

**PRODUCTIVITY
AND PROSPERITY
IN QUEBEC**

**2016
OVERVIEW**

 Centre for Productivity
and Prosperity
Walter J. Somers Foundation
HEC MONTRÉAL





PRODUCTIVITY AND PROSPERITY IN QUEBEC 2016 OVERVIEW

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About the Centre for Productivity and Prosperity – Walter J. Somers Foundation

The Centre for Productivity and Prosperity – Walter J. Somers Foundation has a twofold mission. First of all, it is devoted to research on productivity and prosperity, mainly in Quebec. The Centre then shares its research findings through knowledge transfer and educational activities.

About the Walter J. Somers Foundation

The Somers family established the Walter J. Somers Foundation in tribute to the founder of Walter Surface Technologies. Through different donations, the Foundation pursues the family heritage of commitment to the community and contributes to the prosperity of Quebec society, firstly by helping to improve its productivity but also by supporting excellence in youth education.

For more information on the Centre or on the Walter J. Somers Foundation, visit www.hec.ca/cpp or write us at info.cpp@hec.ca.

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To mark the eighth edition of *Productivity and Prosperity in Quebec – Overview*, the Centre for Productivity and Prosperity – Walter J. Somers Foundation has changed the publication's format to refocus its analysis on its primary mission: monitoring the province's economic performance.

This new and more accessible format addresses the same themes fundamental to Quebec's economic performance, but offers a brief snapshot of the situation. Readers can assess the province's performance at a glance by examining a series of economic indicators: standard of living, labour productivity, economic growth, work intensity, employment rate, etc.

At a time when Quebec's economic health remains precarious, this new format will make it easier for readers to analyze indicators over time and from one edition of the *Overview* to the next. Recurring themes in the portrait of the province's economic situation will be profiled every year; to give readers an ongoing update of indicators illustrating Quebecers' wealth and incomes.

Read on and enjoy!

Robert Gagné

Director of the Centre for Productivity and Prosperity – Walter J. Somers Foundation



PRODUCTIVITY AND PROSPERITY IN QUEBEC 2016 OVERVIEW

STANDARD OF LIVING:

MEASURING QUEBEC'S ABILITY TO CREATE WEALTH



STANDARD OF LIVING: CLEARLY LAGGING

The **standard of living** is a leading economic indicator, one of the rare measurements that can be used to concretely evaluate a country's economic prosperity. It is obtained by dividing the gross domestic product by the country's population and, once national currencies have been converted into Canadian dollars using a **purchasing power parity exchange rate**, can be used to compare countries with each other, regardless of their size and any differences in prices from one country to another.

When we compare Quebec's standard of living with that of 20 OECD member countries, we can see that there is a large gap in wealth between the province and several of these countries:

- With a per capita standard of living of \$46,126 in 2015, Quebec is trailing the pack. Only Spain and South Korea have lower standards of living.
- There is a per capita difference of \$32,209 between Quebec and Switzerland, which is at the top of the group. On the other hand, the gap between Quebec and South Korea, with the lowest standard of living of the 20 selected OECD countries, is just \$3,000.

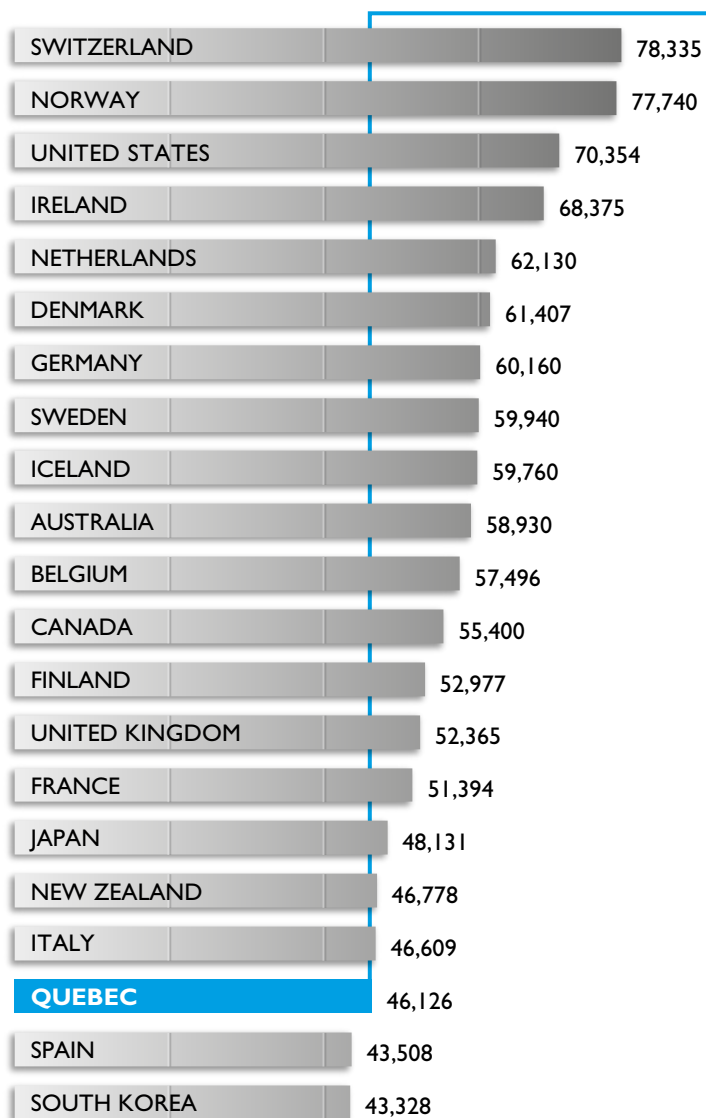


FIGURE I

STANDARD OF LIVING AT PURCHASING POWER PARITY IN 2015

PER CAPITA GDP IN 2015 CANADIAN DOLLARS

WHY 20 COUNTRIES?

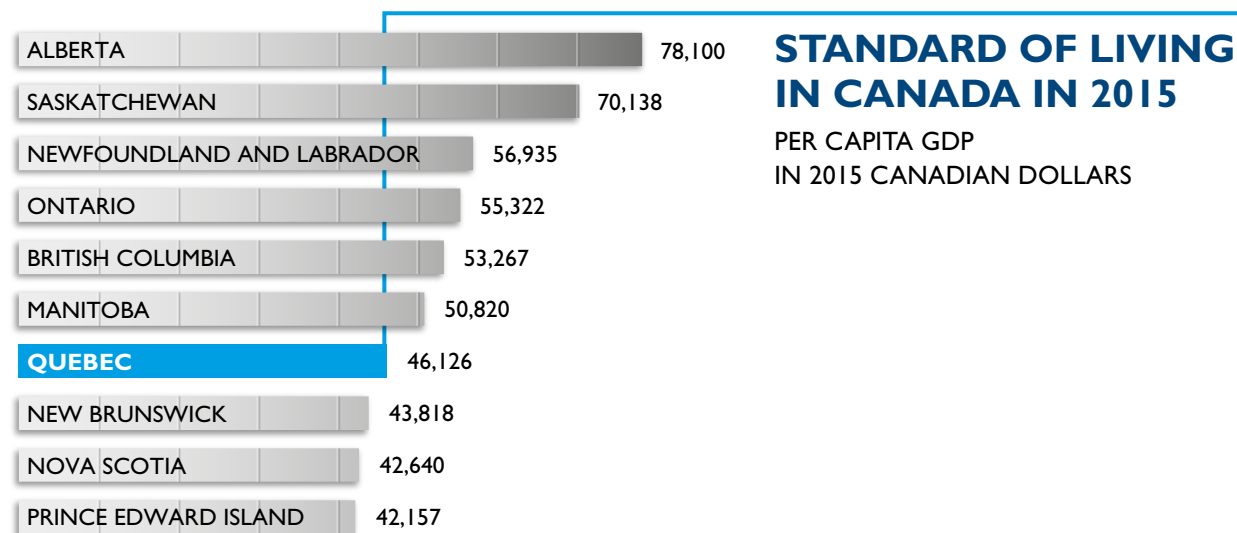
The OECD countries used for purposes of comparison here are those with which Quebec has been compared in the seven previous editions of *Productivity and Prosperity – Overview*. The availability of historical data was originally the main reason for selecting these countries, out of the 35 OECD member countries. Greece, Austria, Portugal, Slovenia, the Czech Republic, Hungary, Estonia, Lithuania, the Slovak Republic, Poland, Turkey, Luxembourg, Chile, Mexico and Israel were excluded from this list because not all the historical data on their economies were available.

STANDARD OF LIVING: CLEARLY LAGGING

Quebec's performance is no better when it is compared with the rest of Canada:

- Only the Maritime provinces have a lower standard of living.
- There is a gap of close to \$32,000 between the per capita standard of living in Quebec and Alberta, at the top of the ranking. On the other hand, the gap between Quebec and Prince Edward Island, at the bottom of the list, is only \$3,969 per capita.
- Ontario is \$9,196 per capita ahead of Quebec. In other words, the standard of living in Ontario is 20% higher than in Quebec.

FIGURE 2



ABOUT THE STANDARD OF LIVING

While the standard of living is a useful measurement for making international comparisons, it must be remembered that this measurement of economic prosperity tells us little about the quality of life or how this wealth is distributed among citizens. In short, people in two countries with identical standards of living can in theory have diametrically opposed qualities of life.

For instance, one individual may hold 99% of the wealth produced in economy A, whereas in economy B the same wealth may be shared evenly among citizens. In the end, the standard of living in the two countries would be similar, but their citizens would have vastly different qualities of life.

While there is clearly no such gap in the countries with which we compare Quebec, we must keep in mind that the standard of living as measured by per capita GDP is primarily an indicator of an economy's ability to generate wealth, rather than of quality of life.

FACT: With a per capita standard of living of \$46,126, Quebec sits at the back of the pack. Only two of the 20 OECD countries selected for our analysis and three Canadian provinces have lower standards of living.



PURCHASING POWER PARITY

When we compare the standard of living in Quebec with that in other countries, we have to be sure that we are comparing their performance in a common currency. The goal is quite simple: knowing that the per capita GDP of Sweden was 426,678 kronor in 2015 is not very useful if we are trying to determine whether Quebec lags economically with a per capita standard of living of \$46,126 in Canadian dollars.

To convert standards of living into a common currency, we could use the market exchange rate, meaning the rate at which a bank would convert your dollars if you planned to travel outside Canada. While this approach has the advantage of being simple, it also has some serious flaws. Official exchange rates are subject to sharp and sometimes drastic fluctuations. These short-term variations may be completely unrelated to the country's actual economic conditions and could bias international comparisons. More important still, official exchange rates do not take account of the purchasing power of each currency, meaning the quantity of goods and services a Canadian dollar can buy, in comparison with another currency.

To avoid this major problem, some organizations like the OECD publish purchasing power parity exchange rates. These exchange rates take account of differences in standards of living, by measuring the purchasing power of different currencies based on a standard basket of goods. Purchasing power parity exchange rates thus compare the amount of the national currency required to buy a specific quantity of goods and services, regardless of the country. They let us evaluate standards of living by compensating for the differences in the cost of living between different countries.

LOOKING BACK: QUEBEC IN 1981

Quebec's relative performance in terms of its standard of living has gradually declined since the early 1980s. All the countries except Italy and Switzerland have pulled farther ahead.

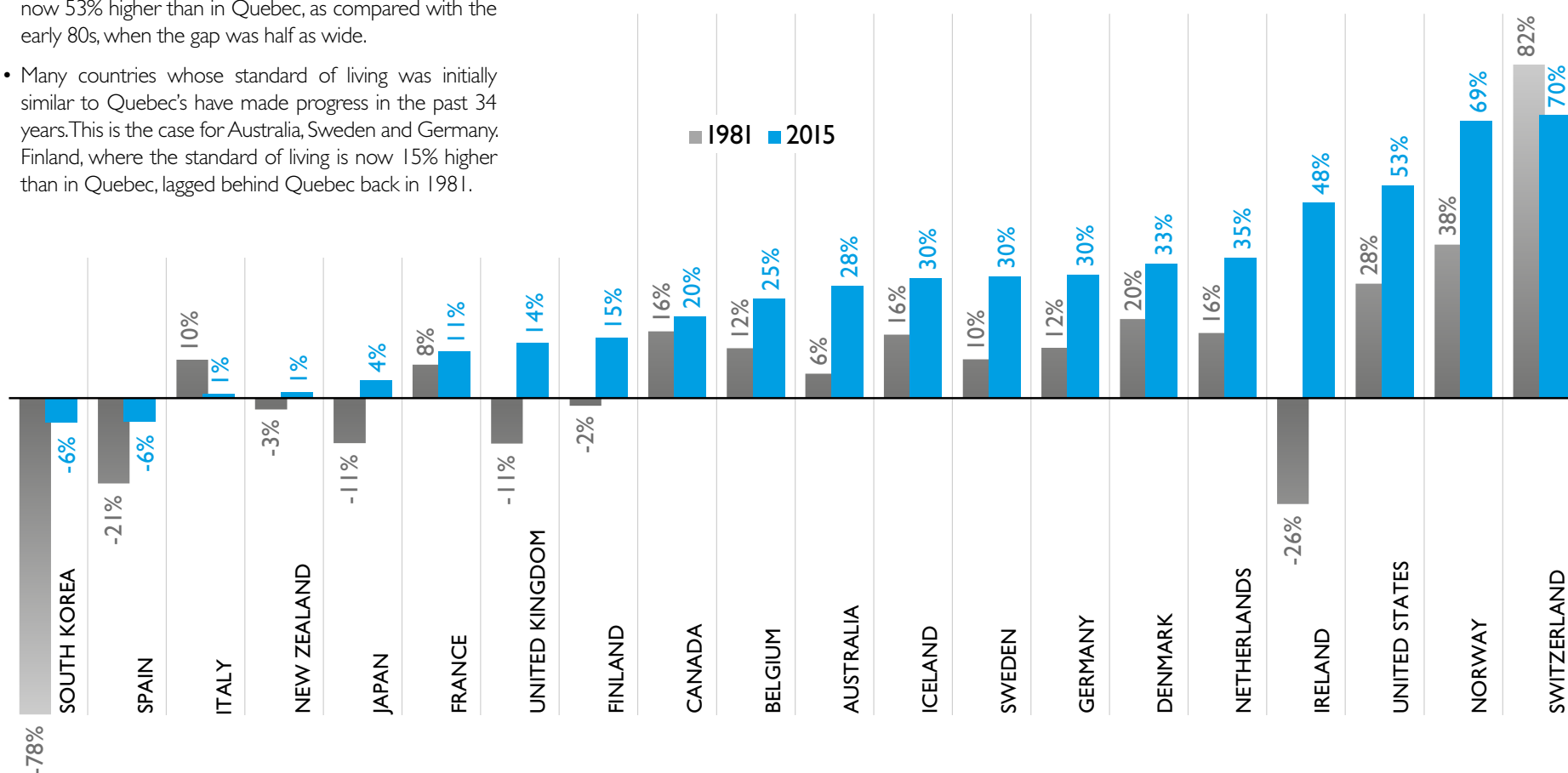
- For instance, the standard of living in the United States is now 53% higher than in Quebec, as compared with the early 80s, when the gap was half as wide.
- Many countries whose standard of living was initially similar to Quebec's have made progress in the past 34 years. This is the case for Australia, Sweden and Germany, Finland, where the standard of living is now 15% higher than in Quebec, lagged behind Quebec back in 1981.

