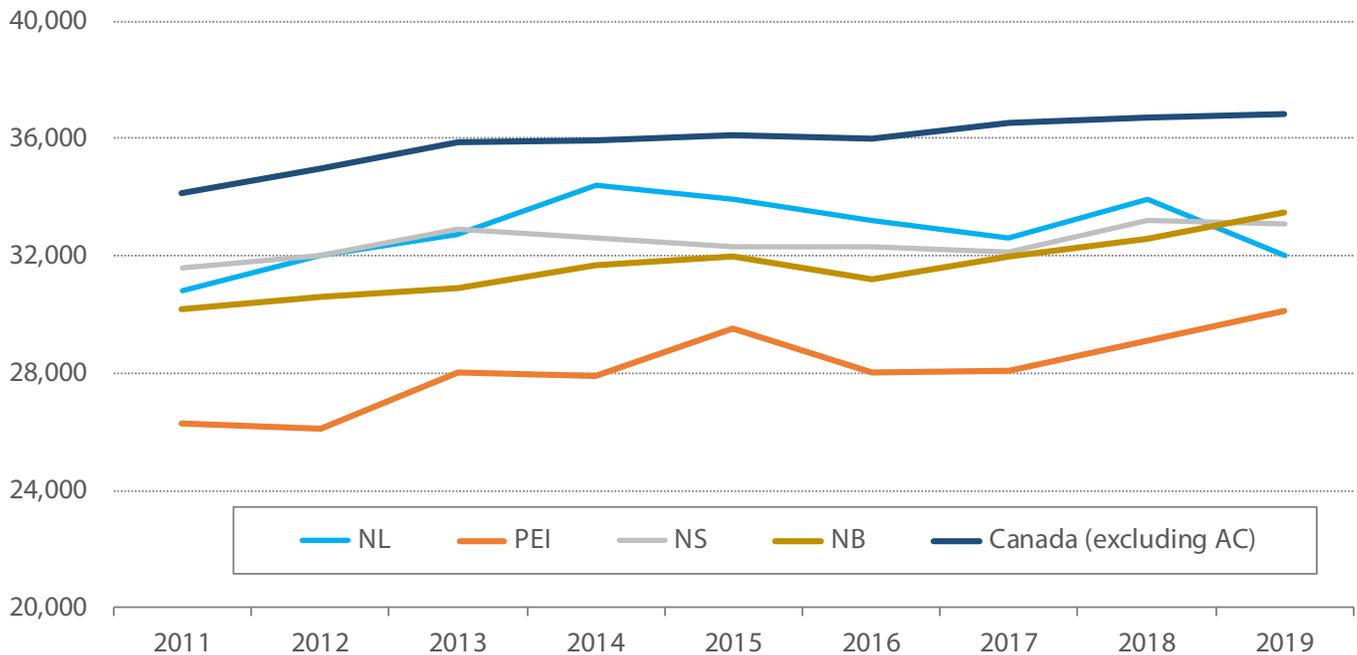
Newfoundland & Labrador performs better on per-capita GDP than on median employment income because the province's highly productive and large oil and gas sector contributes to overall GDP more than it does to labour income (Peters, Carter, and Cadigan, 2014).

These data show that all four Atlantic provinces trail well behind the national average on median employment income, which is a key indicator of labour market strength that provides important insight into living standards. In fact, the four Atlantic provinces have the lowest median employment income in Canada.

The gap between the Atlantic provinces and the rest of the country on median employment income has not been shrinking in recent years. During and following the 2008/09 recession a

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Figure 3: Median Employment Income, 2011–2019 (in \$2020)



Note: Median employment income for Canada, excluding the Atlantic provinces, was calculated as the median of the values for the four Western provinces (BC, AB, SK and MB) plus Ontario and Quebec.

Sources: Statistics Canada, 2022c; and calculations by authors.

severe negative economic and wage shock in other regions, particularly Ontario, somewhat reduced the gap between Atlantic Canada and the rest of Canada. However, since then there has been no further convergence. Figure 3 illustrates this point.

