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We're Getting Poorer

GDP per Capita in Canada and the OECD, 2002–2060

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MAIN CONCLUSIONS

- This research bulletin examines historical and projected trends in the growth of Canada's GDP per capita, and compares these trends to those in peer countries in the OECD.
- Canadians have been getting poorer relative to residents of other countries in the OECD. From 2002 to 2014, Canadian income growth as measured by GDP per capita roughly kept pace with the rest of the OECD. From 2014 to 2022, however, Canada's position declined sharply, ranking third-lowest among 30 countries for average growth over the period.
- Between 2012 and 2022, Canada lost ground compared to key allies and trading partners such as the United States, United Kingdom, New Zealand, and Australia, with Canadian GDP per capita declining from 80.4% of the US level in 2012 to 72.3% in 2022.
- Looking forward to 2060, Canada's projected average annual growth rate for GDP per capita (0.78%) is the lowest among 30 OECD countries.
- Canada's GDP per capita (after adjusting by inflation), which exceeded the OECD average by US$3,141 in 2002 and was roughly equivalent to the OECD average in 2022, is projected to fall below the OECD average by US$8,617 in 2060.
- The root cause of Canada's declining long-term growth in GDP per capita—recent and projected—is very low or negative growth in labour productivity reflecting weak investment in physical and human capital per worker.

Introduction

Canadians are concerned about their real incomes—the purchasing power of their income—because it directly affects their standard of living. Measuring changes in real income over time and against peers can help Canadians gain a perspective on whether they are better or worse off relative to their past way of life or to residents of other countries. This study will shed light on the level and change in Canadian real incomes over time, compared with the incomes of residents in other OECD countries. The OECD provides a good basis of comparison for Canadian incomes, as its member countries provide a wide cross-section of advanced economies, including many that are similar to Canada in many respects.

There are various ways to measure real income or purchasing power. This study will use the broad measure of per-capita gross domestic product (GDP). Per-capita GDP is a commonly used measure of income calculated simply by dividing the country's economic output by its population. How much an economy produces directly affects its real income.

The study will proceed as follows. First, we will present a snapshot of Canadian GDP per capita in the most recent year of available data to provide a perspective on where Canada ranks relative to peer OECD countries. Second, we will measure how Canadian GDP per capita has changed over time by comparing Canada's ranking within the OECD. We will conclude with a projection of Canadian incomes going forward based on the latest growth forecasts provided by the OECD, examine alternate scenarios, and briefly discuss the policy implications of this weak growth performance.

The data in this study is provided by the OECD. Data on per-capita GDP from 2002 to 2022 is derived from the *OECD's Economic Outlook* (OECD, 2023), as of November 2023, while projections of per-capita GDP are provided by OECD Policy Paper No. 29 (Guillemette and Turner, 2021).

Our goal is to provide Canadians with perspective on how the country's GDP per capita has changed over time relative to that of other countries. Understanding Canada's position and how it has changed is an important precursor to any discussion on how to grow Canadian incomes.

Part 1. Historical comparison of per-capita GDP in Canada and the OECD

The first part of this study presents data on Canadian incomes compared to those of a 30-country panel[1] of OECD countries (not including Canada) in the 20-year period between 2002 and 2022, which represents the latest year of available data. This time frame allows a comparison of Canada's performance over the long term, including multiple business cycles, two recessions, and multiple changes in governments.

Canadian incomes, as measured by per-capita GDP, were almost identical to the OECD average in 2022 (**table 1**; **figure 1**). At $46,035 per capita, Canada ranked just below the OECD average of $46,266.[2] However, when the analysis is expanded to a longer time frame, it becomes clear that Canada has been losing ground against its peers in the OECD, especially in recent years.

1 As of this writing, there are 38 member countries in the OECD. The first part of this study uses a 30-country panel of OECD countries to allow for a consistent comparator group over the 20-year timeframe, eliminating countries that were not a part of the OECD during the whole period of analysis, as well as countries with incomplete data. When referring to the OECD in the first part of the study, we mean the 30-country panel unless noted otherwise.

2 All dollar values are in constant $US 2015 and other currencies translated in US dollars using PPP exchange rates.

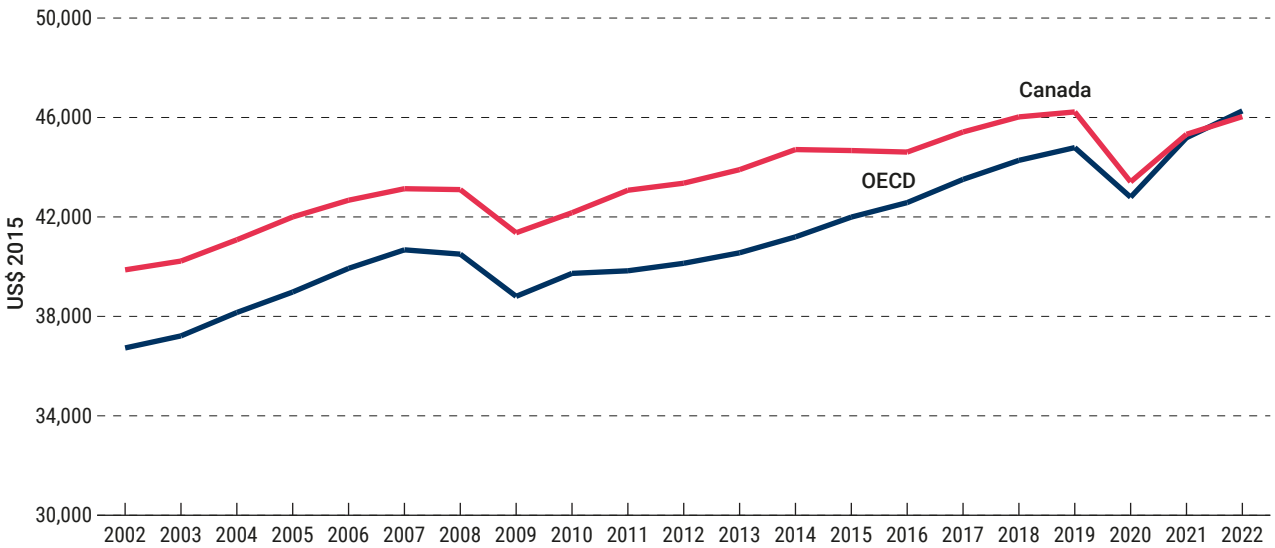
Table 1: GDP per capita (in $US 2015, at constant purchasing power parities), Canada and OECD 30-country panel, 2002–2022

	Canada	OECD (30 countries)	% difference, Canda/OECD		Canada	OECD (30 countries)	% difference, Canda/OECD
2002	39,871	36,730	8.6%	2013	43,902	40,557	8.2%
2003	40,225	37,215	8.1%	2014	44,710	41,197	8.5%
2004	41,081	38,156	7.7%	2015	44,670	41,994	6.4%
2005	41,999	38,979	7.7%	2016	44,609	42,577	4.8%
2006	42,672	39,931	6.9%	2017	45,417	43,510	4.4%
2007	43,135	40,676	6.0%	2018	46,024	44,276	3.9%
2008	43,099	40,503	6.4%	2019	46,224	44,788	3.2%
2009	41,363	38,806	6.6%	2020	43,410	42,794	1.4%
2010	42,170	39,729	6.1%	2021	45,324	45,185	0.3%
2011	43,073	39,833	8.1%	2022	46,035	46,266	−0.5%
2012	43,358	40,135	8.0%				

Note: Real GDP per capita for the OECD is based on a weighted average calculation.