- South Korea caught up economically between 1981 and 2015. While there was a standard of living gap of nearly 80% between South Korea and Quebec in 1981, the province is now only 6% ahead.

FIGURE 3

STANDARD OF LIVING GAP IN COMPARISON WITH QUEBEC, 1981 AND 2015

PER CAPITA GDP IN 2015 CANADIAN DOLLARS



LOOKING BACK: QUEBEC IN 1981

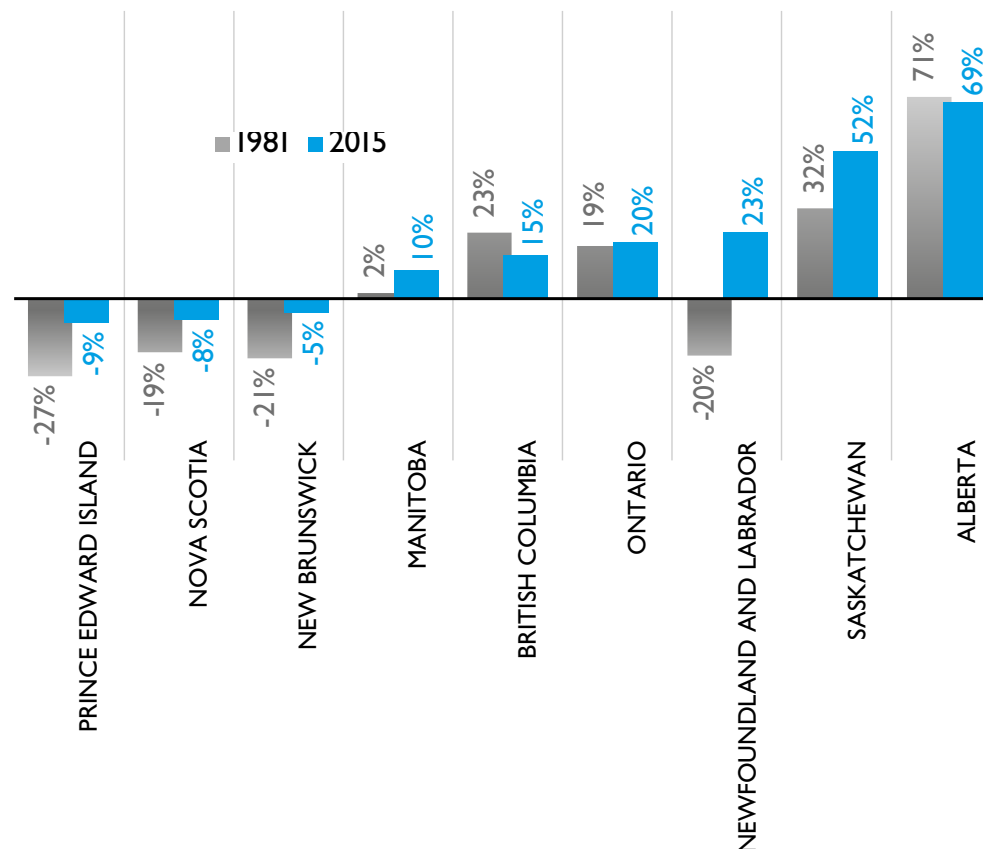
Quebec's relative performance has also declined in comparison with the rest of Canada:

- Its lead over the Maritime provinces in terms of standard of living has gradually crumbled since 1981. The gap between Quebec and the bottom of the ranking is now only 9%, whereas 34 years ago, its lead was three times greater.
- Thanks to economic growth driven by natural resource extraction, the standard of living in Newfoundland and Labrador is now higher than in Quebec. In 1981, its standard of living was 20% lower than in Quebec.
- British Columbia is the only province to have significantly lost ground to Quebec. In 1981, its standard of living was 23% higher than in Quebec, whereas in 2015, it was only 15% ahead. This deterioration can be explained mainly by the nearly nil growth in the standard of living in British Columbia during the 90s.

FIGURE 4

GAP IN THE STANDARD OF LIVING IN COMPARISON WITH QUEBEC, 1981 AND 2015

PER CAPITA GDP IN 2015 CANADIAN DOLLARS



FACT: Generally speaking, Quebec's relative performance has declined over the past 34 years, a sign that the province is falling behind most OECD countries.

1981-2015: INADEQUATE GROWTH

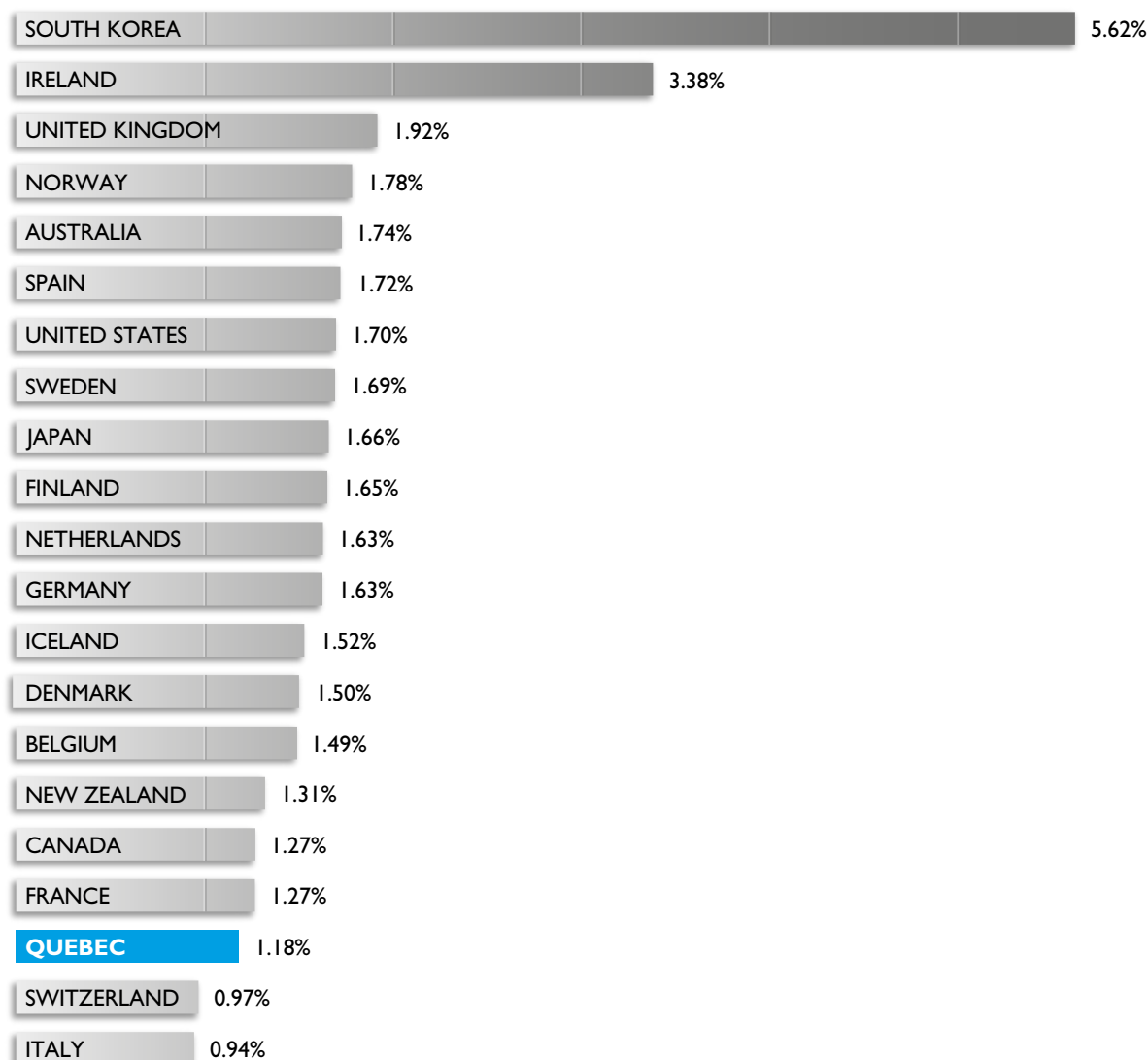
If Quebec's standard of living has declined over the past 34 years, it is mainly because the province's economic growth has been particularly slow:

- Between 1981 and 2015, the standard of living in Quebec rose at an annual average rate of 1.18%. This was the third-lowest growth among the 20 selected OECD countries. Only Switzerland and Italy posted slower growth.
- Despite its particularly slow economic growth, Switzerland remains at the top of the list in terms of standard of living, thanks to its especially high standard of living in the early 80s. This is not the case for Italy, however, which today is even with Quebec despite holding a 10% lead in 1981.
- South Korea has posted the most impressive performance of all these countries, with its excellent economic catch-up over the past 34 years. Remember that the per capita South Korean standard of living was only \$6,760 in the early 80s, whereas today the country is closely trailing Quebec. If this trend continues, South Korea will be even with Quebec by 2017.

FIGURE 5

AVERAGE ANNUAL STANDARD OF LIVING GROWTH, 1981-2015

PER CAPITA GDP IN 2015 CANADIAN DOLLARS

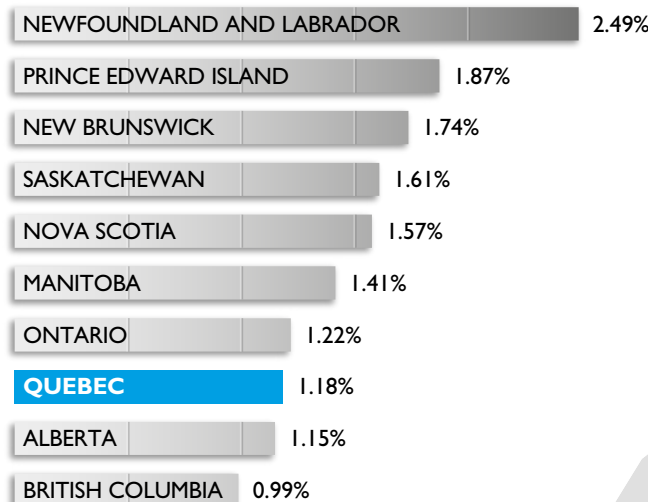


1981-2015: INADEQUATE GROWTH

Only two provinces posted growth lower than Quebec:

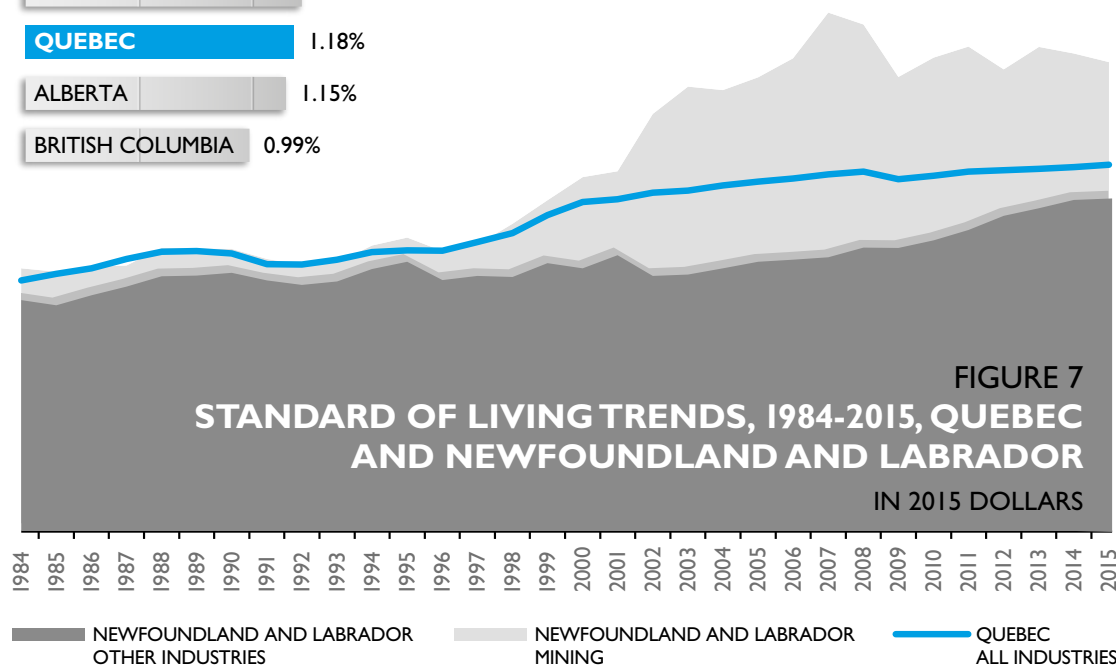
- Between 1981 and 2015, standard of living growth in Alberta was slower than in Quebec. Alberta remains at the head of the pack in terms of standard of living, nonetheless, thanks to the lead it held in the early 80s.
- Growth in British Columbia was also lower than in Quebec, in this case because of its practically nil economic growth during the 90s.
- The growth between 1981 and 2015 in Newfoundland and Labrador is evidence of the strong economic catch-up that started in the late 90s, thanks to its economic growth driven by natural resource extraction.