Since 2011, the median employment income gap between Newfoundland & Labrador and the rest of Canada excluding the Atlantic region has increased by 4.3 percentage points. For Prince Edward Island, the gap has shrunk by 7.4 percentage points. For Nova Scotia, the gap has increased by 3.3 percentage points. And for New Brunswick, the gap has shrunk by 3.1 percentage points. Taken together, these data show that there was no meaningful convergence between Atlantic Canada and the rest of the

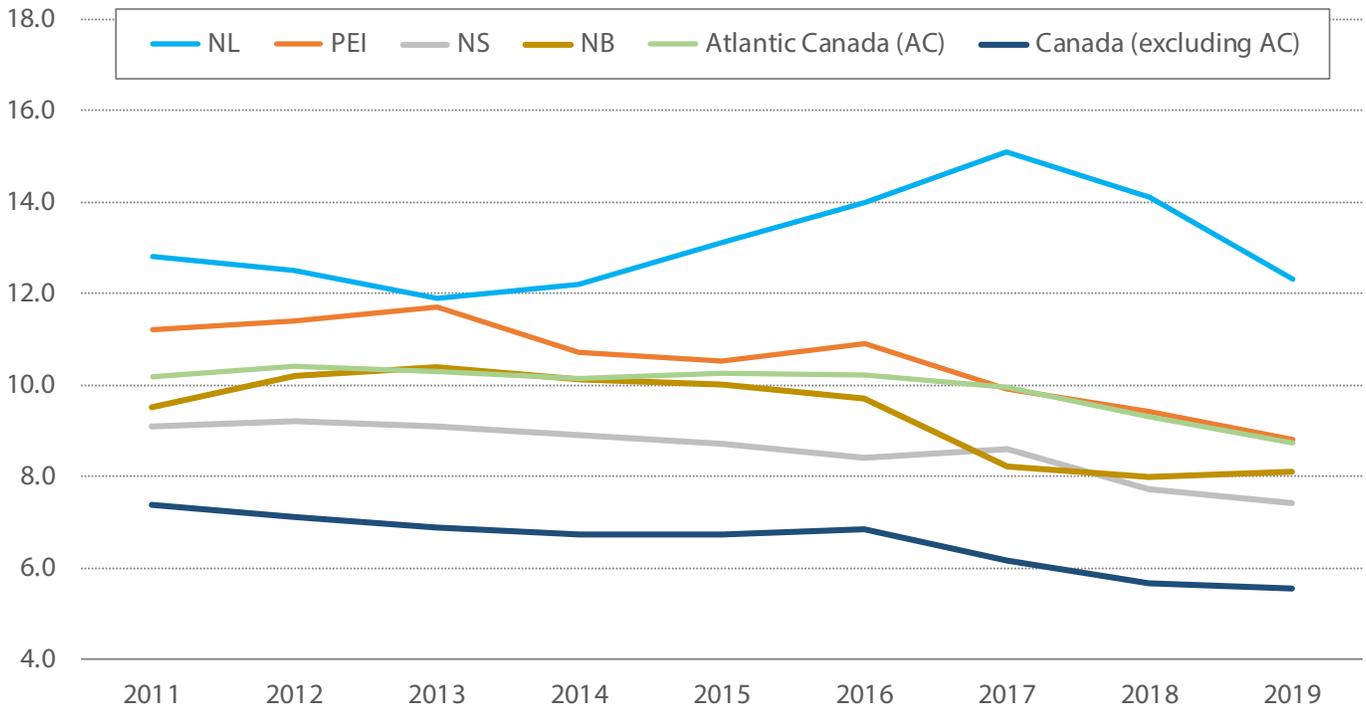
country on median employment income between 2011 and 2019.

Employment and unemployment in the Atlantic region compared to the rest of Canada

The previous section showed that median incomes in Atlantic Canada are significantly lower than they are in the rest of the country. This section shows that between 2011 and 2019 both unemployment and employment rates have generally been worse in the Atlantic region than in the rest of the country. Although this backgrounder focuses on the recent experience of the region and country, the gap between Atlantic Canada and the rest of the country on

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Figure 4: Unemployment Rate, 2000-2019



Note: The unemployment rate is the number of unemployed persons expressed as a percentage of the labour force. The unemployment rate for a particular group (age, sex, marital status, etc.) is the number unemployed in that group expressed as a percentage of the labour force for that group. Estimates are percentages, rounded to the nearest tenth.

Sources: Statistics Canada, 2022d; 2022e; calculations by authors.

many labour market indicators is long-term (McMahon, 2021) and precedes 2011.

Figure 4 shows the unemployment rate in the Atlantic region, in each of the Atlantic provinces, and in the rest of Canada from 2011 to 2019. It shows that the unemployment rate has been significantly higher in the Atlantic Region than in the rest of Canada (ROC), excluding the Atlantic provinces, throughout the period.