Sources: OECD, 2023; calculations by authors.

Figure 1: GDP per capita in $US 2015, at constant purchasing power parities), Canada and OECD 30-country panel, 2002–2022



Note: Real GDP per capita for the OECD is based on a weighted average calculation.
Sources: OECD, 2023; calculations by the authors.

In the period between 2002 and 2014, Canadian incomes fluctuated relative to the OECD average, at first losing ground between 2002 and the 2008 recession, then recovering in the period between the recession and 2014. In 2002, Canadian GDP per capita was 8.6% higher than the OECD average, falling to a low of 6.0% above in 2007, while recovering back to 8.5% above by 2014.

Since 2014, Canada's advantage over the OECD average has disappeared. In fact, Canada's position relative to the OECD average declined every year between 2014 and 2022 and, as a result, by 2022 the OECD average exceeded the Canadian average. Figure 1 shows the difference between Canada and the OECD average in graphic form, with incomes moving approximately in tandem between 2002 and 2014, followed by a convergence from 2014.

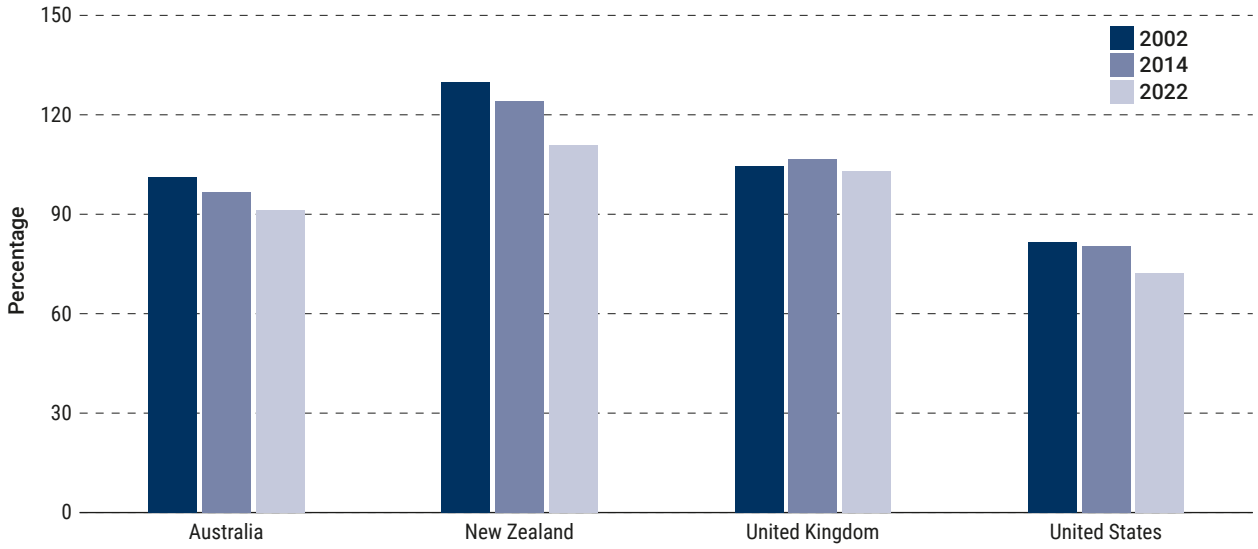
Table 2 and **figure 2** compare Canada's performance with a sample of its closest trading partners and similar economies. Looking first at the United States, GDP per

Table 2: GDP per capita (in $US 2015, at constant PPP), selected countries, 2002, 2014, 2022

	2002		2014		2022	
	GDP per capita	Canadian level as a percentage	GDP per capita	Canadian level as a percentage	GDP per capita	Canadian level as a percentage
Australia	39,385	101.2%	46,304	96.6%	50,481	91.2%
Canada	**39,871**	**100.0%**	**44,710**	**100.0%**	**46,035**	**100.0%**
New Zealand	30,724	129.8%	36,009	124.2%	41,489	111.0%
United Kingdom	38,101	104.6%	41,907	106.7%	44,745	102.9%
United States	48,911	81.5%	55,605	80.4%	63,685	72.3%

Sources: OECD, 2023; calculations by authors..

Figure 2: Canadian GDP per capita as a share (%) of the GDP of Australia, New Zealand, United Kingdom, and United States, 2002, 2014, 2022

