FRASER RESEARCH BULLETIN

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Comparing Employment Income in Toronto and Selected American Metropolitan Areas

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Summary

- Several recent Fraser Institute studies have found that a "prosperity gap" exists between Ontario and nearby American states. Additional research has shown that the province experienced weak economic growth throughout the 2010s.

- This paper turns to an examination of the labour market performance of Ontario and Canada's largest CMA, the metropolis of Toronto. Specifically, we examine median employment income in the 15 largest metropolitan areas in Canada and the United States (CMAs) United States (MSAs) in 2019. Toronto is the only Canadian metropolitan area large enough to qualify for this list.

- We find that Toronto has the lowest level of median employment income amongst the 15 largest metropolitan areas in Canada and the United States. The gap between Toronto and the lowest ranking US MSA, Miami, was $2,030 in 2019. The gap was larger for all other US MSAs analyzed here.

- This study also measures growth in median employment earnings during the 2010s. On this indicator, Toronto also fared poorly. Toronto's annual median employment income growth rate of 0.4 per cent ranked 10th out of the 15 metropolitan areas.

Introduction

In February 2022, the Fraser Institute published a study comparing the gross domestic product (GDP) and recent GDP growth in Ontario with that in Quebec and a selection of nearby US States. That paper concluded that there exists a "prosperity gap" between Ontario and most of its neighbours (Eisen and Li, 2022). This means that the province is a regional economic laggard with respect to key measures of income. Further, that report found that the gap between Ontario and its neighbours has generally been growing in recent years.

A subsequent paper did a closer comparison of large metropolitan areas in the Great Lakes region, specifically focusing on comparing the southwestern Ontario CMAs of Ontario—London and Windsor—to major manufacturing hubs in American Great Lakes states. That paper found that as measured by median employment income, London and Windsor fall far behind the selected group of peer cities and, as in the case for Ontario broadly, fell further behind throughout the 2010s [Eisen, Li, and Emes, 2023).

This paper considers the specific case of Toronto and its performance on this same indicator relative to a set of American comparator MSAs. It is difficult to overstate the importance of Toronto to Ontario's economic performance and indeed that of the entire country. When measured as a share of the national population, Toronto's CMA is comparable to California and the state of New York in the United States. The performance of Canada's largest city is a matter of national importance.

To examine Toronto's performance relative to relevant comparator cities, this analysis goes beyond the Great Lakes region and focuses on the largest MSAs in the United States. Extensive research has shown that very big cities are often the major drivers of economic growth for national economies. Many studies document productivity benefits from large scale urban agglomeration (Ahrend et al., 2017).

A recent Brookings Institution commentary explained in the broadest strokes the role of cities in driving growth and prosperity around the world. It noted, "from the beginning of time cities have been centers of commerce, formed along the roads and routes of trade. In this way, economies have risen, innovation has flourished, wealth has grown, and culture has evolved" (Katz, 2011).

Identifying the comparison group of American metro areas

This report compares median employment income for the Toronto CMA with the largest MSAs in the United States. The choice of precisely how many metropolitan areas to include is by its nature somewhat arbitrary. We have chosen to compare the 15 largest metropolitan areas in the two countries, including Toronto.

The 14 American MSAs[1] to which we compare Toronto, listed in order of size, are:

- New York
- Los Angeles
- Chicago
- Dallas
- Houston
- Washington, DC
- Philadelphia
- Atlanta
- Miami
- Phoenix

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1 Throughout this report, for readability we use the name of the large city at the core of each CMA/MSA. The figures and table provide the full CMA/MSA names.

- Boston
- Riverside-San Bernardino
- San Francisco
- Detroit

As noted, there are different reasonable rationales for selecting which large cities are to be comparators. There are also different reasonable options for selecting the nature of the comparator city list. For instance, Toronto has a large financial sector, and so a comparison to other metropolitan areas with similarly large financial sectors would provide useful insights. Such an analysis would likely focus on a different indicator than median employment income; instead it might zero-in on indicators that have a greater effect on the mobility choices of highly skilled and mobile workers in the financial services sector, such as compensation rates for the top 10 percent of the workforce.

