Summary

- Real GDP per person is a broad measure of incomes (and consequently living standards). This paper analyzes changes in quarterly per-person GDP, adjusted for inflation from 1985 through to the end of 2023, the most recent data available at the time of writing.
- The study assesses the length (number of quarters) as well the percentage decline and the length of time required to recover the income lost during the decline.
- Over the period covered (1985 to 2023), Canada experienced nine periods of decline and recovery in real GDP per person.
- Of those nine periods, three (Q2 1989 to Q3 1994, Q3 2008 to Q4 2011, and Q2 2019 to Q2 2022) were most severe when comparing the length and depth of the declines along with number of quarters required for real GDP per person to recover.
- The experience following Q2 2019 is unlike any decline and recovery since 1985 because, though per person GDP recovered for one quarter in Q2 2022, it immediately began declining again and by Q4 2023 remains below the level in Q2 2019.
- This lack of meaningful recovery suggests that since mid-2019, Canada has experienced one of the longest and deepest declines in real GDP per person since 1985, exceeded only by the decline and recovery from Q2 1989 to Q3 1994.
- If per-capita GDP does not recover in 2024, this period may be the longest and largest decline in per-person GDP over the last four decades.
Introduction

A paper by Clemens, Palacios, and Veldhuis (2021) compared the general pre-recessionary economic performance of the last five periods preceding recessions in Canada. Their study analyzed economic indicators from 1985 to 2020, and found that economic performance in Canada during the most recent period (2016-2019) was the weakest compared to the previous pre-recession periods. This analysis builds on that paper by looking specifically at how inflation-adjusted gross domestic product (GDP) per person (a broad measure of living standards) fluctuated over the period from 1985 to 2023. This period allows for in-depth analysis of real GDP per person over the same timeframe used by Clemens et al. (2021), while expanding that timeframe to include the most recent data available at the time of writing.

This paper highlights periods during which GDP per person is declining and subsequently recovering, and compares the relative depth and length of each decline as well as the relative length of each recovery. In addition, this paper compares the duration and extent of real GDP per person growth in between the various periods of decline. The key finding is that since the middle of 2019, Canada has experienced one of the longest and deepest declines in real GDP per person over the last four decades.

Analysis Framework

The real value of final goods and services produced in the economy during a period—inflation-adjusted GDP—is the most widely used measure of overall economic activity. GDP is typically measured either in aggregate or per person, and as Eisen, Palacios, and Schembri (2024) show, GDP per person is the more useful indicator of economic progress. Specifically, GDP per person is a more useful measure of a country’s living standards when making comparisons over time or between countries when changes in the size of the population are not stable.

Canada has recently experienced historically high rates of population growth, which grows aggregate GDP but does not necessarily grow per person incomes (Eisen et al., 2024; Peterson, 2017; Statistics Canada, 2024c). For example, between 2000 to 2023, Canada had the second highest rate of GDP growth in the G7, but had among the lowest growth rates when measuring GDP per person (Eisen et al., 2024). Therefore, it is less useful to compare aggregate GDP growth in recent years with growth in the past because the differences are mainly due to differing rates of population growth, rather than differing rates of productivity growth (which is largely what drives incomes higher and increases living standards).

Figures 1 and 2 are the basis for this analysis. Figure 1 shows quarterly inflation-adjusted GDP per person from Q1 1985 to Q4 2023, while figure 2 shows the quarterly percentage change in real GDP per person during the same period. Taken together, these figures show a number of periods of consecutive quarters of declining real GDP per person, followed by subsequent periods of growth. To clearly

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1 This analysis utilizes quarterly GDP per person in chained 2017 dollars, drawn from Statistics Canada (2024a, 2024b).
2 It is important to note that the framework for this analysis, though similar, is distinctly different from that of Clemens et al. (2021). We do not utilize traditional business cycle methodology or dating (see NBER, no date, for example), and so our periods of declining and recovering GDP per person should not be considered interchangeable with the recessions highlighted by Clemens et al. (2021).
3 Though a broad and useful measure of the economy, GDP is not the only indicator of economic performance. Measures of business investment and labour market outcomes are also important indicators of economic performance (see Clemens et al., 2021, for example).
4 The G7 is an informal group of advanced economies often used to gauge Canada’s economic performance, and includes Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
Changes in Per-Person GDP (Income): 1985 to 2023