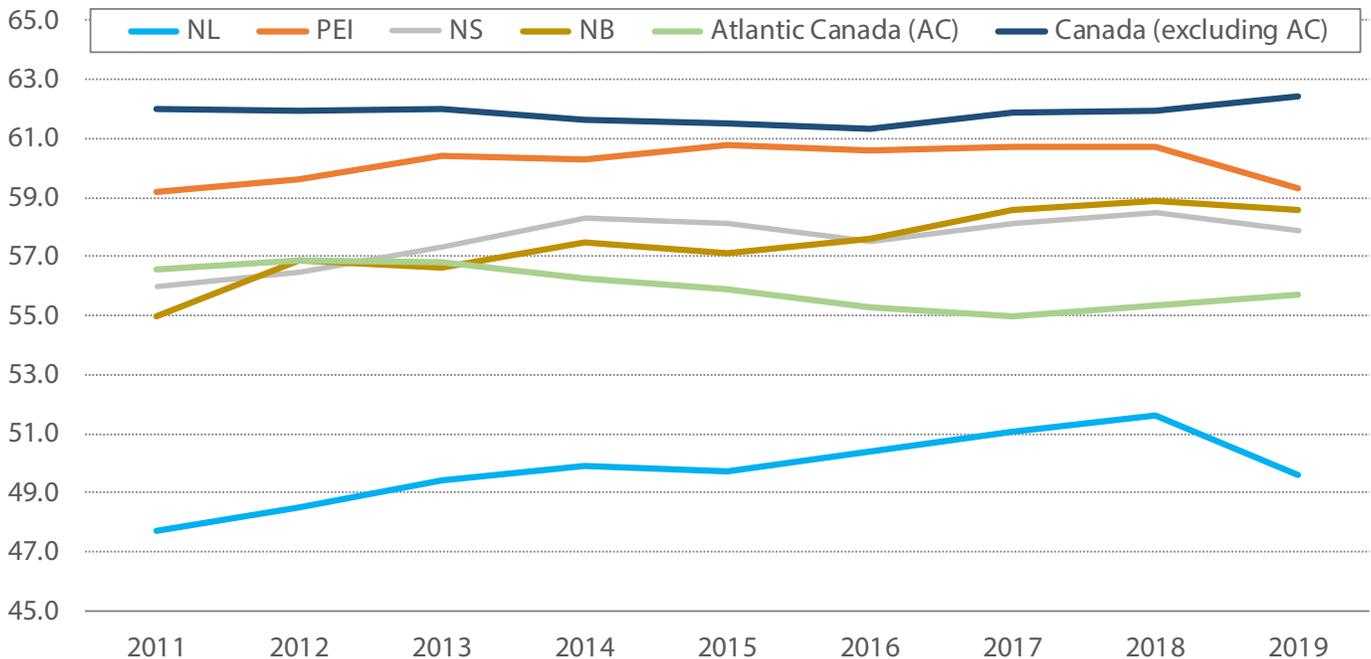
The unemployment rate measures the share of individuals in the workforce who are seeking employment but are unable to find it. In ROC (excluding the Atlantic provinces), between 2011

and 2019, the unemployment rate ranged from 5.5 to 7.4 percent. In Atlantic Canada, the range was between 8.7 and 10.4 percent. Throughout the period, the gap between Atlantic Canada and ROC remained fairly constant, with a low of 2.8 percentage points in 2011 and a high of 3.8 percentage points in 2017.

There is some differentiation between the Maritime provinces and Newfoundland & Labrador on this indicator, as Newfoundland & Labrador's unemployment rate climbed quickly in the middle of the 2010s as the price of oil fell. The performance of the Maritime provinces was much steadier over this timeframe. Along with ROC,

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Figure 5: Employment Rate, 2011-2019



Note: The employment rate is the number of persons employed expressed as a percentage of the population 15 years of age and over. The employment rate for a particular group (age, sex, marital status, etc.) is the number employed in that group expressed as a percentage of the population for that group. Estimates are percentages, rounded to the nearest tenth.

Sources: Statistics Canada, 2022d; 2022e; calculations by authors.

all four Maritime provinces saw slight declines in their unemployment rates from 2011 to 2019.

Another useful indicator that sheds some light on the strength of the labour market (although it is significantly affected by demographics) is the employment rate. This indicator shows the share of the adult population that is working. Partly due to the higher unemployment rate described above and partly due to an older workforce (Statistics Canada, 2022b) the Atlantic region consistently shows a lower employment rate than ROC (excluding the Atlantic provinces) throughout this analysis period. The gap ranged from a low of

5.0 percentage points in 2012 to a high of 6.9 percentage points in 2017. Figure 5 presents these data.