FIGURE 6
**AVERAGE ANNUAL
STANDARD OF LIVING
GROWTH IN CANADA,
1981-2015**
PER CAPITA GDP IN 2015
CANADIAN DOLLARS



FACT: If Quebec has lost ground over the past 34 years, it is because the province posted some of the weakest economic growth among the 10 Canadian provinces and the 20 selected OECD countries.

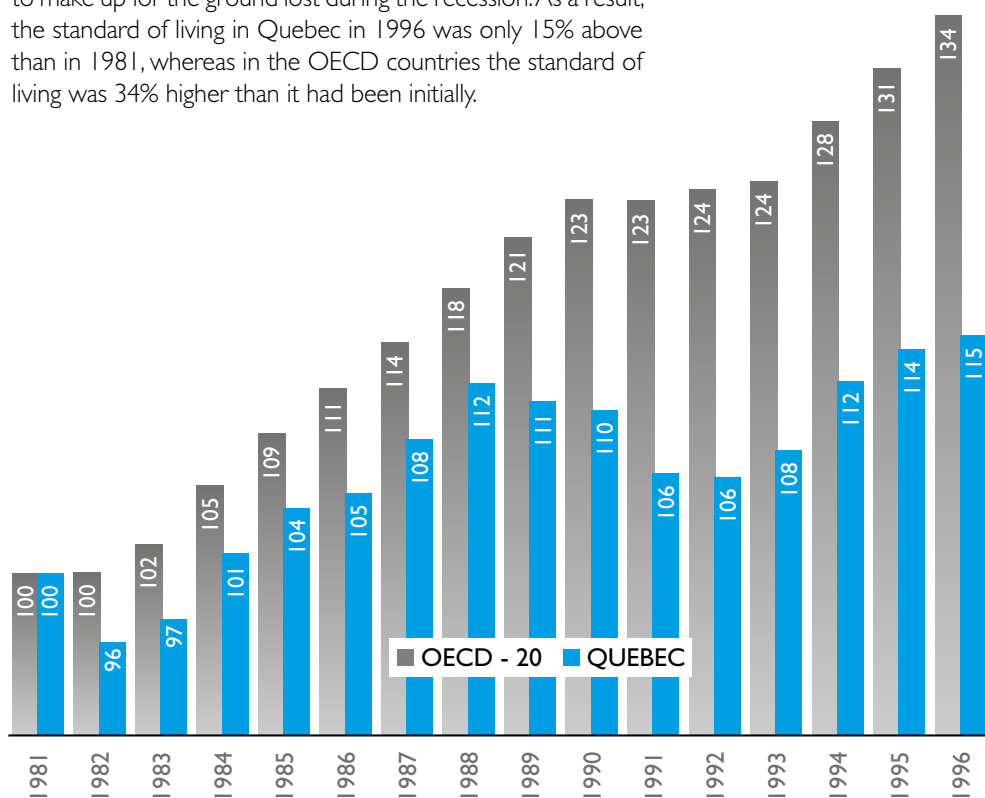
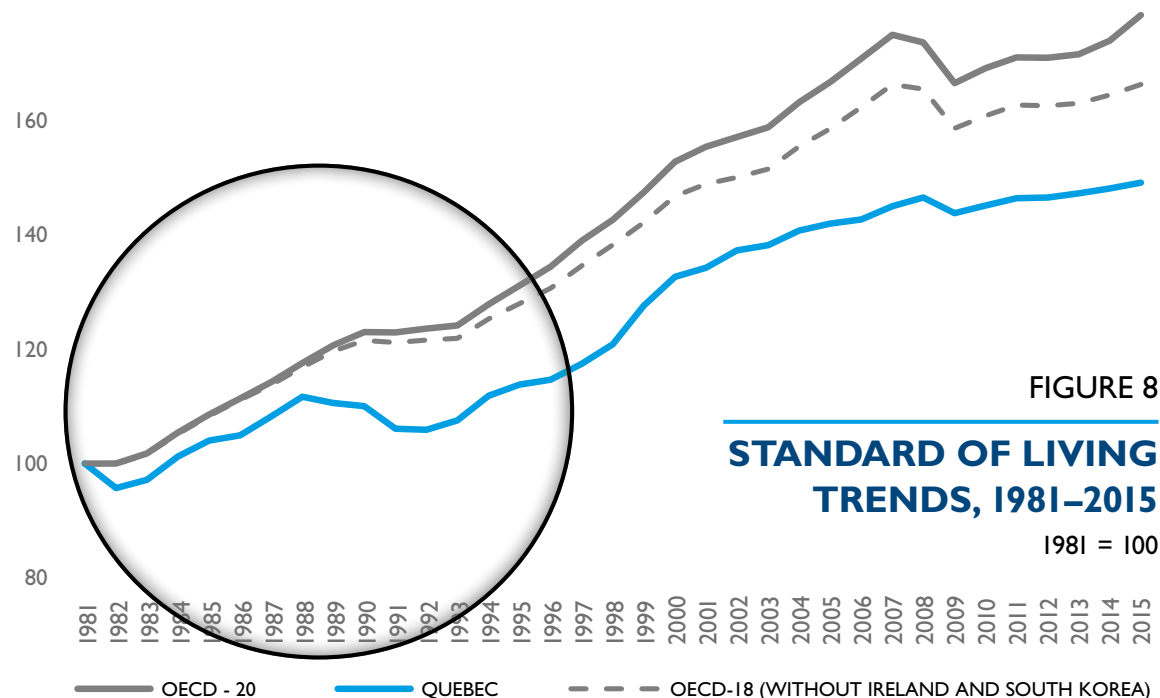
FIGURE 7
**STANDARD OF LIVING TRENDS, 1984-2015, QUEBEC
AND NEWFOUNDLAND AND LABRADOR**
IN 2015 DOLLARS



SCARRED BY RECESSIONS...

If we compare standard of living trends in Quebec with the average standard of living in OECD countries, we can see that the recessions in the 1980s and 90s left deep scars in the province's economy.

First of all, the decline in economic activity as a result of the recession in the early 1980s hit Quebec harder than the OECD average. The recovery at the end of the crisis was also not as vigorous here, so that Quebec was left behind. Then the province was struck harder and over a longer time by the 1990s recession. Economic growth coming out of the recession was not particularly strong, leaving Quebec unable to make up for the ground lost during the recession. As a result, the standard of living in Quebec in 1996 was only 15% above than in 1981, whereas in the OECD countries the standard of living was 34% higher than it had been initially.



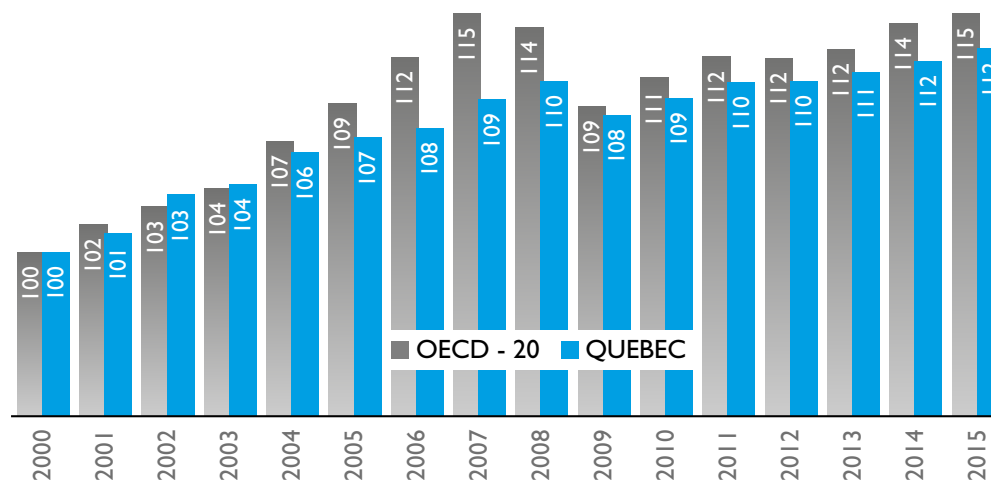
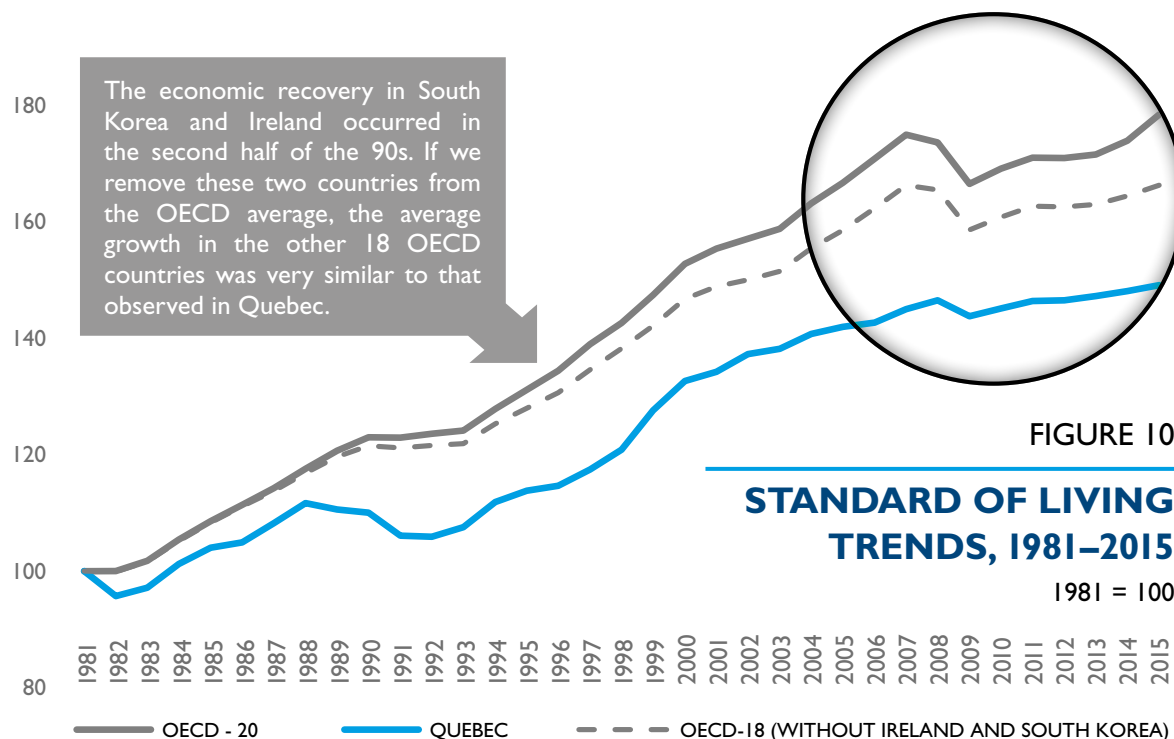
...OR LEFT UNAFFECTED!

If we look only at the 2000s, it can be seen that this time it was the OECD countries that suffered the most from the 2008 recession.

After rising by 15% during the first half of the 2000s, the average standard of living in the OECD countries dropped drastically after the 2008 recession. The Quebec economy proved more resilient following the 2008 recession, but its economic growth during the early 2000s was slower than in the OECD. As a result, Quebec was almost level with the OECD in terms of growth by 2009.

The OECD countries recovered more quickly from the recession, however, so the gap with Quebec widened once again.

FIGURE 11
STANDARD OF LIVING TRENDS, 2000–2015
2000 = 100



WHY HAS STANDARD OF LIVING GROWTH IN QUEBEC BEEN SO WEAK?



WHAT EXPLAINS QUEBEC'S WEAK STANDARD OF LIVING GROWTH?

To be able to determine why Quebec's economic growth has been so weak over the past 34 years, we can decompose the standard of living using a simple equation (Diagram 1). It shows that the standard of living is the result of three aspects of the economy:

- labour productivity, which measures the average wealth created per hour worked;
- work intensity, which measures the average number of hours worked per job;
- the employment rate, which measures the number of jobs as a proportion of the total population.

In short, the standard of living is determined by combining the efficiency with which an economy generates wealth, how hard its population works, and its population's labour market participation. Once this equation has been transformed into growth, it lets us determine the contribution of each factor to standard of living growth.

DIAGRAM 1

THE THREE STANDARD OF LIVING DETERMINANTS

$$\begin{array}{ccccccc} \text{STANDARD} & & & & & & \\ \text{OF LIVING} & = & \text{LABOUR} & \times & \text{WORK} & \times & \text{OVERALL} \\ & & \text{PRODUCTIVITY} & & \text{INTENSITY} & & \text{EMPLOYMENT RATE} \\ \\ \frac{\text{GDP}}{\text{POPULATION}} & = & \frac{\text{GDP}}{\text{HOURS WORKED}} & \times & \frac{\text{HOURS WORKED}}{\text{NUMBER OF JOBS}} & \times & \frac{\text{NUMBER OF JOBS}}{\text{POPULATION}} \end{array}$$

WHAT EXPLAINS QUEBEC'S WEAK STANDARD OF LIVING GROWTH?

In Quebec's case, the per capita increase of \$15,198 between 1981 and 2015 breaks down as follows:

- 82% (\$12,511 of the per capita total of \$15,198) of the increase was generated by increased labour productivity. In other words, 82% of standard of living growth was generated by improved efficiency in generating wealth.
- 40% (\$6,128 of the per capita total of \$15,198) of the increase was generated by an increase in the employment rate. That means that 40% of standard of living growth was due to greater labour market participation.
- However, the decline in work intensity reduced standard of living growth by 23% (-\$3,441 of the per capita total of \$15,198). In other words, the lower average number of hours worked per job limited Quebec's economic growth.