The median employment income indicator and methodological notes

This paper focuses primarily on comparing the median employment income in Toronto to the 14 largest MSAs in the United States, though the metropolitan areas discussed here could be compared on many possible variables. Employment income differs from other measures in that it excludes some forms of income such as government transfers and investment and pension income. We use it to focus on what people earn in the labour market after stripping away the effects of passive income and government transfers. For economy of words and clarity we sometimes use the word "income" to refer to "median employment income" reported in Canada and "median earnings" reported in the United States.

The choice in this paper to focus on median employment income is intended to shed light on the general,

overall performance of the labour market in Toronto compared to other large cities. Further, chosing median earnings gives us information about how those in the middle of the pack—middle-income households and families—are faring. Other indicators would shed light on other important dimensions of labour market performance. A focus on median incomes, or the median incomes within the top 10 percent, for instance, would shed more light on outcomes for high earners, which is important for attracting mobile human capital. Many other alternatives, including those discussed above, offer interesting potential for future research products.
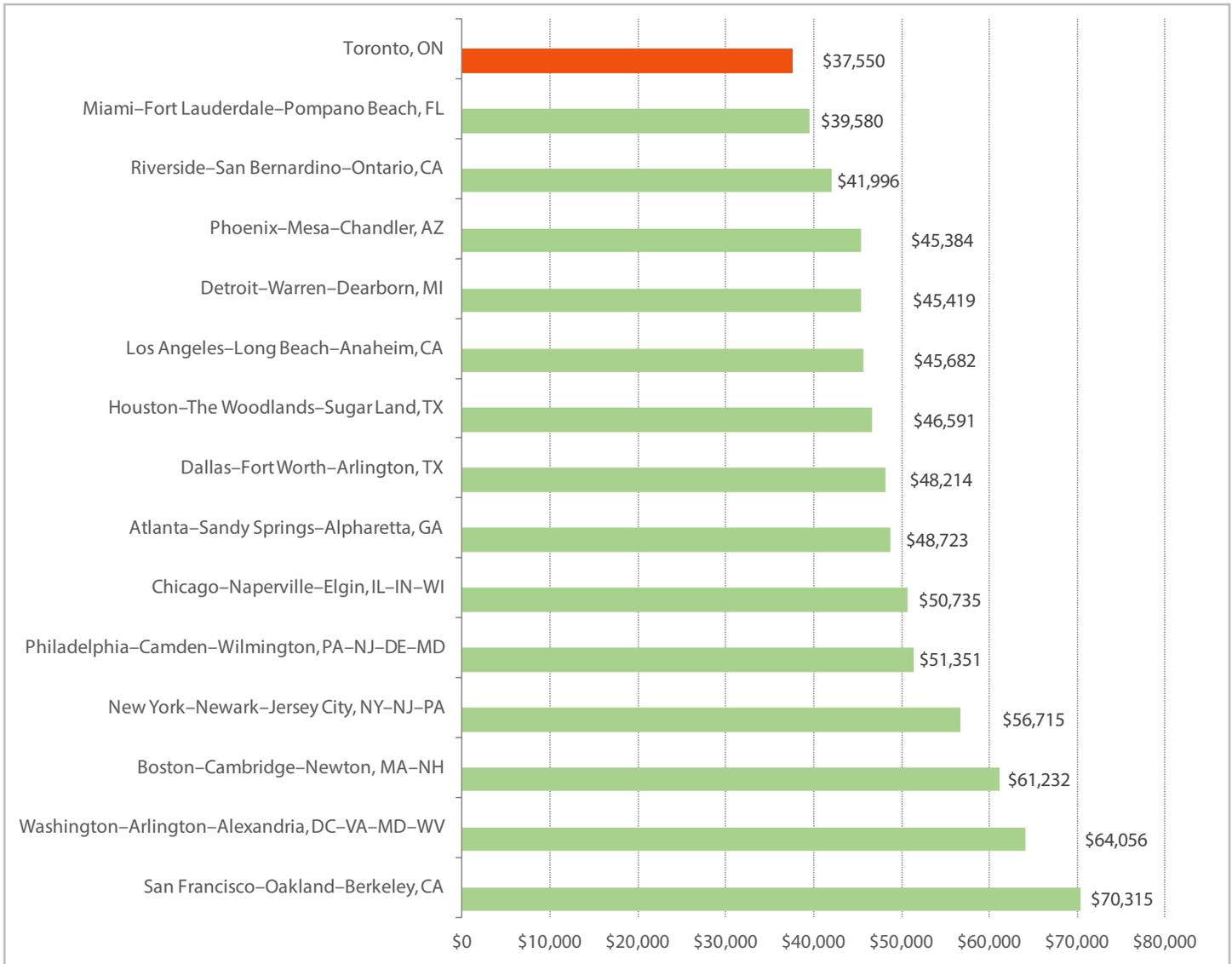
We present data for this indicator from the year 2019, as well as data on the rate of change from 2010 to 2019. We chose 2019 as the endpoint because it is the last year of comparable data in both Canada and the United States that is not distorted by the potentially short-term effects of the COVID-19 pandemic and recession. Our analysis compares the growth in median employment income in the decade from 2010-19.