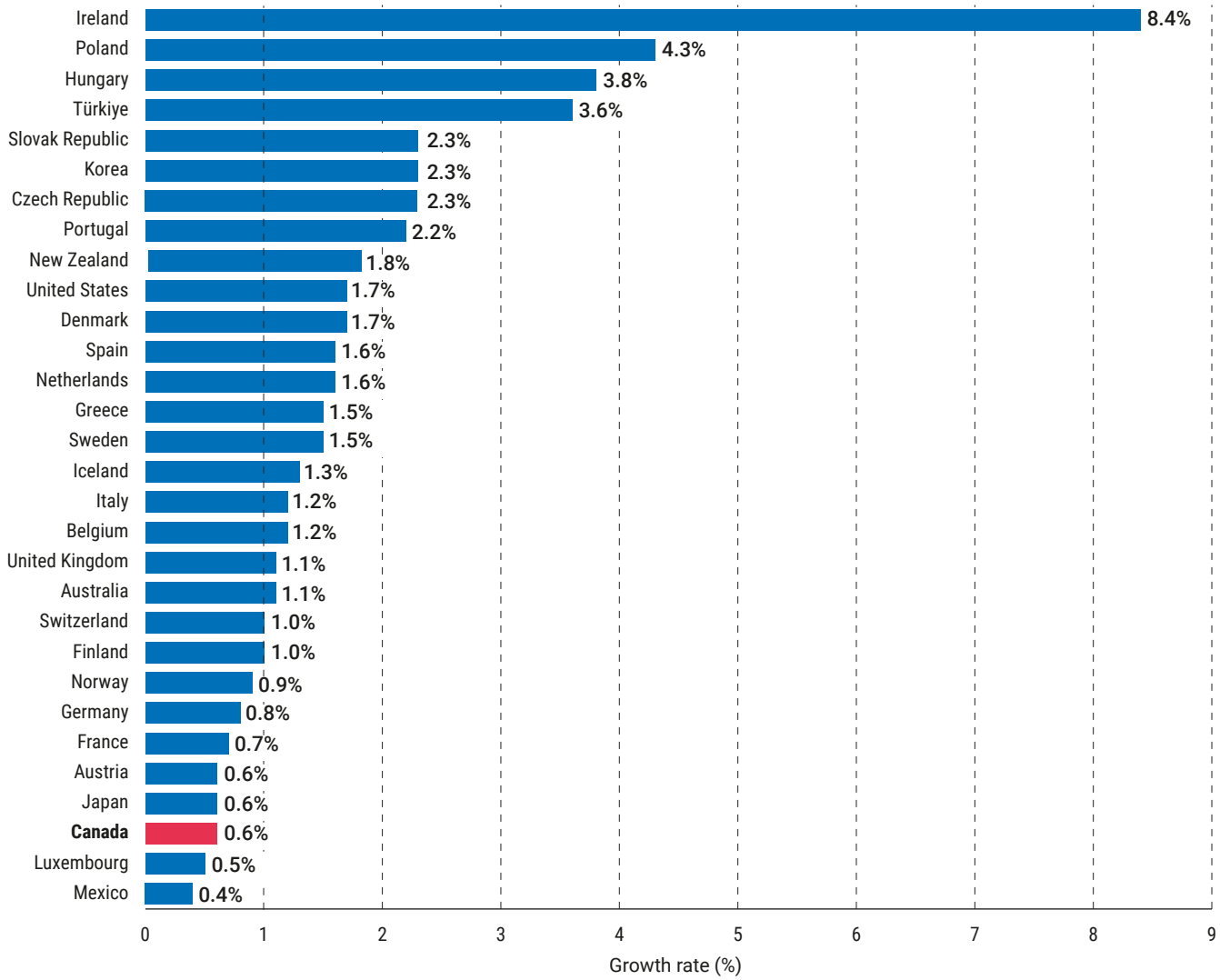


Source: table 2.

capita in Canada was 81.5% of US GDP in 2002 and 80.4% by 2014, while falling off substantially to 72.3% in 2022. Canada's GDP per capita was 104.6% of the United Kingdom's in 2002, 106.7% in 2014, and 102.9% in 2022. In other words, Canada led the United Kingdom by this measure over the whole time period, but experienced a marked decline in that advantage over the past 10 years. Compared to New Zealand, Canada's GDP per capita was 129.8% in 2002, 124.2% in 2014, and 111.0% by 2022. Perhaps most noteworthy because of the close economic similarities between the two countries, Canada's GDP per capita was almost identical to Australia's in 2002, at 101.2%, falling behind to 96.6% by 2014, and further to 91.2% by 2022. Overall, Canada has lost ground relative to all four comparator countries.

Comparing growth rates offers another perspective on Canada's relative performance. Focusing on the 2014-to-2022 period puts into relief just how much Canada has fallen behind. As shown in **figure 3** and **table 3**, during that time period, the annual growth rate of Canada's GDP per capita averaged 0.6% compared to

Figure 3: Average growth rates (%) in real GDP per capita, OECD countries, 2014–2022



Sources: OECD, 2023; calculations by authors.

Table 3: Average growth rates (%) in real per-capita GDP, Canada and the OECD, 2002–2022

