

Measuring Ontario's Regional Prosperity Gap, 2022 Update

by Ben Eisen and Nathaniel Li



SUMMARY

■ By global standards, Ontario is a prosperous place. Ontarians enjoy living standards and access to opportunities that are the envy of much of the world.

■ However, within its own economic region, Ontario is an economic laggard.

■ This bulletin compares overall prosperity in Ontario (measured as Gross Domestic Product per person) to that of the eight American states in the Great Lakes region and its neighbouring province, Quebec. It also compares the economic growth rates of jurisdictions in the region in recent years.

■ The study shows that Ontario has the second lowest GDP per person in the region,

ahead only of Quebec. The region's GDP per capita taken as a whole is 32.7 percent higher than Ontario's.

■ Over the past two decades, Ontario has fallen increasingly behind its regional neighbours. While real inflation-adjusted GDP has increased by 18.5 percent in the entire region since 2001, Ontario's real per person economy has grown by just 6.5 per cent.

■ The large and growing prosperity gap between Ontario and its neighbours should concern Ontarians generally and policymakers specifically. Strong GDP growth contributes to job creation, wage growth, and other indicators of well-being.

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Introduction

By global standards, Ontario is a prosperous jurisdiction. Like residents of all other Canadian provinces, Ontarians enjoy a standard of living and access to economic opportunity that are the envy of most of the world.

Nevertheless, there are good reasons not to be sanguine about the performance of Ontario's economy. Specifically, if we narrow our analysis from the global scale to a regional one, it becomes apparent that Ontario is in fact an economic laggard compared to its neighbours—and has been for some time.

Throughout the 2000s and the first half of the 2010s, the government-funded Ontario Institute for Competitiveness and Prosperity (OICP) periodically published analyses comparing Ontario's overall economic well-being to various groups of jurisdictions in North America and around the world (OICP, 2002). These reports used the straightforward measure of per capita Gross Domestic Product and measured a “prosperity gap” between Ontario and various groups of comparator provinces. The third section of this bulletin defines this metric and explains its use in this analysis.

In 2019, the OICP closed. However, the work of measuring the extent to which Ontario's economic performance lags its neighbours and economic competitors remains important. This bulletin provides an update on the prosperity gap, comparing Ontario's performance to a new group of peer jurisdictions and briefly discussing how this gap has grown over time.¹

¹ Any errors in this update are the sole responsibility of its authors.

Identifying Ontario's peer group

There are many ways to select a group of jurisdictions against which to compare Ontario's economic performance. This report takes the relatively straightforward option of using the province's immediate regional neighbours as the comparison group. More specifically, we compare Ontario to all of the American states in the Great Lakes region—that is, those that border one of the Great Lakes. We add to this list Quebec, which does not border a Great Lake but is Ontario's immediate neighbour and one of the province's most important trading partners and competitors for investment. In this bulletin we refer to this entire group as the Great Lakes region.

In addition to simplicity, this selection process has several other advantages. Most jurisdictions in the region have significant manufacturing sectors and share similar geography and natural resource endowments. As such, they have many similarities that make them attractive for some types of business investment (and less attractive for others) and they therefore compete with each other to varying extents for investment. Further, partly due to the simple fact of proximity, the jurisdictions also share some sectoral similarities that link their supply chains, so there is extensive trade between the states and provinces in the Great Lakes region. Specifically, the jurisdictions with which Ontario is compared in this analysis are:

- Illinois
- Indiana
- Michigan
- Minnesota
- New York
- Ohio

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- Pennsylvania
- Quebec
- Wisconsin

Of course, there are rationales for other sets of comparators. For instance, many studies document the productivity benefits of urban agglomeration (Ahrend et al., 2017). As such, there may be meaningful ways in which states found further away but that also have large cities, such as California, may, at least in some respects, be a better comparator jurisdiction for Ontario than, for example, Minnesota, which does not have a metropolis comparable in size to the Greater Toronto Area. California, however, lacks some of the other advantages of the Great Lakes region described above. In short, while recognizing that no comparator group is perfect and that other choices would also be reasonable, using the Great Lakes states and Quebec as the comparator group is a straightforward method of selecting important neighbours, trading partners, and competitors for investment.