Since 1981, labour productivity growth has explained over 95% of standard of living growth in the 30 economies analyzed. This is indisputably the most significant source of economic growth.

TABLE I

SOURCES OF STANDARD OF LIVING GROWTH AT PURCHASING POWER PARITY, 1981-2015

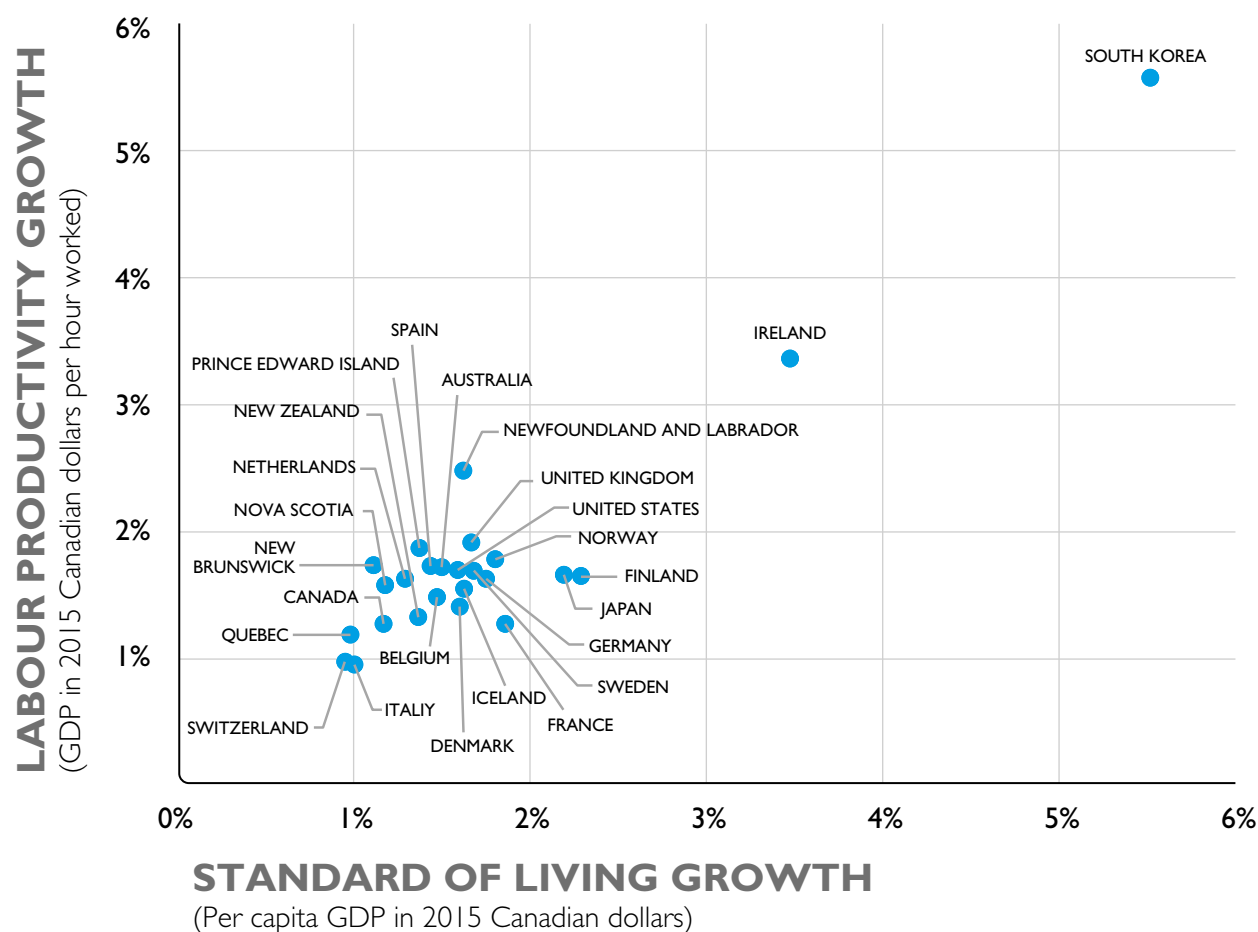
PER CAPITA GDP IN 2015 CANADIAN DOLLARS

FACT: In each of the 30 economies analyzed, by far most of the economic growth since 1981 has come from productivity gains. In the long term, labour productivity is the main, if not the only, source of economic growth.



VARIATION IN THE STANDARD OF LIVING BETWEEN 1981 AND 2015		VARIATION IN THE STANDARD OF LIVING EXPLAINED BY A CHANGE IN:		
		LABOUR PRODUCTIVITY	WORK INTENSITY	OVERALL EMPLOYMENT RATE
IRELAND	45,531	46,601	-10,424	9,354
SOUTH KOREA	36,568	35,815	-6,079	6,832
NORWAY	35,081	35,251	-5,823	5,652
NEWFOUNDLAND AND LABRADOR	32,229	20,934	-1,922	13,217
UNITED STATES	30,687	27,466	1,027	2,194
SASKATCHEWAN	29,359	24,837	-3,554	8,076
NETHERLANDS	26,223	20,649	-4,213	9,786
AUSTRALIA	26,144	22,665	-2,863	6,342
SWEDEN	26,038	25,680	2,574	-2,216
GERMANY	25,384	27,132	-10,706	8,958
ALBERTA	25,123	25,179	-3,458	3,402
UNITED KINGDOM	24,897	21,505	-991	4,384
DENMARK	24,426	27,370	-4,365	1,422
ICELAND	23,966	25,057	-3,457	2,367
BELGIUM	22,738	22,426	-3,720	4,032
FINLAND	22,644	31,112	-4,968	-3,500
SWITZERLAND	21,921	21,229	-7,589	8,281
JAPAN	20,632	27,027	-7,484	1,089
PRINCE EDWARD ISLAND	19,715	14,342	-2,432	7,806
NEW BRUNSWICK	19,403	12,346	-662	7,719
CANADA	19,375	17,695	-2,685	4,365
MANITOBA	19,294	18,158	-2,453	3,589
SPAIN	19,115	15,745	-3,570	6,940
ONTARIO	18,649	19,875	-2,330	1,104
FRANCE	17,896	25,987	-8,632	541
NOVA SCOTIA	17,572	13,015	-2,105	6,662
NEW ZEALAND	16,710	16,811	-2,180	2,079
QUEBEC	15,198	12,511	-3,441	6,128
BRITISH COLUMBIA	15,124	15,077	-2,129	2,176
ITALY	12,742	13,401	-3,099	2,440

PRODUCTIVITY AND STANDARD OF LIVING: A LONG-TERM EFFECT



The relationship between labour productivity and economic growth is indisputable: in the long term, productivity is the main, if not the only, source of economic growth. Since 1981, countries and provinces that have seen substantial productivity gains have all enjoyed sustained economic growth. On the other hand, provinces and countries where labour productivity growth has been slower have generally posted more lacklustre economic growth.

As a corollary to its performance in terms of the standard of living, Quebec has among the slowest growth in labour productivity. Only Switzerland has posted slower growth since 1981. The consequences for that country are less important, however, since Switzerland's standard of living is among the highest in the OECD.

FIGURE 12

**LABOUR PRODUCTIVITY
AND STANDARD OF
LIVING GROWTH, 1981–2015**
PERCENTAGES

FACT: With average annual growth of less than 1%, Quebec has one of the slowest rates of labour productivity growth.

LABOUR PRODUCTIVITY,

THE MAIN CAUSE OF QUEBEC'S ECONOMIC GAP

As a result of over three decades of particularly slow growth, labour productivity in Quebec now lags behind many countries and provinces. Only three countries and the three Maritime provinces have lower labour productivity.

	2015 \$ per hour worked	1981 \$ per hour worked	Variation (%)
1 ALBERTA	77.58	52.58	48%
2 SASKATCHEWAN	76.25	48.19	58%
3 NEWFOUNDLAND AND LABRADOR	71.64	41.65	72%
4 BRITISH COLUMBIA	63.47	45.50	40%
5 ONTARIO	63.27	40.82	55%
6 MANITOBA	57.84	36.90	57%
7 QUEBEC	56.84	40.90	39%
8 NEW BRUNSWICK	52.63	36.27	45%
9 NOVA SCOTIA	50.99	34.40	48%
10 PRINCE EDWARD ISLAND	48.84	30.88	58%

	2015 \$ per hour worked	1981 \$ per hour worked	Variation (%)
1 NORWAY	103.15	56.44	83%
2 IRELAND	93.94	30.59	207%
3 BELGIUM	90.34	54.99	64%
4 DENMARK	87.33	49.47	77%
5 FRANCE	84.67	45.47	86%
6 NETHERLANDS	84.13	54.63	54%
7 GERMANY	83.44	46.45	80%
8 SWITZERLAND	82.24	59.84	37%
9 UNITED STATES	78.11	46.77	67%
10 SWEDEN	75.82	43.22	75%
11 FINLAND	70.84	32.92	115%
12 AUSTRALIA	70.24	42.25	66%
13 ITALY	67.11	47.97	40%
14 UNITED KINGDOM	65.73	37.65	75%
15 SPAIN	64.59	40.10	61%
16 CANADA	63.64	42.96	48%
17 ICELAND	57.26	33.50	71%
QUEBEC	56.84	40.90	39%
18 JAPAN	53.95	25.91	108%
19 NEW ZEALAND	52.12	33.41	56%
20 SOUTH KOREA	39.99	6.48	517%

TABLE 2

LABOUR PRODUCTIVITY AT PURCHASING POWER PARITY

GDP IN 2015 CANADIAN DOLLARS PER HOUR WORKED

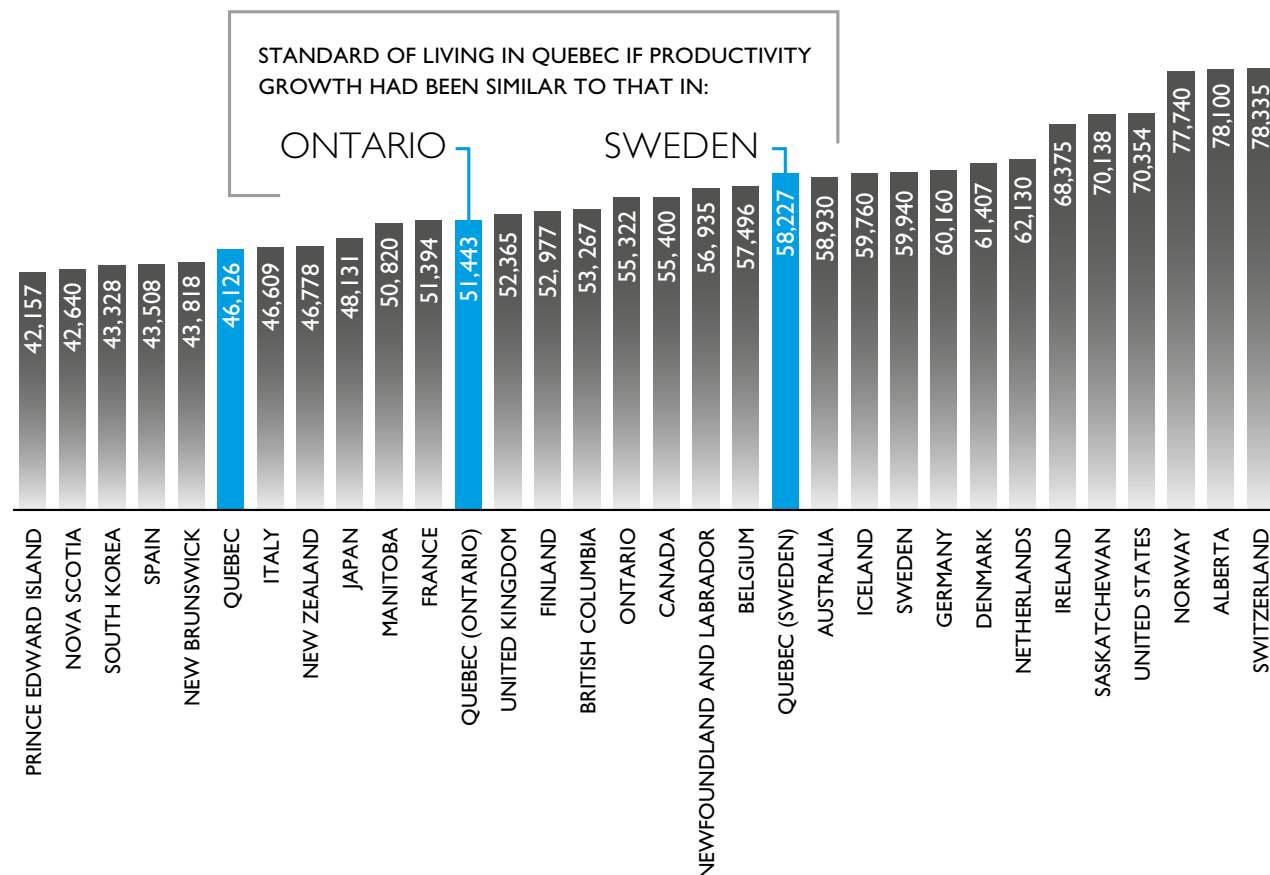
LABOUR PRODUCTIVITY, THE MAIN CAUSE OF QUEBEC'S ECONOMIC GAP

To properly illustrate the impact of labour productivity on economic growth, suppose that labour productivity growth in Quebec between 1981 and 2015 had been the same as in Sweden, a country where labour productivity was relatively similar to that in Quebec in 1981. In that case, the per capita standard of living in Quebec would be \$58,227 today, or \$12,101 higher per capita than the current level. The same is true if we apply the rate of labour productivity growth in Ontario over that period. Simply increasing labour productivity growth from 39% to 55% would have allowed Quebecers to enjoy additional gains of \$5,318 per capita.