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2014–2022 Avg.	2014–2022 Rank
Australia	2.8	2.0	2.9	1.8	1.3	2.5	0.4	−0.1	0.9	1.2	2.1	0.4	1.0	0.8	1.1	0.7	1.3	0.4	−3.1	5.1	2.5	1.1	20
Austria	1.2	0.5	1.9	1.7	3.0	3.3	1.2	−4.0	1.5	2.7	0.3	−0.6	0.0	0.0	0.7	1.7	1.9	1.0	−7.1	4.0	3.7	0.6	26
Belgium	1.3	0.6	3.1	1.8	1.9	2.9	−0.3	−2.8	1.9	0.4	0.1	0.0	1.1	1.5	0.8	1.2	1.3	1.7	−5.7	6.4	2.1	1.2	18
Canada	**1.9**	**0.9**	**2.1**	**2.2**	**1.6**	**1.1**	**−0.1**	**−4.0**	**2.0**	**2.1**	**0.7**	**1.3**	**1.8**	**−0.1**	**−0.1**	**1.8**	**1.3**	**0.4**	**−6.1**	**4.4**	**1.6**	**0.6**	**28**
Czech Republic	1.7	3.6	4.6	6.4	6.6	5.0	1.5	−5.1	2.0	2.0	−0.8	−0.1	2.1	5.3	2.2	5.1	2.8	2.6	−5.8	3.5	2.4	2.3	7
Denmark	0.1	0.1	2.4	2.0	3.6	0.5	−1.1	−5.4	1.4	0.9	−0.1	0.5	1.1	1.6	2.4	2.2	1.5	1.1	−2.6	6.4	1.8	1.7	11
Finland	1.5	1.8	3.7	2.4	3.6	4.9	0.3	−8.5	2.7	2.1	−1.9	−1.4	−0.8	0.2	2.5	3.0	1.0	1.1	−2.5	3.0	1.3	1.0	22
France	0.4	0.1	1.8	1.0	1.9	1.8	−0.4	−3.3	1.3	1.7	−0.1	0.2	0.5	0.6	0.6	2.0	1.3	1.4	−8.0	6.0	2.2	0.7	25
Germany	−0.2	−0.7	0.8	1.1	4.2	3.3	1.0	−5.3	4.3	4.0	0.4	0.3	1.8	0.4	1.3	2.6	0.7	0.9	−4.3	3.1	1.2	0.8	24
Greece	3.5	5.5	4.8	0.3	5.3	3.0	−0.6	−4.6	−5.6	−10.0	−6.6	−1.8	1.1	0.5	−0.1	1.3	1.9	1.9	−8.8	8.9	6.6	1.5	14
Hungary	5.0	4.4	5.2	4.5	4.1	0.4	1.2	−6.5	1.3	2.2	−0.7	2.1	4.5	4.0	2.5	4.5	5.5	4.9	−4.3	7.5	4.8	3.8	3
Iceland	−0.3	1.5	6.6	4.9	3.4	6.0	−0.4	−7.6	−2.5	1.5	0.5	3.6	0.6	3.4	4.8	1.8	2.1	−0.4	−8.7	2.8	5.1	1.3	16
Ireland	3.9	2.5	4.6	3.7	2.5	2.1	−6.4	−6.3	0.5	0.8	−0.5	1.3	7.6	21.0	1.2	8.7	7.3	4.1	4.7	13.9	7.5	8.4	1
Italy	0.1	−0.3	0.4	0.4	1.5	0.7	−1.7	−5.9	1.2	0.5	−3.3	−2.1	0.1	0.8	1.6	1.9	1.0	0.7	−8.6	8.9	4.2	1.2	17
Japan	−0.2	1.3	2.1	1.8	1.3	1.4	−1.3	−5.7	4.1	0.2	1.6	2.2	0.4	1.7	0.9	1.9	0.9	−0.2	−3.9	2.4	1.4	0.6	27
Korea	7.1	2.6	4.8	4.1	4.7	5.3	2.2	0.3	6.3	2.9	1.9	2.7	2.6	2.3	2.5	2.9	2.5	1.9	−0.8	4.5	2.8	2.3	6
Luxembourg	2.1	1.4	2.9	0.9	4.4	6.3	−2.1	−5.0	1.8	−1.3	−0.7	0.6	0.2	0.3	2.3	−0.9	−0.7	0.8	−2.4	5.5	−0.8	0.5	29
Mexico	−1.5	−0.1	2.4	1.0	3.6	0.8	−0.4	−7.6	3.6	2.2	2.3	−0.3	1.4	1.6	2.3	0.7	0.7	−1.6	−9.7	4.8	3.1	0.4	30
Netherlands	−0.4	−0.3	1.4	1.8	3.5	3.5	1.8	−4.2	0.8	1.1	−1.4	−0.4	1.1	1.5	1.6	2.4	1.7	1.2	−4.4	5.6	3.4	1.6	13
New Zealand	3.3	2.5	3.1	1.3	1.3	2.9	−1.2	−0.7	1.0	1.1	2.1	1.2	1.5	2.0	1.8	2.0	2.4	1.3	−2.7	5.7	2.0	1.8	9
Norway	0.8	0.3	3.4	2.0	1.6	1.9	−0.8	−3.2	−0.4	−0.2	1.4	−0.2	0.9	0.8	0.3	1.7	0.2	0.4	−1.8	3.3	2.4	0.9	23
Poland	1.5	3.7	4.9	3.5	6.3	7.1	4.1	2.5	3.0	5.1	1.6	0.9	3.8	4.4	3.2	5.2	5.9	4.5	−1.9	7.4	6.5	4.3	2
Portugal	0.2	−1.3	1.5	0.6	1.4	2.3	0.2	−3.2	1.7	−1.6	−3.7	−0.4	1.3	2.2	2.3	3.8	3.0	2.7	−8.4	5.8	6.8	2.2	8
Slovak Republic	–	–	–	–	–	–	–	–	–	–	1.2	0.5	2.6	5.1	1.8	2.8	3.9	2.4	−3.5	5.2	0.9	2.3	5
Spain	1.1	1.1	1.5	1.7	2.5	1.6	−0.8	−4.6	−0.3	−1.2	−3.0	−1.0	1.7	3.9	2.9	2.8	1.9	1.2	−11.6	6.5	5.1	1.6	12
Sweden	1.9	2.1	3.4	2.4	4.3	2.8	−1.4	−5.1	4.8	2.5	−1.0	0.3	1.8	3.1	0.6	1.4	0.9	1.0	−3.0	5.3	2.2	1.5	15
Switzerland	–	–	–	–	–	–	–	–	–	–	0.1	0.7	1.1	0.4	1.0	0.5	2.1	0.4	−3.0	4.6	1.8	1.0	21
Türkiye	5.1	4.5	8.5	7.7	5.6	3.8	−0.5	−6.1	6.8	9.6	3.5	7.1	3.5	4.7	1.9	6.1	1.6	−0.6	0.9	10.4	4.1	3.6	4
United Kingdom	1.4	2.7	1.9	2.0	1.7	1.8	−1.0	−5.3	1.4	0.3	0.8	1.2	2.4	1.4	1.1	2.0	0.8	1.1	−10.7	8.8	3.2	1.1	19
United States	0.7	1.9	2.9	2.5	1.8	1.0	−0.8	−3.4	1.8	0.8	1.5	1.4	1.7	2.1	1.0	1.8	2.4	1.9	−2.6	5.7	1.6	1.7	10
OECD - Total	0.8	1.3	2.6	2.2	2.5	2.0	−0.4	−4.2	2.4	1.5	0.8	1.1	1.6	1.9	1.4	2.1	1.7	1.1	−4.6	5.7	2.4	1.5	

Sources: OECD, 2023; calculations by authors.

the OECD average of 1.5%. In fact, Canada's average growth rate during this time period is tied for third last in the 30-member panel of OECD countries. At 0.6%, Canada is tied with Austria and Japan, and has experienced a per-capita average growth rate approximately half of that observed in the United Kingdom and Australia, and a third of that observed in the United States. Canada's slow growth is even more stark when compared to the OECD leaders, namely Ireland, at 8.4% annual average per-capita growth over the time period, followed Poland at 4.3% and Hungary at 3.8%.

Canada's economic performance, both over time and compared to the OECD is in a state of decline when it comes to our broad measure of prosperity, GDP per capita. Canada's track record is mixed prior to 2014 but, since that time, Canada has lost substantial ground against both the OECD average and key comparator countries.

Part 2. Projections of per-capita GDP in Canada and the OECD

In addition to providing data on past performance, the OECD projects growth rates in per-capita GDP across its member countries. In a 2021 paper, the OECD projected potential per-capita GDP growth for countries in the period up to 2030, then between 2030 and 2060 (Guillemette and Turner, 2021). Before moving into a discussion of Canada's projection and alternative scenarios, we briefly summarize the approach used by the OECD to generate its projections for its member countries. This explanation provides a better understanding of what underlies Canada's projected performance, and how it might be changed.

Decomposition of OECD's projections of per-capita GDP growth

The OECD's projections of growth in GDP per capita over a 40-year period (Guillemette and Turner, 2021) are determined by four factors:[3]

1. trend labour efficiency growth;
2. trend growth in capital per worker;
3. trend growth in the potential employment rate;
4. trend growth in the share of active population (in the workforce)

The starting point for this decomposition is the identity:

$$\frac{Y}{Pop} \equiv \left(\frac{L}{L_f}\right)\left(\frac{L_f}{Pop}\right)\left(\frac{Y}{L}\right) \qquad (1)$$

Where Y is output measured by GDP; Pop is total population; L is employment; and Lf is the labour force (or the population active in the labour market). In words, this identity states that output per capita is equal to the product of the employment rate, the share of the active population, and the amount of output per worker (or the level of labour productivity).