Figure 1: Real GDP per person (2017$), Q1 1985 to Q4 2023

Sources: Statistics Canada, 2024a, 2024b; calculations by authors

Figure 2: Quarterly change (%) in real GDP per person, Q1 1985 to Q4 2023

Sources: Statistics Canada, 2024a, 2024b; calculations by authors
define these periods of falling and recovering real GDP per person, we created three categories based on the following definitions (see table 1):

- **High-point Quarter**—the last quarter of positive growth in real GDP per person before two or more consecutive quarters of decline.
- **Recovery Quarter**—the quarter in which real GDP per person returns to (or exceeds) the level at the previous high-point after a period of decline no less than two consecutive quarters.
- **Low-point Quarter**—the quarter in which real GDP per person reaches its lowest level in between a high-point quarter and a recovery quarter.

When this framework is applied to the data shown in the previous two figures, nine periods in which real GDP per person falls and recovers (shown in table 1) are identified. Specifically, each period begins at the high-point quarter and ends at the recovery quarter, with real GDP per person declining from the high-point to the low-point quarter, and recovering from the low-point to the recovery quarter. Following each recovery quarter, real GDP per person generally continues to increase until it reaches the next high-point (i.e., the next period).

There are two important points to note regarding the last two periods in table 1. First, a low-point or recovery quarter for the period beginning in Q2 2022 has not yet been determined. This is because in Q4 2023 (the latest quarter of available data at the time of writing), real GDP per person remained below the level it was at the high-point of Q2 2022, meaning there is not yet a recovery quarter and therefore a low-point quarter cannot be determined. Moreover, as of Q4 2023, real GDP per person is still on a declining track as it declined 0.8 percent from Q3 2023, which means it cannot be inferred whether or not the decline has ended. However, in some instances during this analysis Q4 2023 is utilized as a placeholder for the low-point or recovery quarter, to allow for comparison with the other periods.

The second point to note is that the last two periods (Q2 2019 to Q2 2022, and Q2 2022 to undetermined) represent back-to-back declines, which is shown by the fact that Q2 2022 is categorized as both a recovery and high-point quarter. While described in more detail in proceeding sections, the paper initially treats these two periods as separate, before shifting to argue that Q2 2019 to Q4 2023 represents one extended period of declining real GDP per person. This is because the extended period is only briefly broken up by a single quarter in which real GDP per person can be considered to have recovered, before immediately declining in the next quarter to the point that real GDP per person in Q4 2023 remains well below its level in Q2 2019.

With the framework of analysis outlined, the rest of the paper continues as follows: the first section analyzes the periods of decline and recovery from each high-point to recovery quarter. It is important
to highlight that this section treats Q2 2019 to Q2 2022 and Q2 2022 to Q4 2023 as two separate and distinct periods of decline (and recovery in the case of the former). The second section explores the post-recovery periods, which run from each recovery quarter to the next high-point quarter, and develops the argument that the experience from Q2 2019 to Q4 2023 represents one extended period. Finally, the last section revisits real GDP per person during each period of decline and recovery, but treats Q2 2019 to Q4 2023 as a single period.

**Analysis of Declines and Recoveries**

Figure 3 illustrates the number of quarters from the high-point to low-point quarter in each period to show the length of each decline (measured in quarters) in real GDP per person. It is clear that the 12-quarter decline from Q2 1989 to Q2 1992 represents the longest period of decline over the entire period of analysis (1985 to 2023), lasting twice as long as the next longest period. The declines from Q4 2014 to Q2 2016, and Q2 2022 to Q4 2023 are tied for second-longest at 6 quarters each. However, as mentioned, the decline from Q2 2022 to Q4 2023 may or may not be finished, meaning it might extend longer than 6 quarters once more data becomes available in 2024. Ranking fourth-longest is the 4-quarter decline from Q2 2019 to Q2 2020, followed by the 3-quarter decline from Q3 2008 to Q2 2009. The remaining declines all meet the minimum length of two quarters, indicating brief and limited periods of decline.

Figure 4 illustrates the length of the recovery from each decline by measuring the number of quarters from the low-point to recovery quarter. Recall that the quarter of recovery is defined as the point when inflation-adjusted GDP per person reaches the level of the previous high point before the decline began, meaning the number of quarters from the low-point to recovery quarter indicates how quickly living standards recovered following

*Figure 3: Number of quarters from high-point to low-point quarter

*Note: Q4 2023 is not necessarily a low-point quarter, however, it is utilized as a placeholder for the low-point in order to compare the current length of this decline with the other periods.