FIGURE 13

STANDARD OF LIVING AT PURCHASING POWER PARITY IN 2015

PER CAPITA GDP IN 2015 CANADIAN DOLLARS



WHY IS PRODUCTIVITY LOWER IN QUEBEC THAN IN ONTARIO?

Over the past five years, average labour productivity in Quebec has been \$56.08 per hour worked, as compared with \$61.77 per hour worked in Ontario, leaving a gap of \$5.69 per hour worked between the two provinces.

Two factors can explain this gap.

On the one hand, economic activity in Ontario may be concentrated in sectors where productivity is higher. If so, Ontario's advantage would be explained by a different breakdown of economic activity. Barring a reallocation of hours worked in Quebec, it would be difficult to close this gap.

On the other hand, it is possible that economic activity is broken down in a similar way in both provinces, but that productivity in the main economic sectors is simply higher in Ontario. If so, the situation would be explained by a difference in productivity, and Quebec could try to close this gap with Ontario.

On average, 93% of the difference between Quebec and Ontario between 2010 and 2015 is the result of productivity. This means that out of a total gap of \$5.69 per hour worked, \$5.29 appears to come from low productivity in Quebec industries. On the other hand, only 7% of the gap with Ontario – \$0.40 of the gap of \$5.69 per hour worked – can probably be explained by the different breakdown of economic activity. In other words, the way economic activity is broken down in Quebec has a limited impact on the labour productivity gap with Ontario.

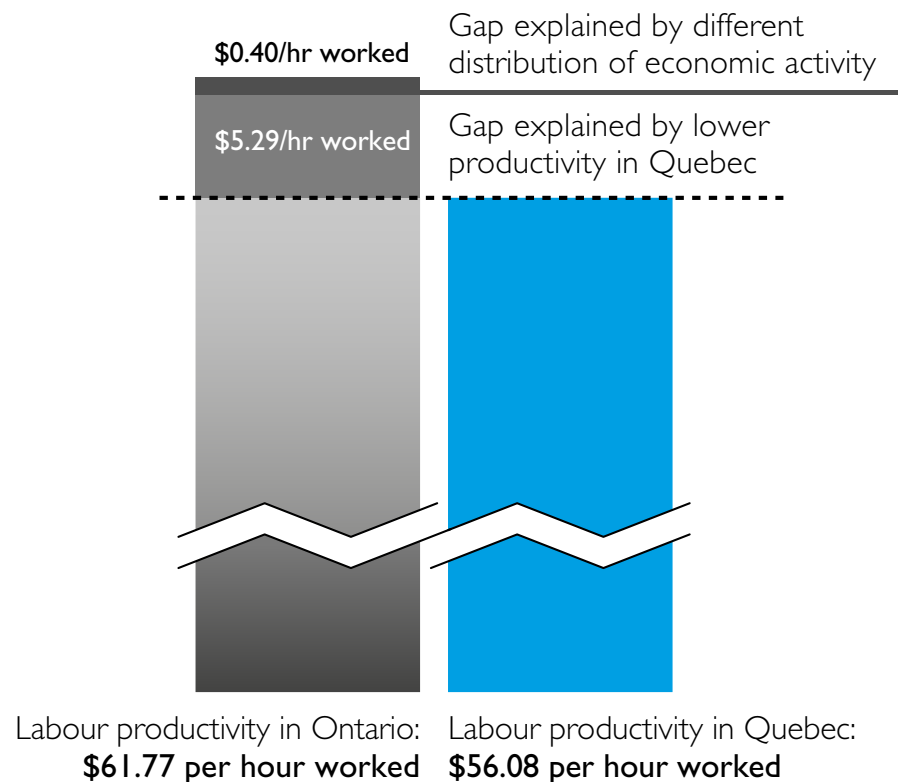


FIGURE 14

PRODUCTIVITY GAP BETWEEN QUEBEC AND ONTARIO IN 2015

GDP PER HOUR WORKED, IN 2015 CANADIAN DOLLARS

FACT: The way economic activity is broken down in Quebec has only a limited impact on the labour productivity gap with Ontario.

THE TREND REVERSES ITSELF

Although the breakdown of economic activity explains only a small proportion of the productivity gap with Ontario, that was not the case in the late 90s.

- In 1997, almost all the productivity gap between Quebec and Ontario was due to the different breakdown of economic activity in the two provinces. In other words, in 1997, if economic activity had been broken down in the same way as in Ontario, Quebec would have had a productivity level similar to that of its neighbour.
- This trend reversed itself after 2001, however, when the impact of the manufacturing crisis began to be felt. From that point on, the breakdown of economic activity was less and less important, until the point when the gap with Ontario could simply be explained by the low productivity of Quebec industries.

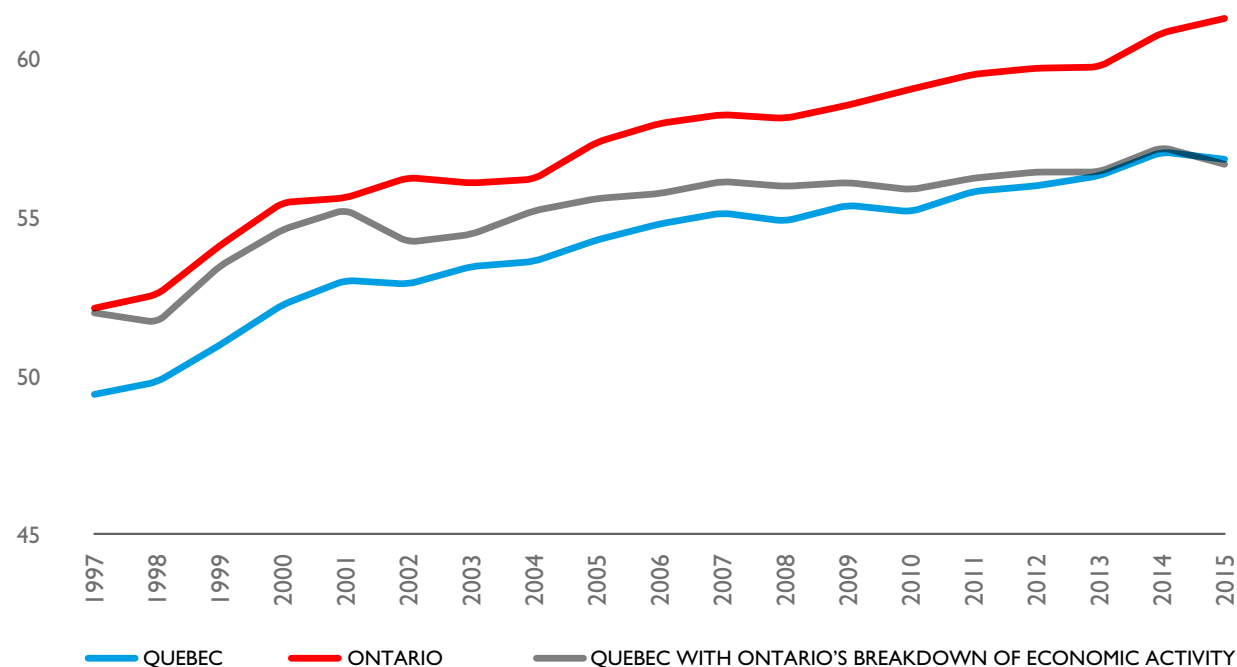


FIGURE 15

TRENDS IN LABOUR PRODUCTIVITY, 1997–2015

GDP IN 2015 CANADIAN DOLLARS PER HOUR WORKED

WORK INTENSITY: LESS IMPORTANT

With the exception of Sweden and the United States, all the countries considered and all Canadian provinces have seen a decrease in their average number of hours worked since 1981. Quebec is no exception. Between 1981 and 2015, work intensity fell by 156 hours, and now stands at 1,642 hours per job, the lowest level in Canada.

Yet this substantial decline in work intensity has had only a marginal impact on economic growth. The number of hours worked fell by the equivalent of nearly four work weeks, at 35 hours per week, but the impact on per capita standard of living growth in Quebec was only \$3,441 between 1981 and 2015.

Compared with the contribution of labour productivity – \$12,511 per job – work intensity appears to have a limited effect on the standard of living. Nonetheless, one question invariably arises when we consider the gap between Quebec and the top-ranked countries and provinces in terms of work intensity: would the standard of living in Quebec be higher if Quebecers worked more?

The answer is yes, but on the other hand it must be recognized that it would take a considerable increase in the number of hours worked per job to produce tangible results. If work intensity in Quebec were the same as in Newfoundland and Labrador, ranking fourth among the 30 economies analyzed, Quebec would move up only three positions in the ranking, with a per capita standard of living of close to \$52,000. This advance would be marginal, all things considered, whereas work intensity would rise by 173 hours per job, or the equivalent of five complete weeks of work. To generate an appreciable increase in Quebec's standard of living, work intensity would have to reach the level observed in South Korea, i.e. growth of 472 hours per job, or 13 more weeks of work per job every year.

TABLE 3

WORK INTENSITY HOURS WORKED PER JOB

	2015	1981	Variation (%)
SOUTH KOREA	2,114	2,879	-27%
ICELAND	1,880	2,024	-7%
UNITED STATES	1,853	1,818	2%
NEWFOUNDLAND AND LABRADOR	1,815	1,908	-5%
ALBERTA	1,793	1,891	-5%
NEW BRUNSWICK	1,769	1,805	-2%
NEW ZEALAND	1,757	1,861	-6%
SASKATCHEWAN	1,747	1,865	-6%
IRELAND	1,731	2,225	-22%
PRINCE EDWARD ISLAND	1,729	1,869	-7%
ITALY	1,723	1,862	-7%
JAPAN	1,719	2,106	-18%
NOVA SCOTIA	1,714	1,827	-6%
ONTARIO	1,710	1,800	-5%
MANITOBA	1,707	1,814	-6%
CANADA	1,707	1,812	-6%
AUSTRALIA	1,702	1,815	-6%
BRITISH COLUMBIA	1,691	1,773	-5%
SPAIN	1,691	1,884	-10%
UNITED KINGDOM	1,658	1,701	-3%
QUEBEC	1,642	1,798	-9%
FINLAND	1,641	1,855	-12%
SWEDEN	1,611	1,522	6%
SWITZERLAND	1,590	1,781	-11%
BELGIUM	1,551	1,684	-8%
FRANCE	1,467	1,803	-19%
NETHERLANDS	1,422	1,553	-8%
NORWAY	1,421	1,570	-9%
DENMARK	1,412	1,546	-9%
GERMANY	1,368	1,724	-21%

OVERALL EMPLOYMENT RATE: A LIMITED CONTRIBUTION TO GROWTH

With the exception of Finland and Sweden, the overall employment rate has risen since 1981 in all the economies considered. Once again, Quebec is no exception. The rate grew by 7.4 percentage points between 1981 and 2015, to reach 49.41%. As a result, the province now sits in the middle of the pack.

Despite significant growth since the early 1980s, employment contributed only \$6,128 to per capita standard of living growth between 1981 and 2015. By way of comparison, the contribution of labour productivity was \$12,511 per capita and yet Quebec posted among the weakest growth of the 30 economies analyzed.

For it to have a marked impact on economic growth, the employment rate would have to rise considerably. For instance, if Quebec had an overall employment rate similar to Alberta's – the highest in Canada and the second-highest in the OECD, at 56.15% – the per capita standard of living in Quebec would be close to \$52,000, although it would remain below the Canadian average. In the long term, the employment rate would reach its saturation point: the unemployment rate would have to be 0% and even then, part of the inactive population would have to have jobs.

TABLE 4
OVERALL EMPLOYMENT RATE
NUMBER OF JOBS PER CAPITA

	2015	1981	Variation in % points
SWITZERLAND	59.92%	52.93%	6.99 p.p.
ALBERTA	56.15%	53.28%	2.87 p.p.
ICELAND	55.53%	52.79%	2.74 p.p.
NORWAY	53.03%	48.15%	4.89 p.p.
GERMANY	52.71%	43.44%	9.27 p.p.
SASKATCHEWAN	52.66%	45.36%	7.30 p.p.
NETHERLANDS	51.93%	42.32%	9.61 p.p.
JAPAN	51.90%	50.39%	1.51 p.p.
MANITOBA	51.47%	47.09%	4.37 p.p.
SOUTH KOREA	51.24%	36.21%	15.03 p.p.
ONTARIO	51.13%	49.90%	1.23 p.p.
CANADA	51.08%	48.35%	2.73 p.p.
NEW ZEALAND	51.00%	46.29%	4.71 p.p.
PRINCE EDWARD ISLAND	49.92%	38.89%	11.03 p.p.
DENMARK	49.79%	48.34%	1.45 p.p.
BRITISH COLUMBIA	49.62%	47.29%	2.33 p.p.
QUEBEC	49.41%	42.06%	7.36 p.p.
AUSTRALIA	49.28%	42.75%	6.53 p.p.
SWEDEN	49.08%	51.52%	-2.44 p.p.
NOVA SCOTIA	48.78%	39.88%	8.90 p.p.
UNITED KINGDOM	48.62%	46.66%	1.95 p.p.
NEW BRUNSWICK	48.06%	42.90%	5.16 p.p.
UNITED STATES	47.06%	37.29%	9.77 p.p.
FINLAND	45.57%	49.67%	-4.10 p.p.
NEWFOUNDLAND AND LABRADOR	43.79%	31.09%	12.70 p.p.
IRELAND	42.05%	33.57%	8.48 p.p.
FRANCE	41.39%	40.85%	0.53 p.p.
BELGIUM	41.04%	37.53%	3.50 p.p.
ITALY	40.30%	37.91%	2.39 p.p.
SPAIN	39.83%	32.28%	7.55 p.p.