Metropolitan areas are defined similarly in the United States and Canada. A Canadian CMA must have a population of at least 100,000 people with at least 50, 000 residents in the core to qualify. Similarly, in the United States, an MSA is a core area containing a large population nucleus together with adjacent communities with a high degree of economic and social integration with that core (US Census Bureau, 2023). This report focuses on Toronto and the 14 largest US MSAs, which have a population ranging from 4.4 million in the MSA surrounding Detroit to 19.8 million in the MSA centered on New York city.

Although the terminology is different in the two countries, the focus is the same. More information about the minor differences in definitions as well as our approach to currency comparability (we rely on a

Figure 1: Median employment income and rank, Toronto and selected large American MSAs, 2019 (CAN$)

MSA	Income
Toronto, ON	$37,550
Miami–Fort Lauderdale–Pompano Beach, FL	$39,580
Riverside–San Bernardino–Ontario, CA	$41,996
Phoenix–Mesa–Chandler, AZ	$45,384
Detroit–Warren–Dearborn, MI	$45,419
Los Angeles–Long Beach–Anaheim, CA	$45,682
Houston–The Woodlands–Sugar Land, TX	$46,591
Dallas–Fort Worth–Arlington, TX	$48,214
Atlanta–Sandy Springs–Alpharetta, GA	$48,723
Chicago–Naperville–Elgin, IL–IN–WI	$50,735
Philadelphia–Camden–Wilmington, PA–NJ–DE–MD	$51,351
New York–Newark–Jersey City, NY–NJ–PA	$56,715
Boston–Cambridge–Newton, MA–NH	$61,232
Washington–Arlington–Alexandria, DC–VA–MD–WV	$64,056
San Francisco–Oakland–Berkeley, CA	$70,315

Note: US data is converted to Canadian dollars using the PPP conversion rate.

Sources: Statistics Canada (2023a); US Census Bureau (multiple years); OECD (2023); calculations by authors.