Sources: Statistics Canada, 2024a, 2024b; calculations by authors
a decline. Notably, figure 4 does not include the most recent period following Q2 2022 due to a lack of recovery.

Unlike figure 3, which saw the longest decline stand out as double the number of quarters of the next closest, the three-longest periods to achieve recovery are similar in length, ranging from 8 quarters to 10 quarters. Specifically, the three longest recoveries were Q2 2009 to Q4 2011 (10 quarters), Q2 1992 to Q3 1994 (9 quarters), and Q2 2020 to Q2 2022 (8 quarters). However, there is a sharp drop-off from the longest three periods of recovery as the next longest recoveries (Q3 1995 to Q2 1996 and Q2 2016 to Q1 2017) both lasted 3 quarters, or less than half the number of quarters as the longest three recovery periods. The remaining three periods of recovery lasted 1 or 2 quarters.

Figure 4: Number of quarters from low-point to recovery quarter

![Figure 4: Number of quarters from low-point to recovery quarter](image)

Sources: Statistics Canada, 2024a, 2024b; calculations by authors

Figure 5: Number of quarters from high-point to recovery quarter, decline and recovery separated

![Figure 5: Number of quarters from high-point to recovery quarter, decline and recovery separated](image)

*Note: Q4 2023 is not categorized as a low-point or recovery quarter, however, it is utilized as a placeholder in order to compare the current length of this period with the other periods.

Sources: Statistics Canada, 2024a, 2024b; calculations by authors
Combining the previous two measures of decline and recovery, figure 5 measures the number of quarters from the high-point to recovery quarter, illustrating the total number of quarters making up each period. While measuring the total number of quarters, figure 5 displays each period separated within the chart into its respective decline (high-point to low-point quarter) and recovery (low-point to recovery quarter).

As is clear from figure 5, the period from Q2 1989 to Q3 1994 is by far the longest at 21 quarters from high-point to recovery quarter. This is split relatively evenly between the decline (12 quarters) and recovery (9 quarters), but represents one of four instances in which the decline lasts longer than the recovery. There is then a significant drop-off to the next longest periods of Q3 2008 to Q4 2011 (13 quarters) and Q2 2019 to Q2 2022 (12 quarters). Both of these periods are similar in total length, and the fact that their period of decline (3 and 4 quarters, respectively) are shorter than the periods of recovery (10 and 8 quarters, respectively) by a factor of approximately two or three.

The period from Q4 2014 to Q1 2017 is the fourth-longest at 9 quarters, with the decline (6 quarters) lasting twice as long as the recovery (3 quarters). Interestingly, the next longest period is the 6 quarters from Q2 2022 to Q4 2023, which only represents a decline and includes no recovery. The remaining periods range from 5 quarters (Q1 1995 to Q2 1996) to 3 quarters (Q2 1986 to Q1 1987 and Q2 2012 to Q1 2013).

While figures 3 to 5 illustrate the relative lengths of the nine periods, they tell us nothing regarding the depth of each decline. To fill this gap, figure 6 measures the percentage decrease in real GDP per person from the high-point to low-point quarter.

Figure 6 shows that the 13.6 percent decline in real GDP per person from Q2 2019 to Q2 2020 far exceeds the depth of any other decline since 1985. Indeed, it is more than double the next largest declines, which were 5.3 percent from Q2 1989 to Q2 1992 and 5.2 percent from Q3 2008 to Q2 2009. From Q2 2022 to Q4 2023, real GDP per capita decreased by 3.4 percent, which ranks fourth-largest.

*Note: Q4 2023 is not necessarily a low-point quarter, however, it is utilized as a placeholder for the low-point in order to compare the current depth of this decline with the other periods.

Sources: Statistics Canada, 2024a, 2024b; calculations by authors
Again, because Q4 2023 may or may not represent a low-point quarter, this decline may be larger.

The fifth largest decline was from Q4 2014 to Q2 2016, which saw real GDP per person decrease by 1.5 percent. This is less than half the depth of the decline following Q2 2022. The remaining declines range from the 1.2 percent decrease from Q2 1986 to Q4 1986, to the 0.3 percent decline from Q3 2007 to Q1 2008.