Measuring the prosperity gap: GDP per capita using purchasing power parity

There are many different ways to measure prosperity and numerous economic indicators that could be considered in any calculation. No single metric captures the whole picture. However, the most comprehensive measure of overall prosperity is real Gross Domestic Product (GDP) per capita.

This measure tells us the overall per-person economic production in a jurisdiction over the course of a year. There is a strong positive correlation between a higher GDP per capita and better performance on the vast majority of economic indicators.

Per-capita GDP growth does not tell us everything about economic performance and living standards in various jurisdictions. For instance, it does not explain the distribution of income, which is why indicators such as median household income are sometimes used to assess living standards for a “typical” household. Nevertheless, GDP growth helps drive job creation and wage growth and is therefore frequently used as a straightforward if imperfect measure of prosperity. That is how the metric is employed in this report.

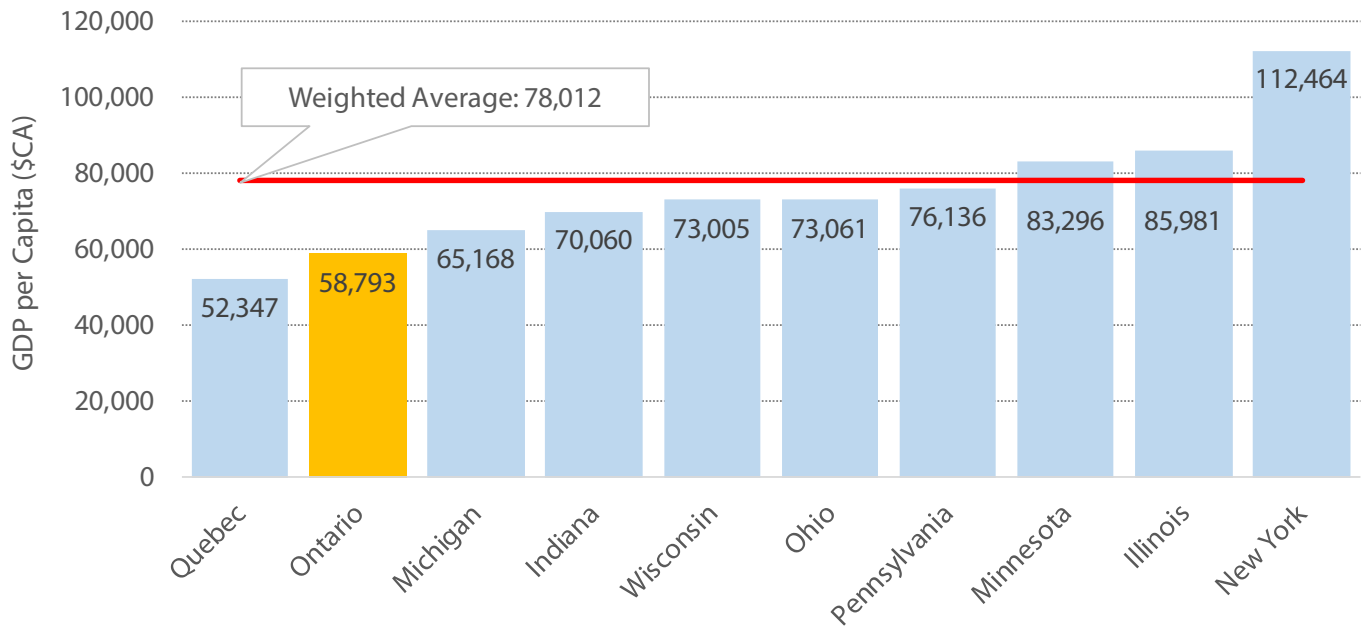
For these reasons, we use GDP per capita as our measure of prosperity. We measure both GDP levels in the most recent year of complete data (2020), along with inflation-adjusted growth since 2001. Including a measure of growth over time is important not only because it shows whether the prosperity gap is growing or shrinking, but it reduces the risk of the result being distorted by the fact of different jurisdictions being at different points of the business cycle at any specific time.