Purchasing Power Parity (PPP) exchange rate to convert American jurisdictions to Canadian dollars) is available in (Eisen and Emes, 2023), where much of this data is first presented and which includes a more detailed methodological section.
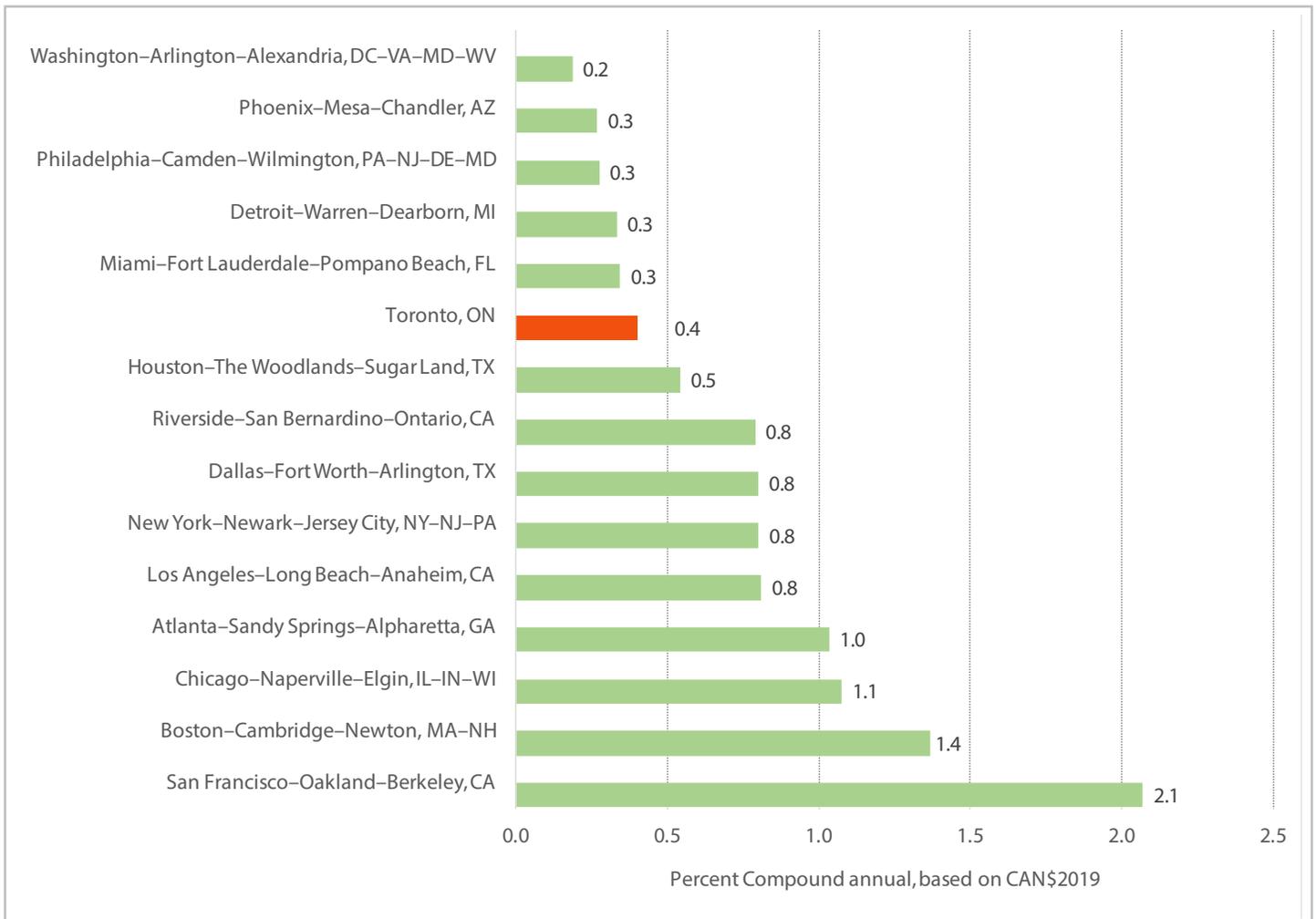
Results

Comparing employment income in Toronto with that in the largest American MSAs

Figure 1 presents one of the two main results of this analysis. It shows that with median employment

Figure 2: Compound annual percent change in Median employment income, Toronto and selected large American MSAs, 2010-19

MSA	Percent
Washington–Arlington–Alexandria, DC–VA–MD–WV	0.2
Phoenix–Mesa–Chandler, AZ	0.3
Philadelphia–Camden–Wilmington, PA–NJ–DE–MD	0.3
Detroit–Warren–Dearborn, MI	0.3
Miami–Fort Lauderdale–Pompano Beach, FL	0.3
Toronto, ON	0.4
Houston–The Woodlands–Sugar Land, TX	0.5
Riverside–San Bernardino–Ontario, CA	0.8
Dallas–Fort Worth–Arlington, TX	0.8
New York–Newark–Jersey City, NY–NJ–PA	0.8
Los Angeles–Long Beach–Anaheim, CA	0.8
Atlanta–Sandy Springs–Alpharetta, GA	1.0
Chicago–Naperville–Elgin, IL–IN–WI	1.1
Boston–Cambridge–Newton, MA–NH	1.4
San Francisco–Oakland–Berkeley, CA	2.1

Percent Compound annual, based on CAN$2019

Note: US data is converted to Canadian dollars using the PPP conversion rate.

Sources: Statistics Canada (2023a); US Bureau of Labor Statistics (2023); US Census Bureau (multiple years); US Census Bureau (2023); OECD (2023); calculations by authors.

income of $37,550, Toronto ranked last amongst the 15 largest metropolitan areas in Canada and the United States on that measure in 2019.

The lowest ranking American MSA on the list, Miami, had a median employment income of $39,580, $2,030 more than Toronto. The next lowest-ranked American MSA is Riverside-San Bernardino at $41,996, a gap of $4,446 over Toronto.