Taken together, figures 3 to 6 provide an assessment of the relative severity of the nine economic declines covered in this paper. They cover the depth and length of the declines as well as the time required to recover the income lost during the decline period.

Understanding this, it becomes clear that the three most severe declines in real GDP per person, since 1985, lasted from Q2 1989 to Q3 1994, Q3 2008 to Q4 2011, and Q2 2019 to Q2 2022. All three periods had the highest number of quarters from high-point to recovery quarter, recorded the highest number of quarters recovering from the low-point quarter, and had the deepest percentage declines in real GDP per person. It is also worth noting that while the decline that followed Q2 2022 is still ongoing as of Q4 2023, it already ranks among the longest (based on number of quarters from high-point to low-point quarter)\(^5\) and deepest declines since 1985.

**Analysis of Post-Recovery Periods**

In addition to understanding the length and depth of each decline and recovery period, another important consideration is what happens after the recovery quarter. Once real GDP per person returns to the level it was prior to the decline, the issue then becomes whether it will continue increasing (along with living standards), level off, or decline again. Should real GDP per person fall again, it is difficult to conclude that incomes (and consequently living standards) have recovered in any meaningful sense.

To analyze what happens after real GDP per person recovers from each period of decline and recovery, figure 7 measures the number of quarters from each

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\(^5\) Again, note that Q4 2023 does not technically represent a low-point, but is the most recent quarter of available data and therefore is used as a placeholder to allow comparison.
recovery quarter to the following high-point quarter, while figure 8 measures the percentage change in real GDP per person during that same time.

In both figures 7 and 8, we observe a post-recovery period of sustained and substantial growth in real GDP per person that lasted 45 quarters from Q2 1996 to Q3 2007. During this time GDP per person expanded by 29.0 percent. This lasted five times longer than the next longest periods of 9 quarters (which occurred from Q1 1987 to Q2 1989 and Q1 2017 to Q2 2019), and the percentage increase in real GDP per person was more than five times larger than the next largest (the 5.4 percent increase from Q1 1987 to Q2 1989). This post-recovery period followed a relatively minor period of decline and recovery that lasted 5 quarters from Q1 1995 to Q2 1996, where real GDP per person declined 0.4 percent from the high-point to low-point quarter.

Focusing on the post-recovery periods following the three major declines in real GDP per person (Q3 1994 to Q1 1995, Q4 2011 to Q2 2012, and Q2 2022), we see that in all three cases the post-recovery periods are short and include little to no growth in real GDP per person. Specifically, the periods from Q3 1994 to Q1 1995 and Q4 2011 to Q2 2012 saw real GDP per person increase by 1.2 percent and 0.0 percent, respectively, both over 2 quarters. Following the period of decline and recovering ending in Q2 2022, we see no quarters until the following high-point quarter, and subsequently no growth in real GDP per person. In contrast, the other remaining post-recovery periods (except Q3 2008) saw real GDP per person increase by at least 2.6 percent (Q1 2017 to Q2 2019) over at least 7 quarters (Q1 2013 to Q4 2014).

While there are three post-recovery periods in which real GDP per person does not grow (Q3 2008, Q4 2011 to Q2 2012, and Q2 2022), Q3 2008 and Q2 2022 represent the only two instances where the lack of growth is due to the fact that once recovered from the previous decline, real GDP per person

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6 Interestingly, the period spanning from Q2 1996 to Q3 2007 coincides roughly with a period that Clemens et al. (2017) coined the Chrétien Consensus. The Chrétien Consensus refers to an implicit agreement between the federal and provincial governments across Canada regarding the soundness of balanced budgets, declining government debt, smaller and smarter government spending, and competitive taxes. While there is not a definitive period over which the consensus prevailed, governments generally employed this approach to fiscal policy from roughly 1995 until 2014.
immediately begins declining again. However, the circumstances of these two instances are quite different.

In the case of the periods before and after Q3 2008, the period before (Q3 2007 to Q3 2008) saw a relatively short and shallow decline, while the period after (Q3 2008 to Q4 2011) was one of the three major declines. In the case of the periods before and after Q2 2022, the period before (Q2 2019 to Q2 2022) was also one of the three major declines, and the period after (Q2 2022 to Q4 2023), rather than being a period of relatively little change in real GDP per person, is a decline that is already substantial relative to most other declines, and which may decrease further.