One complication that arises from comparing GDP per capita in Canadian and American jurisdictions is that the official agencies in each country use their own currencies to measure GDP. There are two main methods of comparing jurisdictions with different currencies—purchasing power parity (PPP) and market foreign exchange rates. PPP compares the value of GDP in each jurisdiction making an adjustment to the value of the currency based on the price of a standardized basket of goods and services. Market foreign exchange rate is determined by the demand for and supply of international currencies.

One of the main advantages of using PPP exchange rates is that they are relatively stable over time. By contrast, market rates are more

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Figure 1: GDP per Capita for Selected States and Provinces (2020) (in \$CA)



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

Sources: Statistics Canada (2021a and 2021b); US Bureau of Economic Analysis (2021); OECD (2021); calculations by authors.

volatile, and using them could produce quite large swings in aggregate measures of growth even when growth rates in individual countries are stable. A disadvantage of using market-based rates is that they are relevant only for internationally traded goods and they exclude non-traded goods and services.

Theoretically, in the long run, PPP and market foreign exchange rates should eventually converge to yield the same result. In reality, there are obstacles to trade across borders and other factors that prevent perfect convergence and, in fact, leave significant gaps between the two measures. We use purchasing power parity in this report for a number of reasons, an important one being that it tends to be more stable over time. Partly for this reason there is a general preference amongst economists for

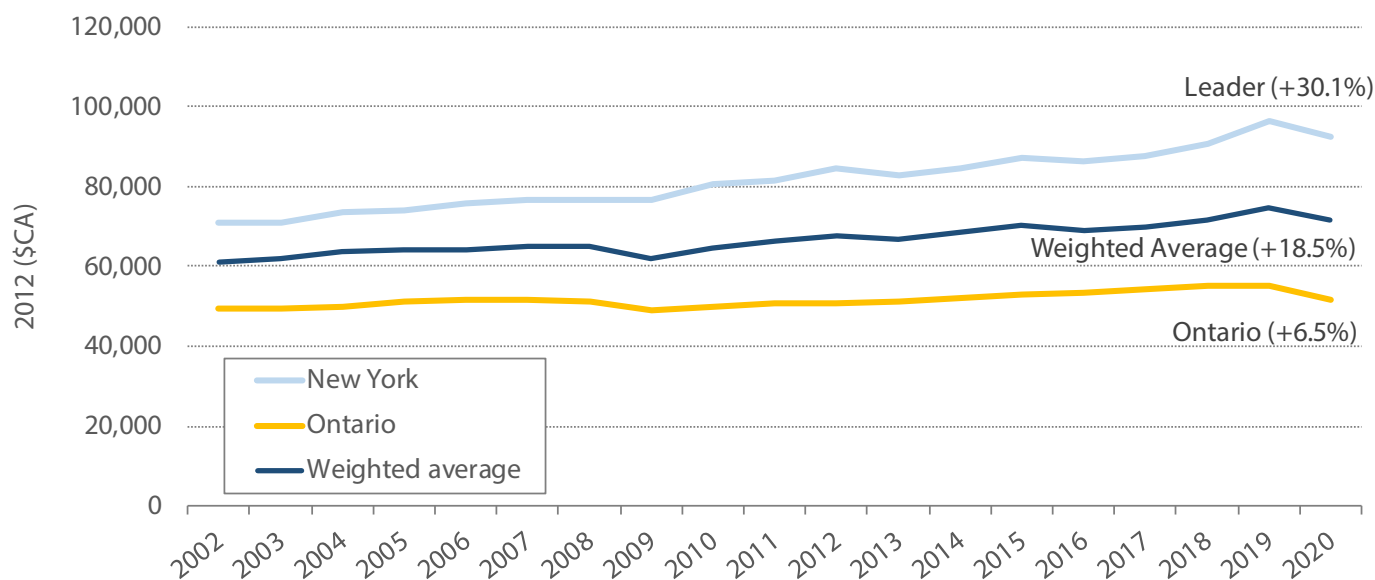
the PPP measure for comparing living standards (OICP, 2002: 18). However, the results of the analysis in this bulletin are generally robust to whichever currency adjustment method is used, particularly the finding that there is a prosperity gap with GDP per capita in the region being higher than Ontario's.