Transforming this identity into growth rates obtains:[4]

$$\left(\frac{\dot{Y}}{Pop}\right) \equiv \left(\frac{\dot{L}}{L_f}\right) + \left(\frac{\dot{L_f}}{Pop}\right) + \left(\frac{\dot{Y}}{L}\right) \qquad (2)$$

Taking the decomposition one step further, assume a simple Cobb-Douglas production function of the labour-efficiency-augmenting form:

$$Y = (\beta L)^{\propto} K^{1-\propto}$$

Where β is the level of labour efficiency, which grows over time as technology and education levels improve;

3 The OECD projects long-term potential growth in GDP per capita based on trend or secular factors, rather than cyclical ones, that is, those that are affected by the business cycle. The use of "potential" implies that both capital and, in particular, labour are employed at their maximum sustainable levels, which would occur when the economy is in a state of macroeconomic equilibrium. This focus on potential growth is appropriate given the long-term nature of these projections, when cyclical episodes are less relevant.

4 This transformation is performed by taking logarithms of both sides and then the derivative with respect to time.

α is the share of efficiency-augmented labour in output, which is assumed to be constant, and typically estimated to be roughly two thirds; and K is the capital stock.

Dividing both sides of this expression by employment L and again transforming into growth rates obtains:

$$\left(\frac{\dot{Y}}{L}\right) = \alpha\dot{\beta} + (1-\alpha)\left(\frac{\dot{K}}{L}\right) \qquad (3)$$

In equation (3), the growth rate of labour productivity is determined by the growth in labour efficiency and growth in the amount of capital per unit of labour, or capital deepening.

The OECD decomposition can be completed by substituting the expression in equation (3) into equation (2) to give:

$$\left(\frac{\dot{Y}}{Pop}\right) \equiv \alpha\dot{\beta} + (1-\alpha)\left(\frac{\dot{K}}{L}\right) + \left(\frac{\dot{L}}{L_f}\right) + \left(\frac{\dot{L_f}}{Pop}\right) \qquad (4)$$

Therefore, the OECD projection of growth in GDP per capita requires estimates of the four components in equation (4). The latter two components, the trend growth rates in the employment rate and in the share of population active in the labour force, are driven by demographic and structural factors, including the age distribution of the population, participation rates of different age cohorts in the labour force, the participation rates of different genders, and trends in inward and outward migration. They are generally small in absolute size as these factors are slow moving, and can be either negative or positive. In contrast, the impact of technology and other factors, such as education, on labour efficiency growth can be much larger. Over the postwar period, estimates of this component have declined in advanced economies from roughly 3% to 1% or less since 2000, largely reflecting slowing technological growth over this period. Growth rates in the capital-labour ratio have also slowed somewhat across these economies as investment rates have declined.

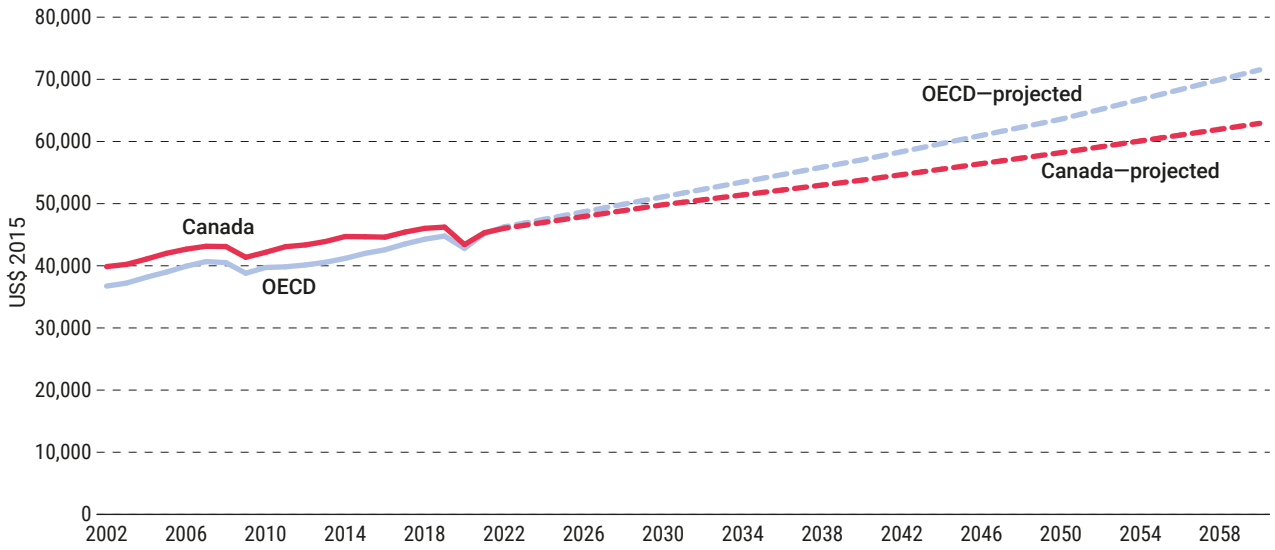
Data for each of the four components for both Canada and the OECD can be found in **table 4**. The data show that Canada trails the OECD average across almost every category in the time periods from 2007 to 2020, 2020 to 2030, and 2030 to 2060. In terms of historical performance, Canada was below the OECD average most substantially in the categories of trend labour efficiency (–0.3% per annum difference), and potential employment rate (–0.3% per annum difference). Looking ahead to the 2030-to-2060 projection, Canada trails the OECD in trend labour efficiency (–0.2% per annum), and capital per worker (–0.2% per annum). Potential employment rate (–0.1% per annum) is also below, while the share of the active population is projected to roughly match the average performance of OECD countries during this time period.

Table 4: Sources of potential GDP growth (% per annum), historical (2007–2020) and projected (2020–2030; 2030-2060), Canada and OECD average

	Potential GDP per Capita			Trend labour efficiency			Capital per worker			Potential employment rate			Share of active population		
	2007–2020	2020–2030	2030–2060	2007–2020	2020–2030	2030–2060	2007–2020	2020–2030	2030–2060	2007–2020	2020–2030	2030–2060	2007–2020	2020–2030	2030–2060
Canada	**0.8**	**0.7**	**0.8**	**0.4**	**0.6**	**0.7**	**0.4**	**0.3**	**0.2**	**0.0**	**0.1**	**0.0**	**0.0**	**–0.3**	**–0.2**
OECD average	1.3	1.3	1.1	0.7	0.8	0.9	0.3	0.4	0.4	0.3	0.2	0.1	0.0	–0.1	–0.2
Difference	–0.5	–0.6	–0.3	–0.3	–0.2	–0.2	0.1	–0.1	–0.2	–0.3	–0.1	–0.1	0.0	–0.2	0.0

Source: Guillemette and Turner, 2021.