The eighth-ranked metropolitan area on the list (the middle placing) is Dallas, with median employment income of $48,214. This means that on this indicator there is a gap of $10,664 between Dallas and Toronto.

Table 1: Median employment income, relative to employment income of Toronto and rank, Toronto and American MSAs, 2019 (CAN$)

Name	2019	Relative to Toronto (Toronto=100)	Rank (of 15)	2020 Total Population
New York–Newark–Jersey City, NY–NJ–PA	56,715	151	4	19,768,458
Los Angeles–Long Beach–Anaheim, CA	45,682	122	10	12,997,353
Chicago–Naperville–Elgin, IL–IN–WI	50,735	135	6	9,510,390
Dallas–Fort Worth–Arlington, TX	48,214	128	8	7,759,615
Houston–The Woodlands–Sugar Land, TX	46,591	124	9	7,206,841
Washington–Arlington–Alexandria, DC–VA–MD–WV	64,056	171	2	6,358,652
Toronto, ON	37,550	100	15	6,303,220
Philadelphia–Camden–Wilmington, PA–NJ–DE–MD	51,351	137	5	6,228,601
Atlanta–Sandy Springs–Alpharetta, GA	48,723	130	7	6,144,970
Miami–Fort Lauderdale–Pompano Beach, FL	39,580	105	14	6,091,747
Phoenix–Mesa–Chandler, AZ	45,384	121	12	4,946,145
Boston–Cambridge–Newton, MA–NH	61,232	163	3	4,899,932
Riverside–San Bernardino–Ontario, CA	41,996	112	13	4,653,105
San Francisco–Oakland–Berkeley, CA	70,315	187	1	4,623,264
Detroit–Warren–Dearborn, MI	45,419	121	11	4,365,205

Note: US data is converted to Canadian dollars using the PPP conversion rate.

Sources: Statistics Canada (2023a and 2023b); U.S. Census Bureau (multiple years); U.S. Census Bureau (2023); U.S. Bureau of Labor Statistics (2023); OECD (2023); calculations by authors.

Median employment income growth rates in Toronto and large American MSAs

These data show that as of 2019 and as measured by median employment income, a large prosperity gap existed between Toronto and the largest metro areas in the United States. Figure 2 presents the second main finding of this report, a comparison of the annualized growth rates for the same 15 metro areas discussed above between 2010 and 2019. It shows that at 0.4 percent, Toronto's annualized growth rate over the 2010s on this indicator was weaker than most of the comparator cities considered in this report.

Toronto ranks 10th out of the 15 metro areas analyzed in this bulletin on this indicator. Further, those MSAs that Toronto did exceed in terms of median employment income growth during the 2010s all sat only very slightly below Toronto. In total, seven of the metro areas presented here had weak growth rates of between 0.2 percent (Washington) and 0.5 percent (Houston). Meanwhile, the remaining eight MSAs all had substantially higher median employment income growth rates of 0.8 percent annually or more. The middle-ranking metro area of Riverside-San Bernardino had an annualized median employment income growth rate of 0.8 percent, double that of Toronto. Four MSAs

(Atlanta, Chicago, Boston, and San Francisco) had annualized median employment income growth rates of more than 1 percent.

To summarize, in most cases the prosperity gap as measured by median employment income between Toronto and the largest MSAs grew over the course of the 2010s. In comparison with five metro areas in the US, the gap shrank, but only slightly.

Table 1 summarizes the data presented in figures 1 and 2 while providing additional information on the results, including each metro area's ranking and its median employment income growth from 2010-19. It also shows the population size of each MSA, and presents the results around median employment income as an index with Toronto's level set at 100. This gives additional context on the size of the prosperity gap between each American MSA and Toronto.

Conclusion

Past Fraser Institute research has extensively documented the economic challenges Ontario has faced in recent years. This bulletin examines the specific case of Toronto and compares its economic performance to the largest American MSAs on one important metric of economic and labour market performance, median employment income.

We examine the 15 largest metropolitan areas in Canada and the United States and find that in 2019, Toronto's median employment income was the lowest of the group. The smallest gap was with Miami at $2,030. The gap was larger in all other comparator MSAs. We also found that from 2010 to 2019, Toronto's growth performance on this indicator was in the bottom half of the rankings. We therefore conclude that the gap between Toronto and the majority of the large American metro areas analyzed in this study continued to grow from 2010 to 2019.

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