Again, Newfoundland & Labrador stands out on this indicator; in 2019 its employment rate was 8.3 percentage points lower than the rate in the next lowest province, Nova Scotia. Newfoundland & Labrador's performance on this indicator therefore exacerbates the size of the gap between ROC and the Atlantic region, but does not change the basic finding that the employment rate has been consistently higher in ROC than the Maritime provinces throughout the period of analysis.

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As noted earlier, a wide range of factors including industry mix and demographics drive the differences in economic and labour market outcomes discussed in this background. The Atlantic region's lower employment rate, particularly that of Newfoundland & Labrador, is linked to its older population and higher share of seniors. However, even if we narrow our focus to the core-age working population (25 to 54), a gap with the rest of the country remains. In 2019, for example, the employment rate for the core-age population in Atlantic Canada was 3.7 percentage points lower than the rest of Canada. A gap on this indicator has persisted throughout the analysis period, ranging from a low of 3.3 percentage points in 2014 to a high of 6.0 percentage points in 2011.

Discussion and conclusion

This short background has shown that median employment income in Atlantic Canada lags far behind that in the rest of the country. It also shows that the region has a higher unemployment rate than the rest of the country. These features of the Atlantic labour force make it more difficult for the province to attract and retain young, mobile workers.

References

Eisen, Ben, Milagros Palacios, Fred McMahon, and Alex Whalen (2019). *Catching up with Canada: A Prosperity Agenda for Atlantic Canada*. The Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/catching-up-with-canada-prosperity-agenda-for-atlantic-canada.pdf>>, as of January 3, 2023.

International Monetary Fund (2016). *The Evidence That Growth Creates Jobs: A New Look at an Old Relationship*. IMF Direct (IMF blog). International Monetary Fund. <<https://www.imf.org/en/Blogs/>

[Articles/2016/11/09/the-evidence-that-growth-creates-jobs-a-new-look-at-an-old-relationship](https://www.fraserinstitute.org/articles/2016/11/09/the-evidence-that-growth-creates-jobs-a-new-look-at-an-old-relationship)>, as of January 3, 2023.

McMahon, Fred (2021). *Returning to Normalcy: Unemployment and Seasonality in Atlantic Canada*. Blog post. The Fraser Institute. <<https://www.fraserinstitute.org/studies/returning-to-normalcy-unemployment-and-seasonality-in-atlantic-canada>>, as of January 3, 2023.

Nichols, Trevor (2022, March 21). *Are EI and Seasonal Work Setting Atlantic Canadian Firms Up for Failure?* Huddle. <<https://huddle.today/2022/03/21/is-ei-and-seasonal-work-setting-atlantic-canadian-firms-up-for-disaster/>> as of January 3, 2023.

Peters, John, Angela Carter, and Sean Cadigan (2014). Chapter 13: *The Political Economy of the Labour Market in Newfoundland and Labrador*. In Alex Marland and Matthew Kerby (eds.), *First Among Equals: The Premier, Politics, and Policy in Newfoundland and Labrador* (McGill-Queen's University Press): 247-264. <https://www.researchgate.net/publication/264897267_The_Political_Economy_of_the_Labour_Market_in_Newfoundland_and_Labrador>, as of January 3, 2023.

Statistics Canada (2022a). Table 36-10-0222-01: *Gross Domestic Product, Expenditure-Based, Provincial and Territorial, Annual (x 1,000,000)*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610022201>>, as of January 3, 2023.

Statistics Canada (2022b). Table 17-10-0005-01: *Population Estimates on July 1st, by Age and Sex*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501>>, as of January 3, 2023.

Statistics Canada (2022c). Table 11-10-0239-01: *Income of Individuals by Age Group, Sex and Income Source, Canada, Provinces and Selected Census Metropolitan Areas*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/>

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[tbl1/en/tv.action?pid=1110023901](https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110023901)>, as of January 3, 2023.

Statistics Canada (2022d). Table 14-10-0020-01: Unemployment Rate, Participation Rate and Employment Rate by Educational Attainment, Annual. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002001>>, as of January 3, 2023.

Statistics Canada (2022e). Table 14-10-0023-01: Labour Force Characteristics by Industry, Annual (x 1,000). Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301>>, as of January 3, 2023.



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ISSN 2291-8620

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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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