Results: Ontario's large prosperity gap is growing

Our comparison of states and provinces in the Great Lakes region shows that Ontario has the second lowest GDP per capita of the 10 jurisdictions. All eight American states have a higher GDP per capita than Ontario, which is higher only than Quebec on this metric. Figure 1 presents the results for 2020, in Canadian dollars. Of course, 2020 is an unusual year

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Figure 2: GDP per Capita, 2001-2020 (in 2012 CA\$)



Note: Real GDP in Canada and the US is presented in 2012 dollars. US data is converted to Canadian dollars using the PPP conversion rate.

Sources: Statistics Canada (2021a and 2021b); US Bureau of Economic Analysis (2021); OECD (2021); calculations by authors.

due to the COVID-19 recession, resulting in a negative GDP shock in nearly all jurisdictions under analysis. Although Quebec and Ontario both saw a larger negative GDP shock than the weighted average of the region taken as a whole, the scale of the shock was somewhat similar from jurisdiction to jurisdiction. Differences between the jurisdictions are therefore still overwhelmingly indicative of overall economic strength rather than short term COVID-related factors.

Figure 1 shows that Ontario's GDP per capita in 2020 was CA\$58,793, ahead of only Quebec. The jurisdiction with the next lowest GDP per capita is Michigan, at CA\$65,168. This means that the US state with the least advantage over Ontario still had a per-capita GDP that was 10.8 percent higher than Ontario's.

A comparison of Ontario to the regional average is also illustrative. The population-weighted average of GDP per capita of all of the jurisdictions in the region taken as a whole is CA\$78,012. This means that the average per-capita GDP in the Great Lakes region is higher than Ontario's by CA\$19,219, or 32.7 percent.

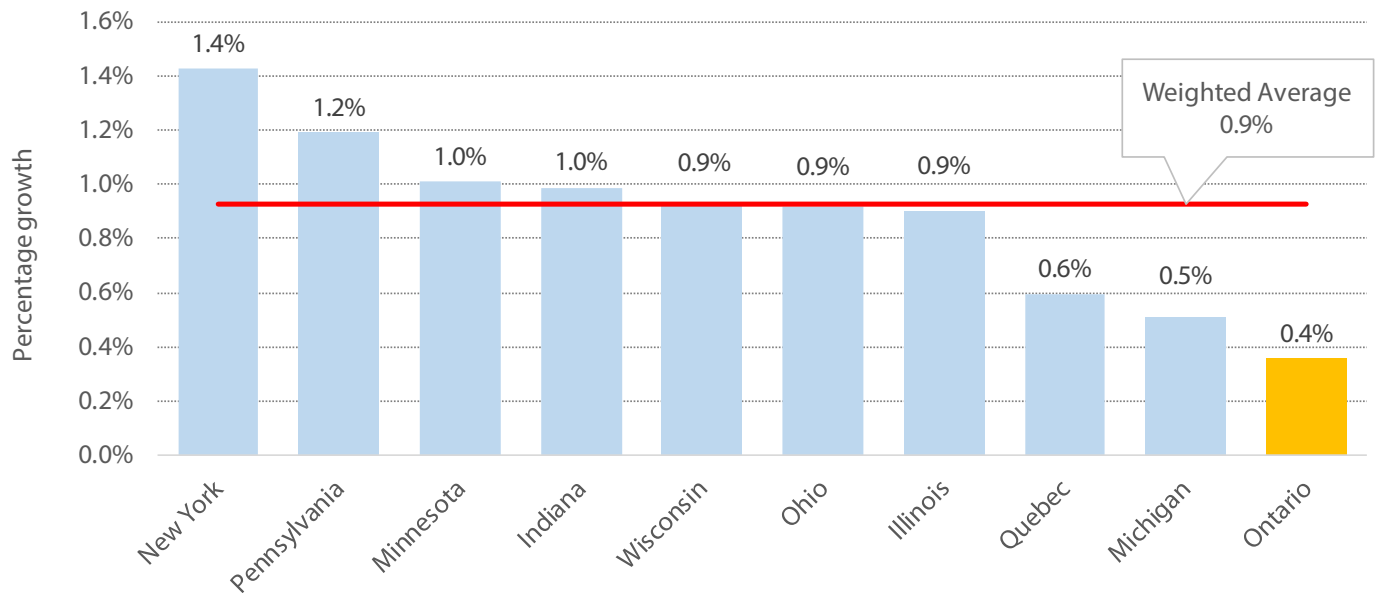
Finally, consider the regional leader, New York State. Its per-capita GDP is CA\$112,464—91.3 percent higher than Ontario's.