COLLECTIVE WEALTH

FOR QUEBEC HOUSEHOLDS



STANDARD OF LIVING: UNDERPERFORMANCE WITH SERIOUS CONSEQUENCES FOR QUEBEC HOUSEHOLDS

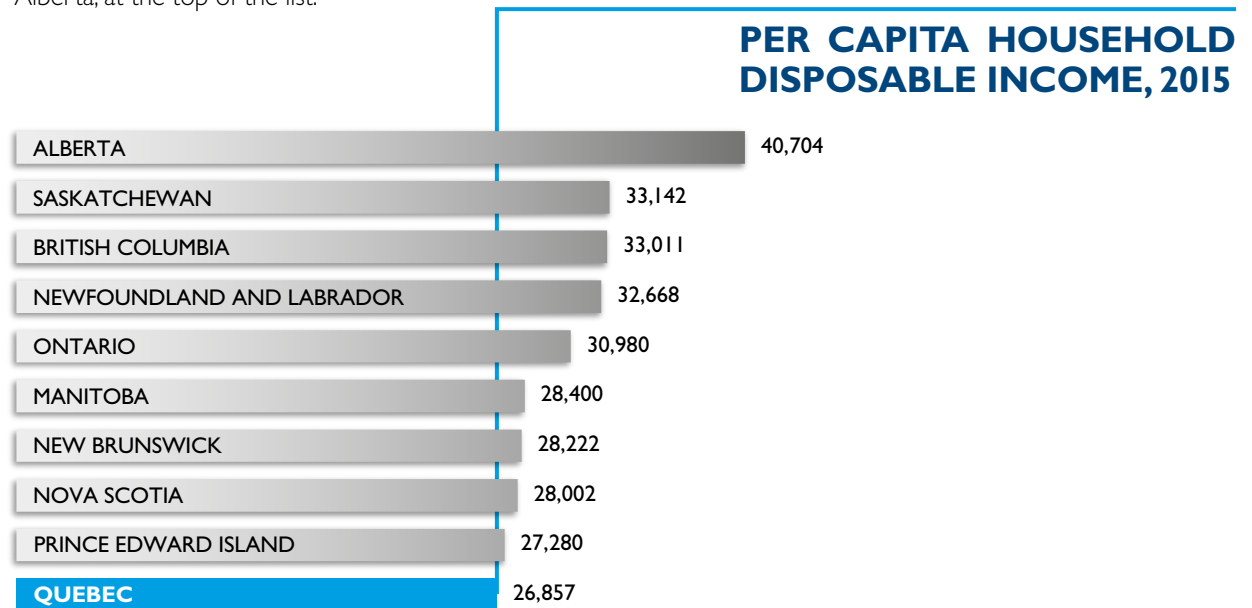
Since it is primarily a measurement of the wealth-generating capacity of a given economy, the standard of living offers little information on citizens' quality of life in that economy or how that wealth is distributed among them. In fact, even though we know that the standard of living in Quebec is lower than in the vast majority of provinces and countries, there is an unavoidable question: why should Quebecers care about the province's economic prosperity?

First of all, it must be understood that governments are financed entirely from the wealth generated by their economies. Consequently, when an economy creates less wealth per capita as compared with others, the governments in question have fewer resources to finance their expenditures and address inequalities. They must either rely on higher taxes if they want to finance the same level of per capita spending, or spend less than other governments. In both cases, it is citizens who foot the bill, either by paying higher taxes or receiving fewer or poorer-quality government services.

Still more important is the fact that the province's economic prosperity contributes to increasing Quebec households' disposable income, meaning the income available for spending and saving. Thus there are serious

consequences for Quebec households as a result of the province's low economic prosperity. In fact, the province comes in dead last in terms of disposable income. On average, a person in Quebec has \$4,123 less to spend or save than someone in Ontario. The difference rises to \$13,847 per capita when we compare Quebec with Alberta, at the top of the list.

FIGURE 16





WHAT IS DISPOSABLE INCOME?

Household disposable income comprises all the amounts available to Quebec households for spending and saving.

To calculate household disposable income, we start with workers' wages. Disposable income consists mainly of a worker's compensation (i.e. before taxes and transfers).

To take account of households' different sources of income, amounts from other sources of income are added to workers' wages: net farm income, net non-farm income, household rental income, net property income. This all adds up to primary income, which corresponds to aggregate household income before taxes and transfers.

Disposable income is obtained by subtracting from primary income the different income and other taxes paid by households to the three levels of government, and adding the transfers they receive from these same governments.

When disposable income is measured per capita, it determines the income available to every individual for spending or saving.

IS THE COST OF LIVING LOWER IN QUEBEC?

When we compare different countries, we use a purchasing power parity exchange rate that allows us to convert other nations' currencies into Canadian dollars, but also to take account of differences in the cost of living.

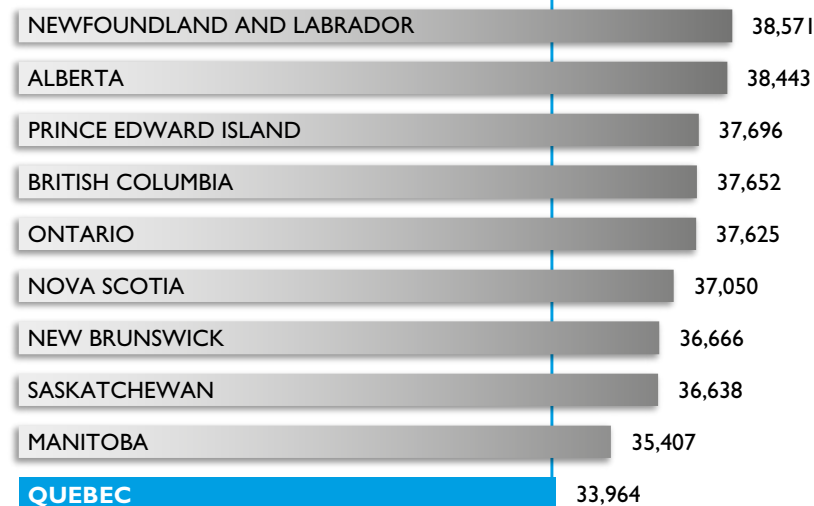
Insofar as such differences in the cost of living are observed and measured between countries, we can logically assume that the same can be done between provinces. Unfortunately, we do not have measurements that would allow us to adjust for differences in the cost of living from one province to another.

That being said, it is possible to estimate differences in interprovincial prices using the Market Basket Measure, originally developed by Statistics Canada to define the low-income cut-off in each province. It establishes the cost of a basket of goods and services allowing a reference household of four people to maintain a modest standard of living in each of the 10 Canadian provinces. By comparing the cost of this standardized basket of goods and services in each province, we can establish a conversion measure that reflects interprovincial price differences. This produces a tool similar to the purchasing power parity exchange rate used for international comparisons, one that lets us evaluate the cost of living for low-income households. By extension, we can assume that the differences observed for this type of household apply to all households.

The results obtained using this tool are conclusive: the cost of living is lower in Quebec than elsewhere in Canada. According to the MBM, a Quebec household spends from \$1,443 (Manitoba) to \$4,606 (Alberta) less than in other provinces to obtain a similar quantity and quality of goods and services. In other words, the cost of living appears to be as much as 14% lower in Quebec.

FIGURE 17

MARKET BASKET MEASURE BY PROVINCE



WHAT IS THE MARKET BASKET MEASURE?

The Statistics Canada Market Basket Measure (MBM) measures the cost of a basket of goods and services representing a modest standard of living for a reference family of two adults ages 25-49 and two children ages 9 and 13. The basket represents the consumption of this type of family.

The goods and services in the basket fall into five categories: food, clothing and footwear, transportation, shelter and other expenses such as computer hardware and supplies. The MBM gives the average amount spent annually by this type of family to obtain the goods and services in these categories.

More specifically, the food category evaluates the cost of groceries representative of a family of four, according to the 2008 National Nutritious Food Basket, all expressed on an annual basis. It includes quantities of dairy products, eggs, meat, poultry, fish, meat substitutes (peanuts, beans, etc.), grains, fruit, vegetables and fats and oils (butter, margarine, salad dressing, etc.) that a family of four people should normally consume in a week for a modest lifestyle. It holds over 67 items.

The clothing and footwear component considers the cost of over 100 items and how often they are replaced. It includes the quantity of clothing required annually for all the members of a reference family, including athletic shoes, casual shoes, winter boots, rubber boots, sandals, underwear, clothing for all seasons (jeans, slacks, blazers, shorts, shirts, skirts, t-shirts, sweaters, etc.), pyjamas, bathing suits, coats and seasonal items, raincoats, belts, wristwatches, wallets, purses, etc.

The MBM also includes the cost of a two- or three-bedroom dwelling, including ancillary costs (electricity, heat, water, appliances, etc.), public transit costs (2 monthly adult passes, 1 monthly student pass and 12 return taxi trips) in urban areas served by public transit or the costs of using a modest vehicle (annual cost of the vehicle, plus interest costs, cost of two driver's licences, registration costs, mandatory insurance costs, maintenance costs and fuel consumption) and the cost of other goods and services deemed necessary according to current societal norms. This category includes telephones, telephone services and Internet access, household cleaning supplies, furniture, electric

appliances like a microwave and air conditioner, medicines, pharmaceutical products, sports equipment, toys and games, cultural activities like outings to movie theatres, museums, performing arts and sports events, school supplies and reading materials, bank service charges, charitable donations, home security equipment, etc.

The cost of this basket is calculated for 49 regions across Canada. Its cost can be evaluated from province to province depending on the geographic distribution of the population.

A DIRECT EFFECT ON HOUSEHOLD INCOME

The differences in the cost of living in each of the ten provinces have a direct impact on the average income available to households for spending and saving.

Before adjustments to reflect the cost of living, Quebec was at the bottom of the list, almost at parity with Prince Edward Island.

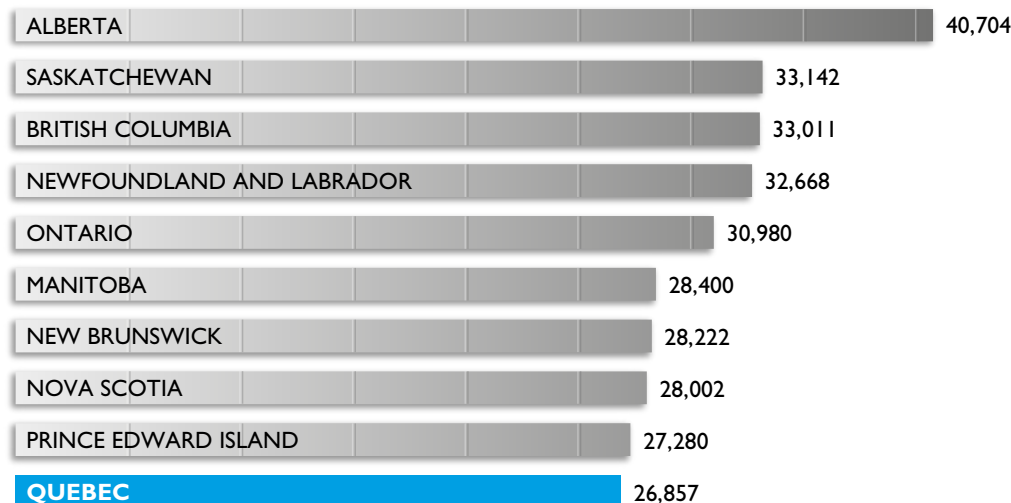
FIGURE 18

PER CAPITA DISPOSABLE INCOME IN 2015

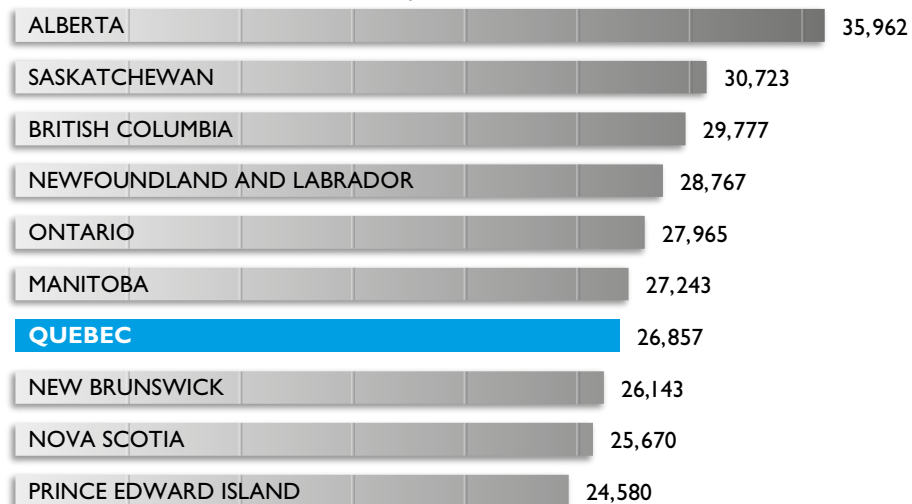
Once the different provinces' disposable income has been adjusted to reflect differences in the cost of living, the gaps among them shrink and Quebec moves up several places in the ranking.

- The difference with Ontario is four times less than before the cost of living correction. Now there is a gap of about \$1,100 between disposable income in Quebec and in Ontario.
- The difference with provinces at the top of the list also shrinks, but Alberta retains a considerable lead over Quebec. Once the data have been adjusted to take account of the cost of living, an Albertan has an average of \$9,105 more than a Quebecker for spending and saving.