Altogether, this section shows the experience since Q2 2019 is unique as it is the only case after 1985 in which there are back-to-back substantial declines in real GDP per person. In fact, due to the proximity and depth of the declines, it is reasonable to assess the decline following Q2 2022 as a continuation of the period that began in Q2 2019.

Considering that for 16 of the 18 quarters from Q2 2019 to Q4 2023 real GDP per person has been below the level recorded in Q2 2019, the “recovery” that was achieved in Q2 2022 was simply a brief interruption of what appears to be a larger ongoing decline. Simply put, the experience from Q2 2019 to Q4 2023 should be considered one extended period of declining real GDP per person, rather than two separate periods.

Revisiting Declines and Recoveries

Now that it is established that Q2 2022 does not represent a lasting recovery, and that the period from Q2 2019 to Q4 2023 represents an ongoing decline, this section briefly revisits two measures of the declines and recoveries to compare this period with the rest. Figure 9 shows the number of quarters from high-point to recovery for each period, this time measuring the period from Q2 2019 to Q4 2023. It is apparent that the number of quarters of the ongoing downturn is now only exceeded by the period from Q2 1989 to Q3 1994.

Figure 9: Number of quarters from high-point to recovery quarter, including decline from Q2 2019 to Q4 2023

*Note: Q4 2023 is not a recovery quarter, rather it is part of an ongoing period of declining real GDP per person. At the time of writing it is the most recent period available, and therefore is used as a place holder to allow comparison with other periods.

Sources: Statistics Canada, 2024a, 2024b; calculations by authors

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Moreover, because Q4 2023 does not represent a recovery quarter, once real GDP per person eventually does recover to its Q2 2019 level, the number of quarters from high-point to recovery quarter could possibly exceed 21 quarters.

Figure 10 presents the percentage decline in real GDP per person from the high-point to the low-point quarter, again extending the period from Q2 2019 to Q4 2023. In addition to being among the longest periods, it also has among the largest decreases in real GDP per person at 3.0 percent. While the decline from Q2 2019 to Q4 2023 is still less than the declines from Q2 1989 to Q2 1992 and Q3 2008 to Q2 2009, it remains double that of all other periods. And again, as of Q4 2023 the decline is still ongoing and may deepen further.

**Conclusion**

In their paper, Clemens et al. (2021) determined that economic performance during the pre-recession period from 2016-2019 was the worst of any pre-recession period dating back to 1985. This analysis builds on their paper by specifically analyzing changes in real GDP per person (a key indicator of living standards) during and after periods of decline and recovery, from the beginning of 1985 to the end of 2023.

Whereas Clemens et al. (2021) highlight the period leading up to and including 2019 as having the worst economic performance since 1985, we find that the experience since Q2 2019 is unlike any since 1985. As of Q4 2023, real GDP per person is below the level it was in Q2 2019, and despite a brief pause, the decline in real GDP per person should still be considered ongoing. This represents one of the longest and deepest declines in real GDP per person since 1985, exceeded in both respects only by the decline and recovery that occurred from Q2 1989 to Q3 1994. However, the decline in incomes since Q2 2019 is ongoing, and may still exceed the downturn of the late-1980s and early-1990s in length and depth of decline.
Appendix

The following appendix provides the detailed results of applying our analysis framework to the real GDP per person data from Q1 1985 to Q4 2023. Specifically, table A1 presents the analysis of real GDP per person from high-points to recovery quarters. Table A2 presents the data analysis from high-points to low-points. Table A3 presents the analysis from low-points to recovery quarters, and table A4 presents the analysis from recovery quarters to the following high-points. Finally, table A5 presents an analysis of real GDP per person during the period from Q2 2022 to Q4 2023.