These data reveal a large prosperity gap. Furthermore, that gap has widened slightly since 2001 (we use a 20-year time period). Figure 2 illustrates GDP per capita (after adjusting for inflation) in 2012 Canadian dollars.²

² Statistics Canada and the US Bureau of Economic Analysis present real GDP in 2012 dollars. US data

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Figure 3: Average Annual Real GDP per Capita Growth, 2001 to 2020



Sources: Statistics Canada (2021a and 2021b); US Bureau of Economic Analysis (2021); OECD (2021); calculations by authors.

In 2001, a prosperity gap did exist between Ontario and the regional Great Lakes average, but it was smaller than it is today. Specifically, the regional average per-capita GDP was 24.3 percent higher than Ontario's in 2001, which is a significant gap, but still much smaller than the gap that has emerged by 2020.

Of course the widening prosperity gap means that per-capita GDP has grown faster in the rest of the region as a whole than in Ontario. As figure 2 shows, inflation-adjusted GDP per capita in the Great Lakes region grew by 18.5 percent during this period, compared to just 6.5 percent in Ontario.

Figure 3 further illustrates Ontario's poor growth performance since 2001. It shows an

were converted to Canadian dollars using the PPP conversion rate (OECD, 2021).

nual average inflation growth in adjusted per-capita GDP between 2001 and 2020.

Figure 3 shows that real per-capita GDP in Ontario increased on average 0.4 percent annually over the period. The past two decades have not been a time of dynamic growth for the entire region, but the regional average real per-capita GDP growth rate was still meaningfully higher than Ontario's at 0.9 percent. The diverging growth rates and their compounding effect led to the widening per-capita GDP gap illustrated in figure 2.

Figure 3 shows Ontario actually registered the lowest average annual average growth rate in the region over this time period. The second lowest average annual rate of growth was in Michigan, at 0.5 percent. Like Ontario, Michigan's manufacturing sector, particularly its automobile industry, contracted significantly in

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the mid-2000s. The state entered a lengthy period of stagnation and decline that was worsened by the 2008/09 recession. However, in the 2010s Michigan's economy finally began to recover (Murphy et al., 2016).

It is important to note that Ontario's economic performance has varied substantially from one region to another within the province. The weak province-wide numbers result from extended economic stagnation in Northern Ontario, Eastern Ontario (excluding Ottawa), and especially populous and manufacturing-heavy Southwestern Ontario. Economic performance in the provincial and national capital cities of Toronto and Ottawa has been relatively strong compared to that in the rest of the province (Eisen and Emes, 2016).

Conclusion

By global standards, Ontario is prosperous. The province's residents have living standards, access to opportunity, and economic freedoms that are the envy of the vast majority of the world. Nevertheless, it would be misguided for the province to be complacent about its economic performance.

This bulletin has shown that overall, Ontario's per-person economic production lags far behind the average of its regional peers. It is just as worrying that the gap has grown wider over the past 20 years. Ontario's lower overall level of economic production and its weak growth has translated into less job creation, slower wage growth, and more pressure on public finances than would be the case in the presence of more robust growth.

Within North America's prosperous Great Lakes region, Ontario is clearly an economic laggard. This report has sought to measure the extent of the prosperity gap between Ontario

and its neighbours in an effort to help Ontarians generally, and policymakers specifically, recognize the scale and enduring nature of this challenge—along with the fact that the gap has grown over the past 20 years.

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