Figure 4: Historical and projected GDP per capita, Canada and the OECD, 2002–2060



Note: Real GDP per capita for the OECD is based on a weighted average calculation. The GDP per capita calculation is based in volume in US$ 2015 at constant purchasing power parities.
Sources: Guillemette and Turner, 2021; OECD, 2023; calculations by the authors.

Projections from the OECD study are displayed in **figure 4** and **table 5**. Specifically, figure 4 illustrates a substantial divergence between the OECD average and Canada over the projected period to 2060. Over this time period, Canada's position will change from being roughly equal to the OECD average in 2022, to lagging behind the OECD to an increasing degree in the following years. By 2040, Canada's per-capita GDP is projected to be $53,780, or 94.3% of the OECD average, and declines to $58,202 or 91.5% of the OECD average by 2050. Finally, by 2060, Canada's per-capita GDP is projected to be $62,917, which is just 88.0% of the OECD average or a difference of $8,617 per capita.

Such a stark change in course is particularly evident when looking at both the historical and projected GDP per capita for Canada against the OECD average. In 2002, Canada's per-capita GDP exceeded that of the OECD average by $3,141. With the OECD average projected to lead Canada by $8,617 by 2060, this results in a total change of Canada's position of $11,758 per capita over the entire time period.

Comparisons with specific countries can help shed additional light on Canada's performance. A closer examination of the data shows that this is not merely a situation where the OECD average is being driven by a few high-growth countries. Rather, Canada's projected performance is very weak when viewed from different angles.

Going back to the peer group above, Canada's GDP per capita in 2002 was 81.5% of that of the United States; this number is projected to fall to 67.2% by 2060. Compared to New Zealand, Canada's per-capita GDP was 129.8% in 2022 and is projected to deteriorate to 92.4% by 2060. Compared to Australia, the ratio over the same time period is 101.2%, declining to 82.4%; and to the United Kingdom, it is 104.6%, declining to 98.1%.

Looking at Canada's ranking within the OECD also illustrates how severe the deterioration in performance is. Table 5 shows the historical and projected GDP per capita for each decade from 2010 to 2060, as well as rankings for each country. In 2010 and 2020, Canada ranked 15th out of the 30 countries in the OECD. By 2030 and 2040 this ranking is projected to

Table 5: Per capita GDP (constant $US 2015 PPP), historical and projected, for 30 OECD countries, 2010–2060

	2010		2020		2030		2040		2050		2060	
	$	Rank	$	Rank	$	Rank	$	Rank	$	Rank	$	Rank
Australia	44,321	13	49,146	12	53,984	12	60,695	11	67,838	11	76,351	9
Austria	49,901	5	52,122	8	56,401	9	61,883	9	68,068	10	76,021	10
Belgium	45,269	12	48,001	13	52,802	13	58,410	14	64,459	14	72,533	13
Canada	**43,234**	**15**	**46,435**	**15**	**49,828**	**16**	**53,780**	**16**	**58,202**	**20**	**62,917**	**22**
Czech Republic	31,250	24	38,517	22	46,473	20	53,136	17	58,426	19	65,293	19
Denmark	48,402	7	53,479	6	59,609	5	65,395	6	73,364	6	83,765	6
Finland	44,068	14	46,570	14	51,780	14	58,627	13	65,606	12	73,178	12
France	40,453	17	43,092	17	47,175	18	52,331	20	58,831	18	67,486	17
Germany	45,405	11	50,232	11	54,573	11	58,939	12	64,702	13	71,807	15
Greece	33,101	22	30,657	28	34,941	29	40,807	29	44,846	29	50,217	29
Hungary	24,291	27	32,008	27	40,699	26	45,594	27	49,388	27	53,698	28
Iceland	48,147	8	52,629	7	59,154	6	66,780	5	75,753	5	85,716	5
Ireland	54,431	4	85,516	2	104,297	2	117,158	2	126,665	2	141,964	2
Italy	39,668	18	39,197	21	42,099	23	45,777	26	51,400	25	60,713	23
Japan	39,074	19	42,278	19	46,832	19	52,336	19	57,517	22	64,685	20
Korea	33,051	23	42,853	18	51,720	15	56,920	15	60,802	16	66,469	18
Luxembourg	101,134	1	109,205	1	119,385	1	132,818	1	148,654	1	168,714	1
Mexico	17,465	30	19,840	30	22,170	30	25,986	30	30,240	30	34,936	30
Netherlands	49,827	6	53,718	5	58,852	7	64,064	7	72,093	7	82,383	7
New Zealand	34,492	21	40,465	20	46,255	21	52,261	21	59,608	17	68,093	16
Norway	47,995	9	52,035	9	56,270	10	61,654	10	68,686	8	77,453	8
Poland	23,068	28	32,169	26	40,885	25	47,384	24	50,877	26	54,482	27
Portugal	30,595	25	33,556	25	39,308	28	43,718	28	48,811	28	57,448	26
Slovak Republic	27,170	26	33,575	24	39,939	27	46,615	25	52,145	23	58,218	25
Spain	37,030	20	38,237	23	42,854	22	47,692	23	51,547	24	59,618	24
Sweden	46,731	10	50,835	10	56,443	8	62,454	8	68,681	9	75,834	11
Switzerland	64,145	2	69,122	3	75,270	3	82,870	3	92,114	3	103,918	3
Türkiye	20,488	29	30,282	29	41,055	24	50,808	22	61,173	15	72,266	14
United Kingdom	41,454	16	44,638	16	48,343	17	52,951	18	57,928	21	64,153	21
United States	54,967	3	61,736	4	69,705	4	76,791	4	84,914	4	93,589	4
Euro area (17 countries)	*41,098*		*44,178*		*48,876*		*53,903*		*59,793*		*68,217*	
OECD (30 countries)	*39,729*		*45,171*		*51,113*		*57,055*		*63,586*		*71,534*	
World	*17,167*		*21,782*		*27,306*		*32,830*		*38,255*		*44,717*	

Sources: Guillemette and Turner, 2021; calculations by authors.

deteriorate to 16th; by 2050, 20th; and finally, 22nd by 2060. In other words, Canada will have fallen from the top half of OECD countries for GDP per capita to the bottom half over this time horizon.