WITHOUT COST OF LIVING ADJUSTMENT



WITH COST OF LIVING ADJUSTMENT



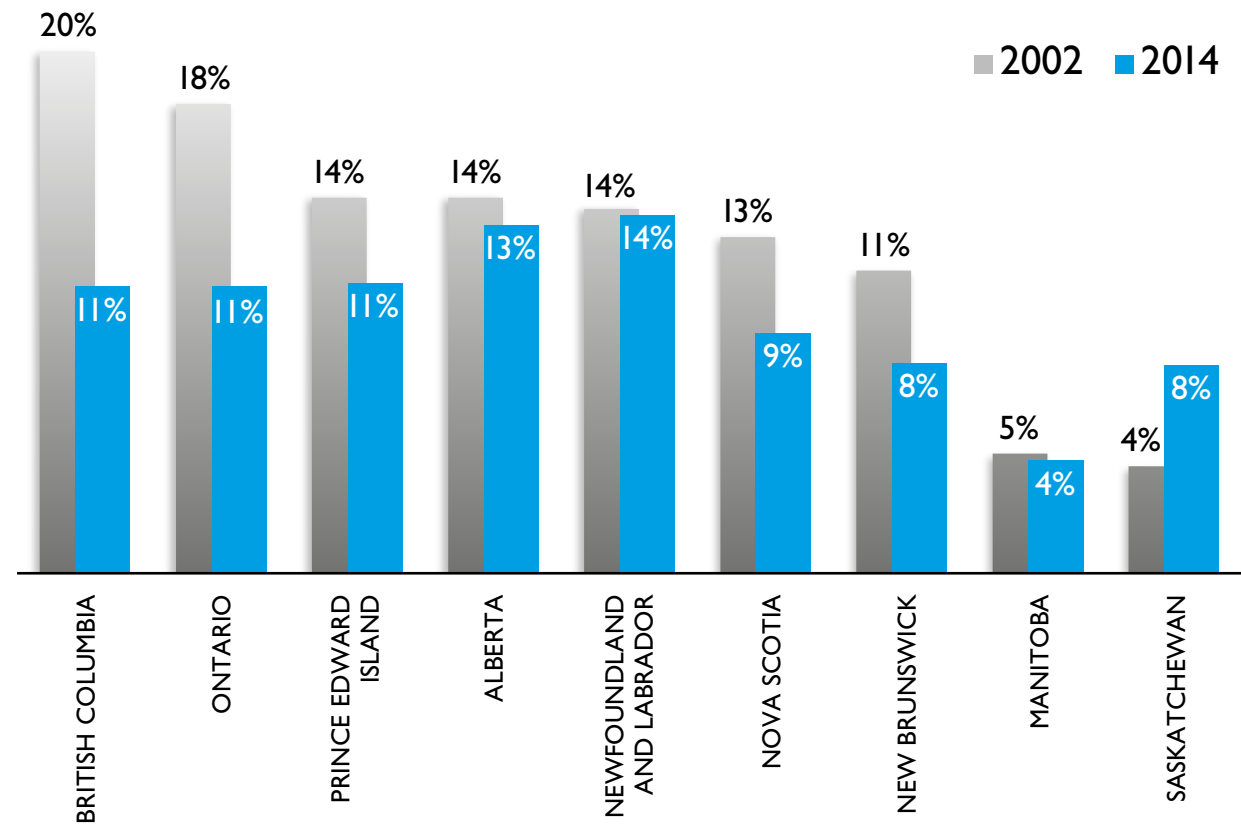
COST OF LIVING: SHRINKING GAPS

FIGURE 19

COST OF LIVING GAP WITH QUEBEC

While the cost of living adjustment tends to favour Quebec, it must be remembered that the gap between Quebec and most other provinces has been shrinking since the early 2000s:

- In 2002, the value of a market basket used to calculate the cost of living was 18% higher in Ontario, while in 2014, it was only 11%. In other words, Quebec's advantage over Ontario decreased by almost half in fewer than 15 years.
- With the exception of Saskatchewan, where the gap has spread, Quebec's advantage over the other provinces shrank between 2002 and 2014. Prices rose more quickly in Quebec than elsewhere in Canada. If this trend continues, the cost of living in Quebec will soon be on a par with that in Ontario.



WHY ARE THESE GAPS DISAPPEARING?

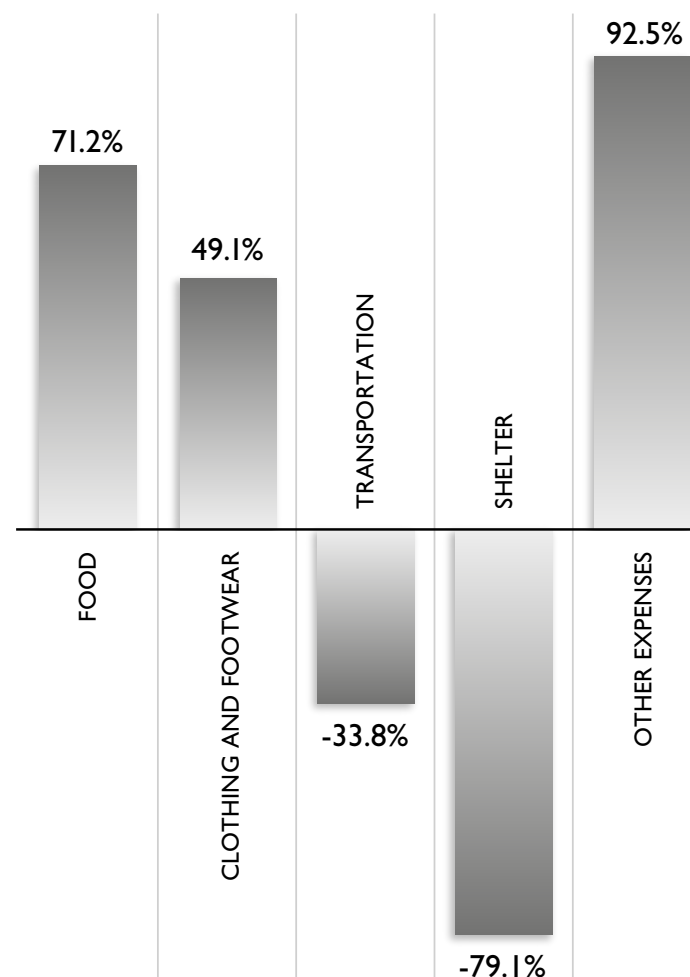
To understand why the cost of living gap between Quebec and Ontario is tending to disappear, we can decompose the MBM to identify why prices have climbed more quickly in Quebec. Remember that the MBM comprises five categories: food, clothing and footwear, shelter, transportation, and other expenses (those not included in the other categories but deemed necessary according to current societal norms: telephone, Internet access, pharmaceuticals, cultural activities, toys and games, etc.).

This shows that prices appear to have risen faster in Quebec in three of the five categories: food, clothing and footwear, and other expenses. In other words, if the cost of living gap between Quebec and Ontario is shrinking, it is because the cost of food, clothing and footwear, and other expenses is rising faster than in Ontario.

Although the costs of shelter and transportation have risen faster in Ontario than in Quebec, the gap is not enough to make up for the difference in the other three categories. In the end, the cost of living gap between the two provinces shrank between 2002 and 2014.

FIGURE 20

SOURCE OF TRENDS IN THE COST OF LIVING GAP BETWEEN QUEBEC AND ONTARIO, 2002–2014



WHAT ABOUT INEQUALITY?



GINI COEFFICIENT: QUEBEC STANDS OUT

Although its collective wealth is low, it is generally acknowledged that Quebec has more equitably distributed income. The Gini coefficient, a key tool in measuring inequality, offers a perfect illustration.

With a Gini coefficient of 0.293, Quebec clearly has a more egalitarian distribution of wealth than do the United States and the United Kingdom, which are at the head of the list. All in all, the province outperforms 12 of the 20 selected OECD countries, placing Quebec in an enviable position in terms of equality in income distribution.

That being said, it must be admitted that many countries have a Gini coefficient lower than Quebec, and at the same time a much higher standard of living. This is the case, in particular, for Sweden, Belgium and Denmark, where the standard of living is up to 33% higher than here. It seems that greater economic prosperity doesn't necessarily prevent equality in income distribution.

FIGURE 21

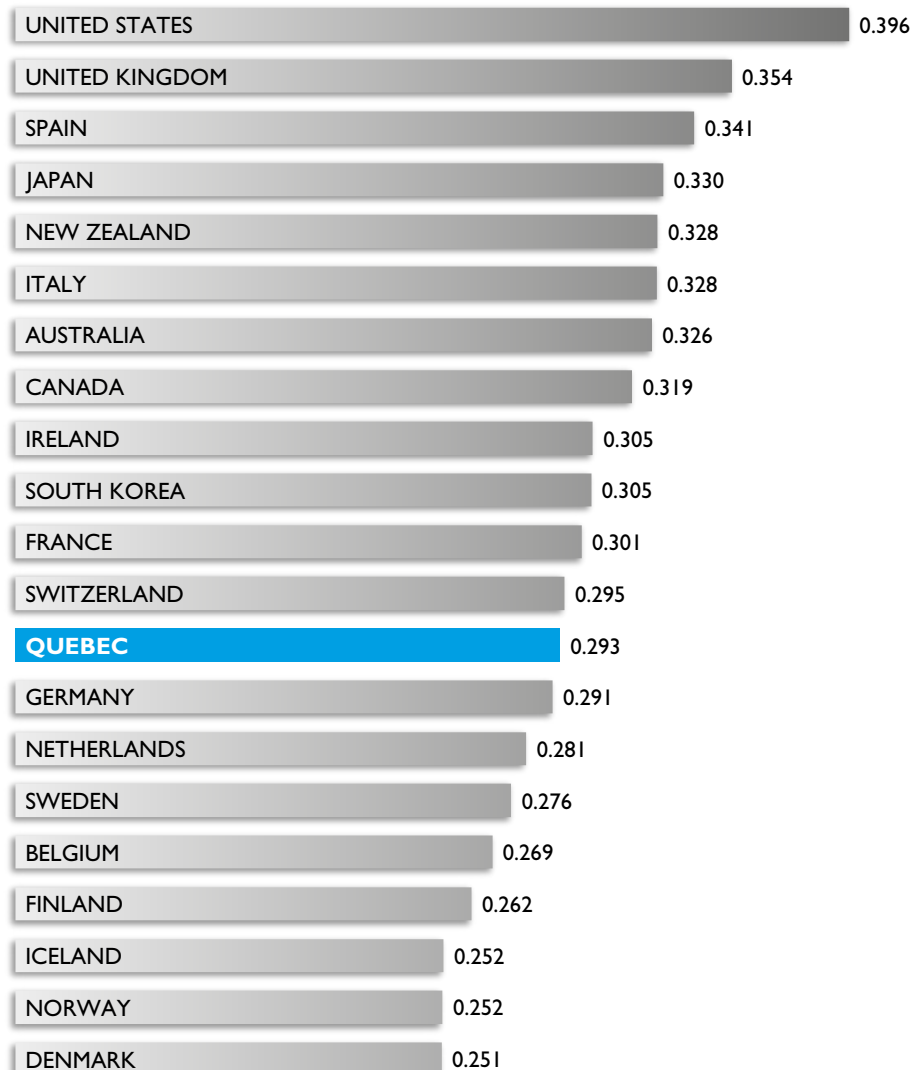
THE GINI COEFFICIENT, AFTER INCOME TAXES AND TRANSFERS

HOW DOES THE GINI WORK?

The Gini coefficient measures inequality in a society's income distribution:

- A coefficient of 1 means that a single household receives all the income
- A coefficient of 0 means that all households receive the same income

This means that the closer the Gini coefficient is to 1, the more unequal the distribution of income. Inversely, the closer the Gini trends to 0, the more equal the distribution of income.



INCOME REDISTRIBUTION IN CANADA

Quebec also holds an enviable position in Canada with regard to equal income distribution. Only the Maritime provinces have a lower Gini coefficient. Quebec is more egalitarian than Ontario, Alberta and British Columbia.

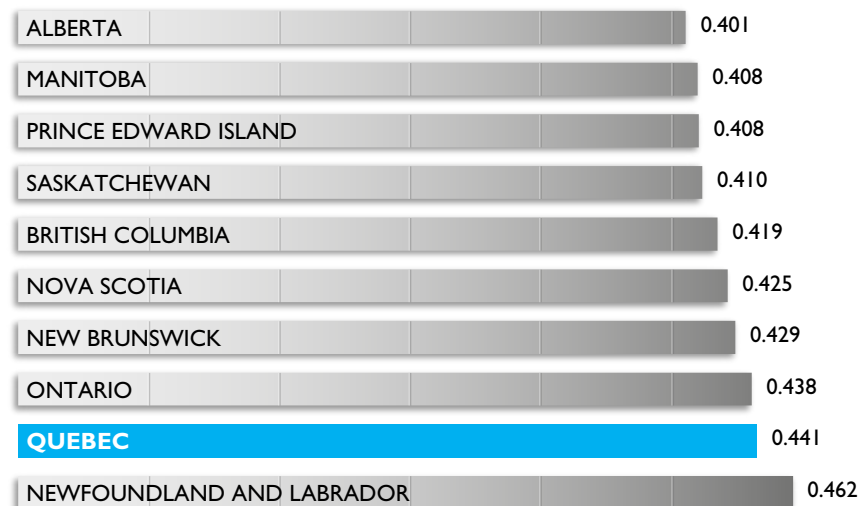
If we look more closely, we can see that this equilibrium is largely the result of government intervention. When we compare the provinces' Gini coefficients before income taxes and transfers, i.e. measuring inequality in income distribution before the government carries out its mission of redistribution, Quebec has the second-highest coefficient of the ten Canadian provinces, while Alberta has the lowest. This means that before governments intervene through tax policy to redistribute wealth, income distribution in Alberta is less unequal than in Quebec. Once governments collect taxes and income from individuals and businesses and redistribute them, the situation changes radically and Quebec becomes one of the provinces with the lowest income inequality. In other words, it is thanks to government intervention that Quebec enjoys greater equality in income distribution.