### Table A1: Real GDP per person analysis, high-point to recovery quarter

<table>
<thead>
<tr>
<th>High-Point Quarter</th>
<th>Recovery Quarter</th>
<th>GDP per person at High-Point Quarter (2017$)</th>
<th>GDP per person at Recovery Quarter (2017$)</th>
<th>Change (2017$)</th>
<th>Change (%)</th>
<th># of Quarters from High-Point to Recovery Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 1986</td>
<td>Q1 1987</td>
<td>40,103</td>
<td>40,416</td>
<td>314</td>
<td>0.8%</td>
<td>3</td>
</tr>
<tr>
<td>Q2 1989</td>
<td>Q3 1994</td>
<td>42,616</td>
<td>42,717</td>
<td>101</td>
<td>0.2%</td>
<td>21</td>
</tr>
<tr>
<td>Q1 1995</td>
<td>Q2 1996</td>
<td>43,212</td>
<td>43,282</td>
<td>70</td>
<td>0.2%</td>
<td>5</td>
</tr>
<tr>
<td>Q3 2007</td>
<td>Q3 2008</td>
<td>55,845</td>
<td>56,015</td>
<td>170</td>
<td>0.3%</td>
<td>4</td>
</tr>
<tr>
<td>Q3 2008</td>
<td>Q4 2011</td>
<td>56,015</td>
<td>56,084</td>
<td>68</td>
<td>0.1%</td>
<td>13</td>
</tr>
<tr>
<td>Q2 2012</td>
<td>Q1 2013</td>
<td>56,083</td>
<td>56,307</td>
<td>225</td>
<td>0.4%</td>
<td>3</td>
</tr>
<tr>
<td>Q4 2014</td>
<td>Q1 2017</td>
<td>58,162</td>
<td>58,404</td>
<td>242</td>
<td>0.4%</td>
<td>9</td>
</tr>
<tr>
<td>Q2 2019</td>
<td>Q2 2022</td>
<td>59,905</td>
<td>60,178</td>
<td>273</td>
<td>0.5%</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: Change (2017$) column may not necessarily equal the difference between the GDP per person columns as a result of rounding.

Sources: Statistics Canada, 2024a, 2024b; calculations by authors.

### Table A2: Real GDP per person analysis, high-point to low-point quarter

<table>
<thead>
<tr>
<th>High-Point Quarter</th>
<th>Low-Point Quarter</th>
<th>GDP per person at High-Point Quarter (2017$)</th>
<th>GDP per person at Low-Point Quarter (2017$)</th>
<th>Change (2017$)</th>
<th>Change (%)</th>
<th># of Quarters from High-Point to Low-Point Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 1986</td>
<td>Q4 1986</td>
<td>40,103</td>
<td>39,607</td>
<td>(496)</td>
<td>-1.2%</td>
<td>2</td>
</tr>
<tr>
<td>Q2 1989</td>
<td>Q2 1992</td>
<td>42,616</td>
<td>40,366</td>
<td>(2,250)</td>
<td>-5.3%</td>
<td>12</td>
</tr>
<tr>
<td>Q1 1995</td>
<td>Q3 1995</td>
<td>43,212</td>
<td>43,050</td>
<td>(161)</td>
<td>-0.4%</td>
<td>2</td>
</tr>
<tr>
<td>Q3 2007</td>
<td>Q1 2008</td>
<td>55,845</td>
<td>55,687</td>
<td>(158)</td>
<td>-0.3%</td>
<td>2</td>
</tr>
<tr>
<td>Q3 2008</td>
<td>Q2 2009</td>
<td>56,015</td>
<td>53,109</td>
<td>(2,906)</td>
<td>-5.2%</td>
<td>3</td>
</tr>
<tr>
<td>Q2 2012</td>
<td>Q4 2012</td>
<td>56,083</td>
<td>55,883</td>
<td>(200)</td>
<td>-0.4%</td>
<td>2</td>
</tr>
<tr>
<td>Q4 2014</td>
<td>Q2 2016</td>
<td>58,162</td>
<td>57,309</td>
<td>(853)</td>
<td>-1.5%</td>
<td>6</td>
</tr>
<tr>
<td>Q2 2019</td>
<td>Q2 2020</td>
<td>59,905</td>
<td>51,783</td>
<td>(8,121)</td>
<td>-13.6%</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Change (2017$) column may not necessarily equal the difference between the GDP per person columns as a result of rounding.

Sources: Statistics Canada, 2024a, 2024b; calculations by authors.
## Table A3: Real GDP per person analysis, low-point to recovery quarter