Comparing the growth rates of Canada and other OECD countries helps to underscore just how weak Canada's projected performance is. **Table 6** presents data on the projected growth rates of GDP per capita for each country for the periods from 2020 to 2030, and 2030 to 2060 as well as rankings among the OECD members. **Figure 5** shows Canada's ranking in projected growth of per-person GDP from 2030 to 2060. For both time periods, Canada ranks last among the 30 countries listed for annual percentage growth rate in per-capita GDP.

An alternative scenario can help to underscore how large Canada's challenge is. In Part 1 of the study, we looked at Canada's performance during relatively better times, the years between 2002 and 2015, when Canada's per-capita GDP grew by 0.89% per year. During this period, Canada's total growth was 12.0%, compared to the OECD average of 14.3%. While Canada's position did worsen somewhat compared to the OECD average over that period, the country's growth rate was not far off that of the OECD.

Figure 6 (p. 13) presents a projection through to 2060 under a scenario where Canada was able to return to its growth rate from 2002 to 2015 of 0.89% per year. Going back to the decomposition described earlier, this could be accomplished through any mix of improvement in the four factors considered in the OECD projection. As shown in figure 6, this would improve Canada's growth over the projection period; however, Canada would remain far behind the OECD through to 2060.

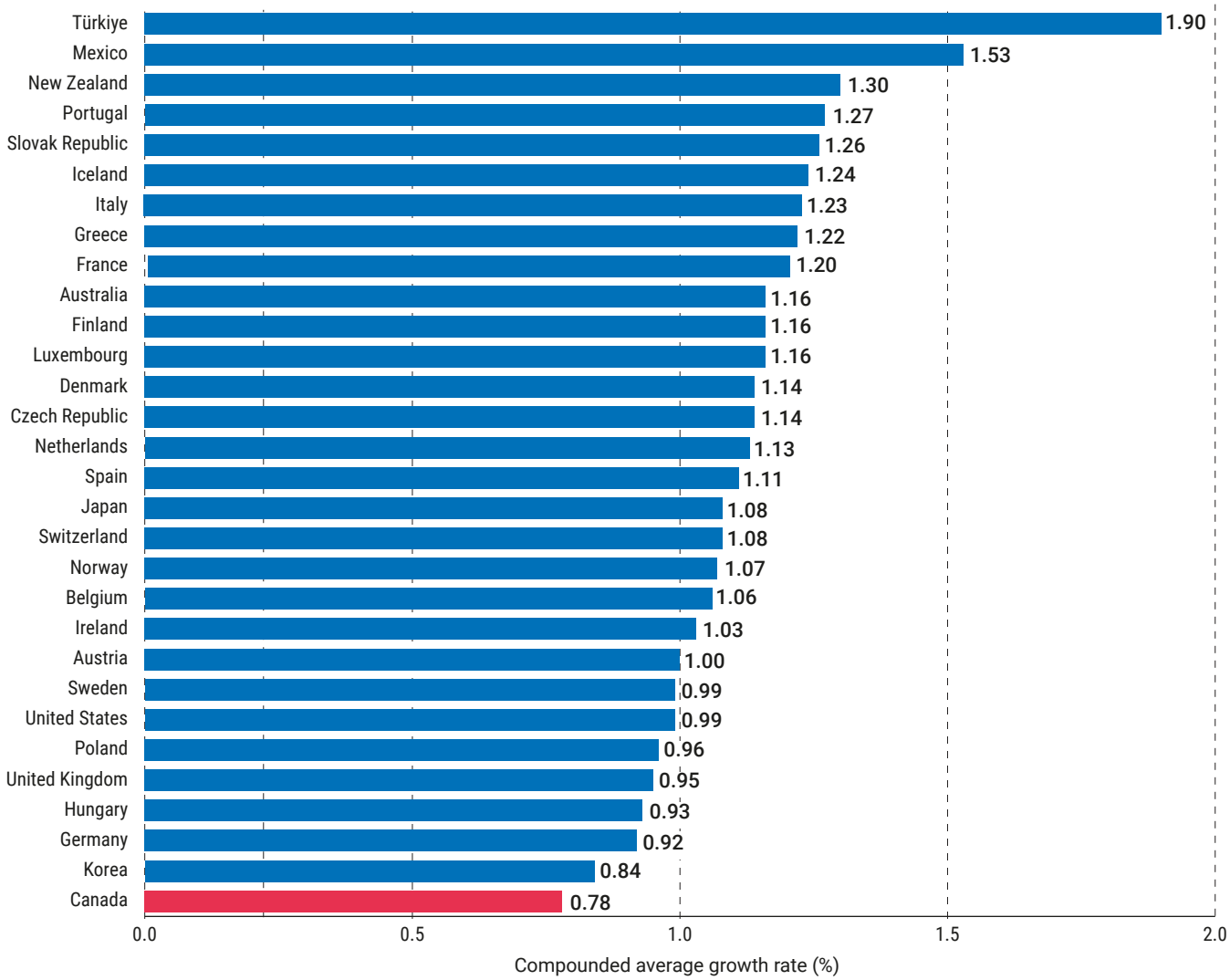
Under the projected scenario drawn from the OECD's Economic Policy Paper 29 (Guillemette and Turner, 2021), Canada's GDP per capita would be 88.0% of the OECD average by 2060. If Canada were able to return

Table 6: Projected compounded average rate of growth (%) in per-capita GDP, OECD Countries, 2020–2030 and 2030–2060

	2020–2030		2030–2060	
	Growth	Rank	$	Rank
Australia	0.94	20	1.16	10
Austria	0.79	27	1.00	22
Belgium	0.96	19	1.06	20
Canada	**0.71**	**30**	**0.78**	**30**
Czech Republic	1.90	6	1.14	14
Denmark	1.09	15	1.14	13
Finland	1.07	16	1.16	11
France	0.91	22	1.20	9
Germany	0.83	25	0.92	28
Greece	1.32	10	1.22	8
Hungary	2.43	2	0.93	27
Iceland	1.18	12	1.24	6
Ireland	2.01	4	1.03	21
Italy	0.72	29	1.23	7
Japan	1.03	18	1.08	17
Korea	1.90	5	0.84	29
Luxembourg	0.90	23	1.16	12
Mexico	1.12	14	1.53	2
Netherlands	0.92	21	1.13	15
New Zealand	1.35	9	1.30	3
Norway	0.79	28	1.07	19
Poland	2.43	3	0.96	25
Portugal	1.59	8	1.27	4
Slovak Republic	1.75	7	1.26	5
Spain	1.15	13	1.11	16
Sweden	1.05	17	0.99	23
Switzerland	0.86	24	1.08	18
Türkiye	3.09	1	1.90	1
United Kingdom	0.80	26	0.95	26
United States	1.22	11	0.99	24

Sources: Guillemette and Turner, 2021; calculations by authors.

Figure 5: Projected growth rates in per-capita GDP, OECD countries, 2030–2060



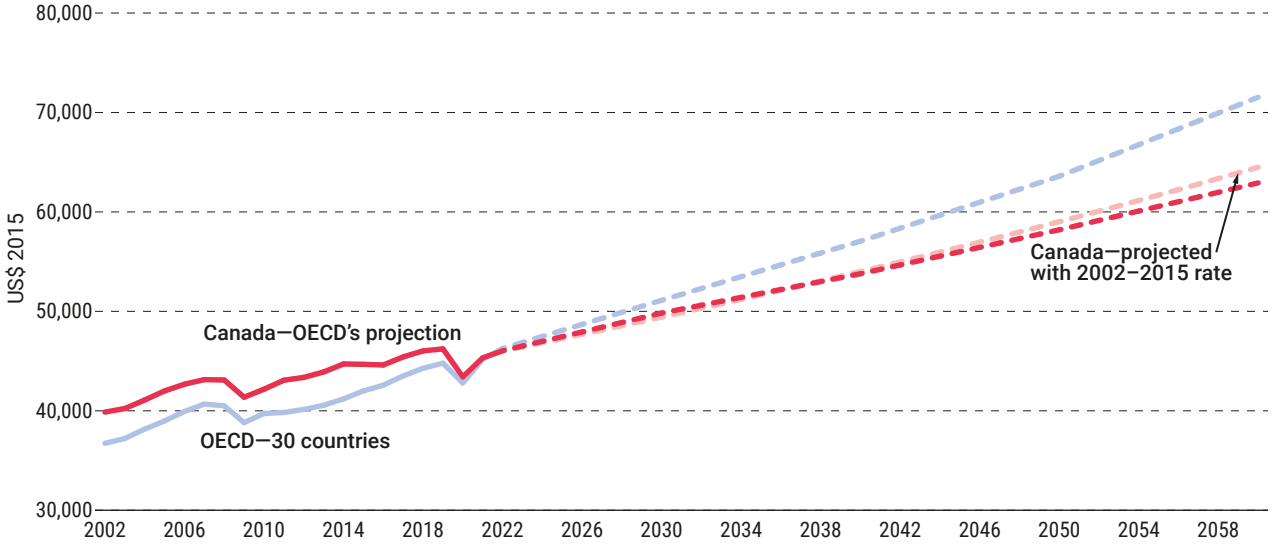
Sources: Guillemette and Turner, 2021; calculations by authors.

to its 2002-to-2015 growth rate, this would improve to 90.2%. While this stands as a modest potential improvement, it highlights just how large the gap is, as the OECD average is being driven by countries outperforming Canada on their projected GDP per capita through the combined factors of trend labour efficiency, capital per worker, potential employment rate, and the share of the active population. A return to even historical norms, let alone fully closing the GDP with the OECD, would be a massive challenge, as we will discuss in the next section.

Part 3. Discussion

The data discussed above show that Canada once had a standard of living well above the OECD average as measured by GDP per capita, that this lead has been squandered in recent years, and that Canada's GDP per capita is projected to fall substantially behind the OECD average in the decades to come. This section briefly addresses the scale of the challenge facing Canada in closing this gap, as well as offering some policy considerations.

Figure 6: Historical and projected GDP per capita (constant $US 2015 PPP), Canada and the OECD, various scenarios, 2002–2060



Note: Projections for the OECD and Canada are drawn from projected average growth rates found in Guillemette and Turner, 2021. For Canada, a 0.71% growth rate is used from 2023 to 2030, and 0.78% from 2030 to 2060. For the OECD, the rates are 1.25% from 2023 to 2030 and 1.13% from 2030 to 2060. The 2002-to-2015 rate used in the projection is 0.89%.
Sources: Guillemette and Turner, 2021; OECD, 2023; calculations by the authors.

As explained earlier, root cause of Canada's poor projected long-term growth of GDP per capita, when compared with its own historical experience, with that of similar countries, and with the OECD average is very low or negative labour productivity growth.[5] This directly reflects weak trend growth in both physical and human capital per worker, which is driven by dismal investment trends in both human and especially physical (non-residential) capital growth, trends in immigration, and subdued technological innovation and adoption that increases the efficiency of labour. While most advanced countries are experiencing similar trends, the situation in Canada is worse; and while the differences in trend growth rates appear small, their impact on the gap in living standards grows exponentially because the difference is compounded over time.

A substantial body of research has shown that Canada has been experiencing a collapse in investment, low productivity growth, and a large and growing government sector, all of which can cause reduced growth. Closing the gap with the OECD will require bold and comprehensive policy changes,[6] given Canada's dismal outlook. Going back to the components of the OECD forecast, policies[7] will need to be developed that encourage increased labour efficiency, capital

5 Bank of Canada's senior deputy governor Carolyn Rogers described Canada's recent dismal labour productivity performance as a national emergency that warranted immediate and sustained attention and action (Rendell, 2024).

6 The World Bank's recent edition of *Global Economic Prospects* (2024) has a chapter examining episodes of accelerating investment in both advanced and emerging economies, with the key finding that these often occur after a comprehensive policy reform package.

7 While a full discussion of policy reforms is beyond our scope here, readers may consult Globerman and Emes (2021) for analysis of Canada's investment performance; Globerman (2019), Globerman and Emes (2020), Globerman and Emes (2021), and Finlayson (2023) for analysis of Canada's productivity performance; and Fuss, Munro, and Whalen (2024) and DiMatteo (2013) for research on the size of government.

deepening, and employment ratios. As a starting point, improving the climate for business investment, implementing policies to spur productivity growth, and reducing the large and growing size of government would all serve to raise Canada's projected growth rates in GDP per capita.

Conclusion

Canada's performance on GDP per capita has been in decline relative to the that of the members of the OECD as well as key allies and trading partners over the past several years. Available projections suggest this could dramatically worsen going forward, with Canada having the worst projected growth in GDP per capita among OECD countries.

While the challenge going forward is substantial, several policy options exist that can help encourage growth. Boosting productivity through reduced regulation and barriers to international and interprovincial trade (including improved labour mobility), encouraging innovation and entrepreneurship, tax reform aimed at improved tax competitiveness and a stronger investment climate, as well as a reduced size of government are a few of the actions that should be undertaken.

Governments across the country should begin to immediately enact these bold reforms that will help tackle Canada's ongoing growth crisis. Given that per-capita GDP is a key determinant of living standards, this should be a matter of concern not only to governments, but to all Canadians.

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