<table>
<thead>
<tr>
<th>Low-Point Quarter</th>
<th>Recovery Quarter</th>
<th>GDP per person at Low-Point Quarter (2017$)</th>
<th>GDP per person at Recovery Quarter (2017$)</th>
<th>Change (2017$)</th>
<th>Change (%)</th>
<th># of Quarters from Low-Point to Recovery Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4 1986</td>
<td>Q1 1987</td>
<td>39,607</td>
<td>40,416</td>
<td>810</td>
<td>2.0%</td>
<td>1</td>
</tr>
<tr>
<td>Q2 1992</td>
<td>Q3 1994</td>
<td>40,366</td>
<td>42,717</td>
<td>2,351</td>
<td>5.8%</td>
<td>9</td>
</tr>
<tr>
<td>Q3 1995</td>
<td>Q2 1996</td>
<td>43,050</td>
<td>43,282</td>
<td>232</td>
<td>0.5%</td>
<td>3</td>
</tr>
<tr>
<td>Q1 2008</td>
<td>Q3 2008</td>
<td>55,687</td>
<td>56,015</td>
<td>328</td>
<td>0.6%</td>
<td>2</td>
</tr>
<tr>
<td>Q2 2009</td>
<td>Q4 2011</td>
<td>53,109</td>
<td>56,084</td>
<td>2,975</td>
<td>5.6%</td>
<td>10</td>
</tr>
<tr>
<td>Q4 2012</td>
<td>Q1 2013</td>
<td>55,883</td>
<td>56,307</td>
<td>425</td>
<td>0.8%</td>
<td>1</td>
</tr>
<tr>
<td>Q2 2016</td>
<td>Q1 2017</td>
<td>57,309</td>
<td>58,404</td>
<td>1,096</td>
<td>1.9%</td>
<td>3</td>
</tr>
<tr>
<td>Q2 2020</td>
<td>Q2 2022</td>
<td>51,783</td>
<td>60,178</td>
<td>8,394</td>
<td>16.2%</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Change (2017$) column may not necessarily equal the difference between the GDP per person columns as a result of rounding.
Sources: Statistics Canada, 2024a, 2024b; calculations by authors.

## Table A4: Real GDP per person analysis, recovery quarter to next high-point quarter

<table>
<thead>
<tr>
<th>Recovery Quarter</th>
<th>High-Point Quarter</th>
<th>GDP per person at Recovery Quarter (2017$)</th>
<th>GDP per person at High-Point Quarter (2017$)</th>
<th>Change (2017$)</th>
<th>Change (%)</th>
<th># of Quarters from Recovery Quarter to High-Point Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 1987</td>
<td>Q2 1989</td>
<td>40,416</td>
<td>42,616</td>
<td>2,199</td>
<td>5.4%</td>
<td>9</td>
</tr>
<tr>
<td>Q3 1994</td>
<td>Q1 1995</td>
<td>42,717</td>
<td>43,212</td>
<td>495</td>
<td>1.2%</td>
<td>2</td>
</tr>
<tr>
<td>Q2 1996</td>
<td>Q3 2007</td>
<td>43,282</td>
<td>55,845</td>
<td>12,563</td>
<td>29.0%</td>
<td>45</td>
</tr>
<tr>
<td>Q3 2008</td>
<td>Q3 2008</td>
<td>56,015</td>
<td>56,015</td>
<td>–</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Q4 2011</td>
<td>Q2 2012</td>
<td>56,084</td>
<td>56,083</td>
<td>(1)</td>
<td>0.0%</td>
<td>2</td>
</tr>
<tr>
<td>Q1 2013</td>
<td>Q4 2014</td>
<td>56,307</td>
<td>58,162</td>
<td>1,855</td>
<td>3.3%</td>
<td>7</td>
</tr>
<tr>
<td>Q1 2017</td>
<td>Q2 2019</td>
<td>58,404</td>
<td>59,905</td>
<td>1,500</td>
<td>2.6%</td>
<td>9</td>
</tr>
<tr>
<td>Q2 2022</td>
<td>Q2 2022</td>
<td>60,178</td>
<td>60,178</td>
<td>–</td>
<td>0.0%</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Change (2017$) column may not necessarily equal the difference between the GDP per person columns as a result of rounding.
Sources: Statistics Canada, 2024a, 2024b; calculations by authors.

## Table A5: Real GDP per person analysis, Q2 2022 to Q4 2023

<table>
<thead>
<tr>
<th>GDP per person at Q2 2022 (2017$)</th>
<th>GDP per person at Q4 2023 (2017$)</th>
<th>Change (2017$)</th>
<th>Change (%)</th>
<th># of Quarters from Q2 2022 to Q4 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>60,178</td>
<td>58,111</td>
<td>(2,066)</td>
<td>-3.4%</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Change (2017$) column may not necessarily equal the difference between the GDP per person columns as a result of rounding.
Sources: Statistics Canada, 2024a, 2024b; calculations by authors.
References


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