FIGURE 22

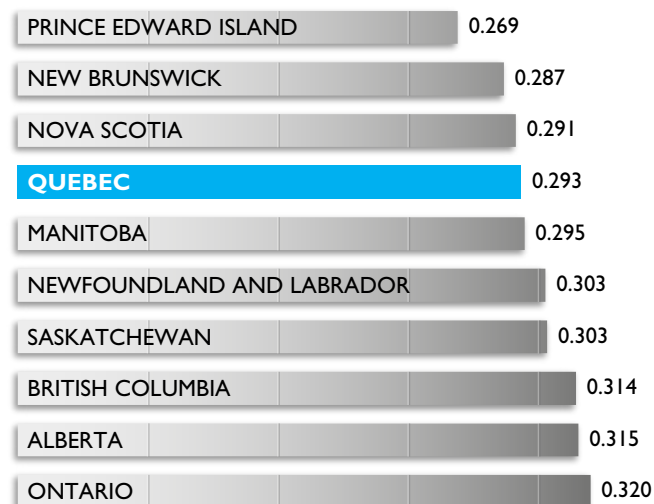
GINI COEFFICIENT

BEFORE AND AFTER INCOME TAXES AND TRANSFERS

GINI BEFORE INCOME TAXES AND TRANSFERS



GINI AFTER INCOME TAXES AND TRANSFERS



INCOME REDISTRIBUTION: LOOKING BEYOND THE GINI

While it is particularly useful for a quick snapshot of income inequality in different economies, the Gini coefficient partly conceals the true reasons behind unequal income distribution. For instance, when we compare the Gini coefficients for Quebec and Ontario, we can conclude that income distribution in Quebec is more balanced, since the Gini coefficient is higher in Ontario.

When we take a more detailed look at income distribution in the two provinces, however, the conclusions are more nuanced. Measuring average disposable income by deciles shows that only households in the first decile – the poorest citizens – have incomes higher than in Ontario. As we move through the other nine deciles, the gap in disposable income shifts to Ontario's advantage and is more and more evident.

Insofar as 90% of Ontario households have incomes higher than their counterparts in Quebec, how can we explain that Quebec is more egalitarian than Ontario?

In fact, the explanation is simple: the incomes of Ontario households in the last deciles are substantially higher than in Quebec, whereas the household incomes in the first deciles are similar. As a result, the gaps in income distribution are necessarily wider in Ontario.

In the end, income distribution in Quebec is less unequal, but the fact remains that 90% of Quebec households have incomes lower than their Ontario counterparts.

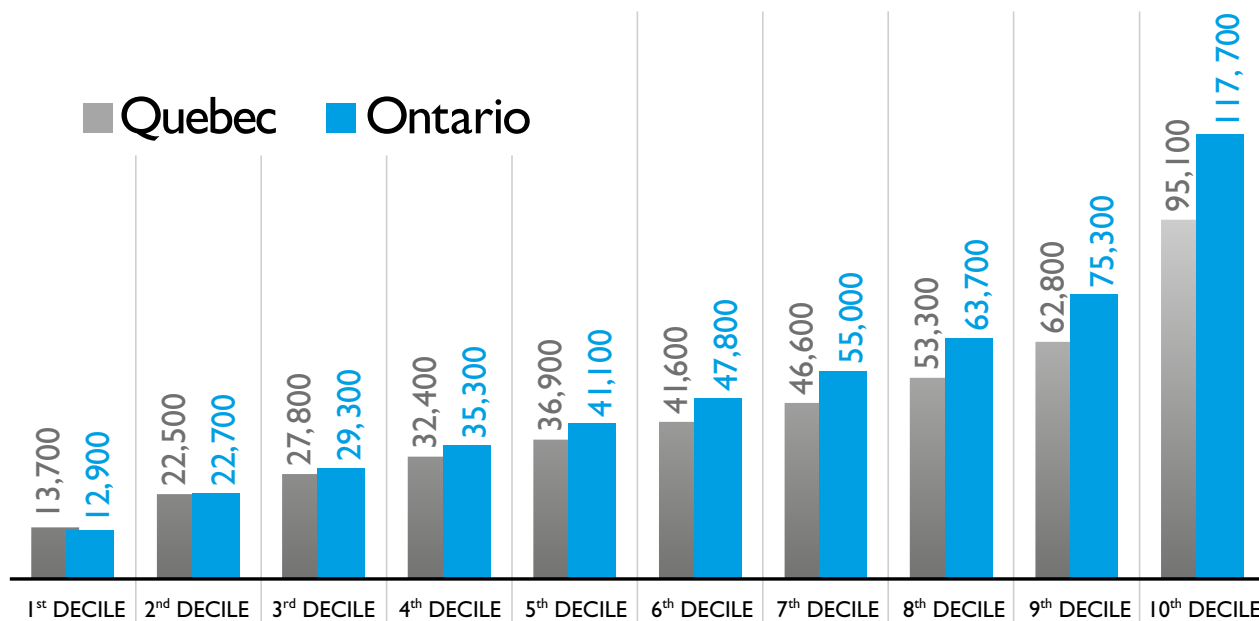


FIGURE 23

DISTRIBUTION OF HOUSEHOLD DISPOSABLE INCOME AFTER INCOME TAXES AND TRANSFERS, 2014

WHAT IS A DECILE?

Incomes are broken down into deciles to measure income distribution. In other words, the average income of each 10% segment of the population is measured, from the poorest to the richest.

WHAT HAPPENS IF WE CORRECT INCOME DISTRIBUTION TO REFLECT THE COST OF LIVING?

Since we know that the cost of living is lower in Quebec than in Ontario, the question naturally arises: would the gaps in disposable income by deciles be smaller if Ontario's income distribution were corrected to take the cost of living into account?

When we make this adjustment, the household disposable income of the first four deciles is higher in Quebec than in Ontario. In other words, the adjustment works to the advantage of less-affluent Quebecers.

This correction also reduces Ontario's lead in the higher deciles. Before the correction, the most-affluent Ontario households had incomes 24% higher than those in Quebec. After the correction, this falls to just 12%.

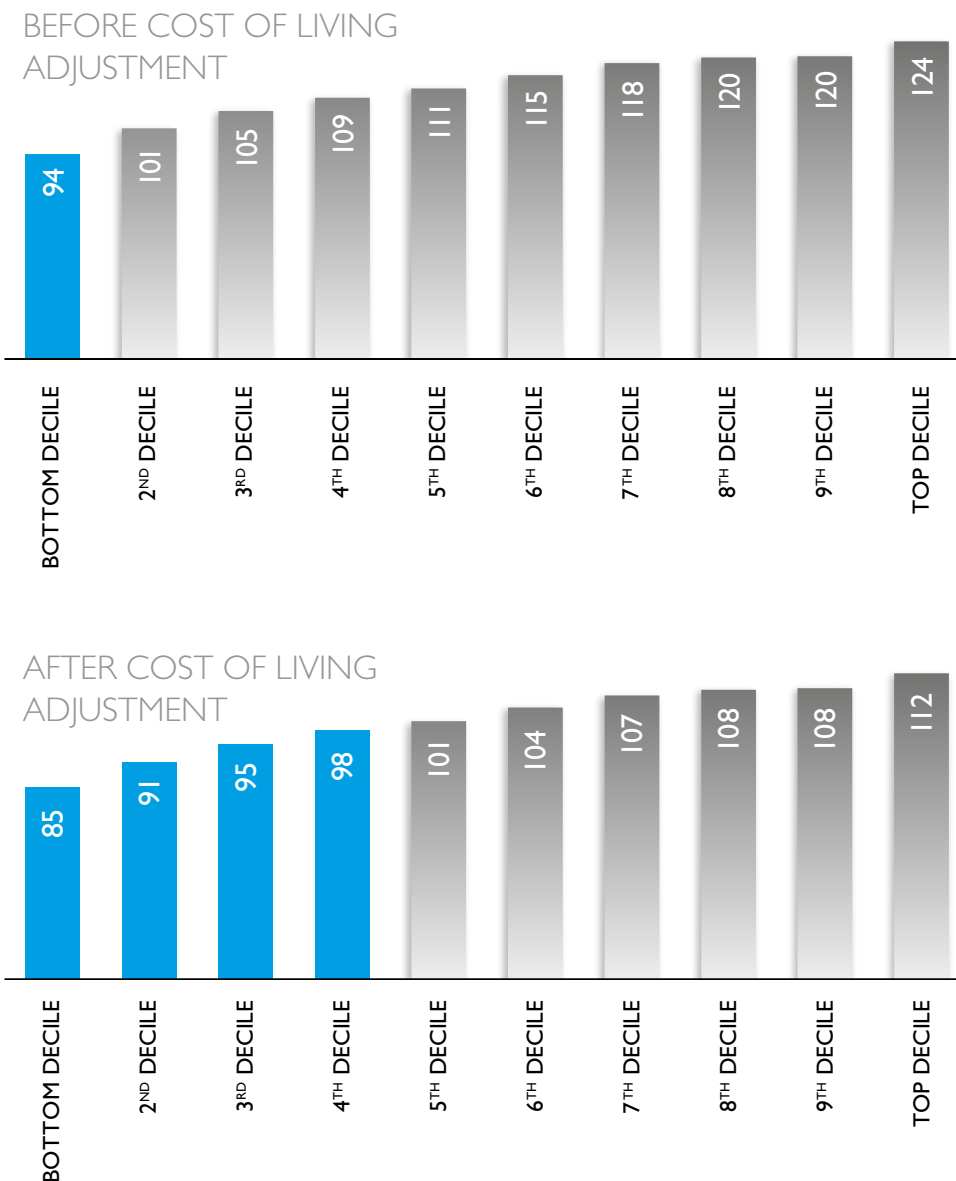
Nevertheless, the fact remains that 60% of Ontario households have higher disposable incomes than in Quebec. This is cause for concern when we consider that Quebec's advantage in terms of its cost of living is shrinking.

WHAT DOES THIS FIGURE MEAN?

In this graph, a disposable income lower than 100 means that Quebec holds a lead over Ontario. Inversely, a disposable income greater than 100 means that Ontario households have higher disposable incomes than those in Quebec. Note that the disposable incomes before the cost of living adjustment were calculated from the data in Figure 23.

FIGURE 24

AVERAGE HOUSEHOLD DISPOSABLE INCOME IN ONTARIO IN COMPARISON WITH QUEBEC, 2014



SOURCES

FIGURE 1

QUEBEC

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 2

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

FIGURE 3

QUEBEC

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 4

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

FIGURE 5

QUEBEC

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

UNITED STATES

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GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

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Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 6

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

FIGURE 7

GDP (chained 2007 dollars) by industry: Statistics Canada, CANSIM, table 383-0033

GDP (chained 2007 dollars) by industry: Statistics Canada, special compilation

Total population: Statistics Canada, CANSIM, table 051-0001

FIGURE 8

QUEBEC

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 9

QUEBEC

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 10

QUEBEC

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 11

QUEBEC

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

TABLE 1

CANADIAN PROVINCES

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

Hours worked: Statistics Canada, CANSIM, table 383-0033 and special compilation

Employment: Statistics Canada, CANSIM, table 383-0033 and special compilation

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

Hours worked: Statistics Canada, National Economic Accounts Division, special compilation

Employment: Statistics Canada, National Economic Accounts Division, special compilation

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Hours worked: OECD.Stat (Productivity Section)

Employment: OECD.Stat (Productivity Section)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 12

CANADIAN PROVINCES

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

GDP (chained 2007 dollars): Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

Hours worked: Statistics Canada, CANSIM, table 383-0033 and special compilation

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

GDP (chained 2009 dollars): Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.6

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

Hours worked: Statistics Canada, National Economic Accounts Division, special compilation

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

GDP (chained 2010 dollars): OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Hours worked: OECD.Stat (Productivity Section)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

TABLE 2

CANADIAN PROVINCES

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

Hours worked: Statistics Canada, CANSIM, table 383-0033 and special compilation

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

Hours worked: Statistics Canada, National Economic Accounts Division, special compilation

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

Hours worked: OECD.Stat (Productivity Section)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 13

CANADIAN PROVINCES

Nominal GDP: Statistics Canada, CANSIM, table 384-0038

Total population: Statistics Canada, CANSIM, table 051-0001

Hours worked: Statistics Canada, CANSIM, table 383-0033 and special compilation

Employment: Statistics Canada, CANSIM, table 383-0033 and special compilation

UNITED STATES

Nominal GDP: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 1.1.5

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

Hours worked: Statistics Canada, National Economic Accounts Division, special compilation

Employment: Statistics Canada, National Economic Accounts Division, special compilation

OECD MEMBER COUNTRIES

Nominal GDP: OECD.Stat (National Accounts Section)

Total population: OECD.Stat (National Accounts Section, national definition of population)

Hours worked: OECD.Stat (Productivity Section)

Employment: OECD.Stat (Productivity Section)

Purchasing power parity exchange rate: OECD.Stat (National Accounts Section)

FIGURE 14

GDP (chained 2007 dollars) by industry: Statistics Canada, CANSIM, table 383-0033

GDP (chained 2007 dollars) by industry: Statistics Canada, special compilation

Hours worked: Statistics Canada, CANSIM, table 383-0033 and special compilation

FIGURE 15

GDP (chained 2007 dollars) by industry: Statistics Canada, CANSIM, table 383-0033

GDP (chained 2007 dollars) by industry: Statistics Canada, special compilation

Hours worked: Statistics Canada, CANSIM, table 383-0033 and special compilation

TABLE 3

CANADIAN PROVINCES

Hours worked: Statistics Canada, CANSIM, table 383-0033 and special compilation

Employment: Statistics Canada, CANSIM, table 383-0033 and special compilation

UNITED STATES

Hours worked: Statistics Canada, National Economic Accounts Division, special compilation

Employment: Statistics Canada, National Economic Accounts Division, special compilation

OECD MEMBER COUNTRIES

Hours worked: OECD.Stat (Productivity Section)

Employment: OECD.Stat (Productivity Section)

TABLE 4

CANADIAN PROVINCES

Total population: Statistics Canada, CANSIM, table 051-0001

Employment: Statistics Canada, CANSIM, table 383-0033 and special compilation

UNITED STATES

Total population: Bureau of Economic Analysis, National Income and Product Accounts Tables, Table 7.1

Employment: Statistics Canada, National Economic Accounts Division, special compilation

OECD MEMBER COUNTRIES

Total population: OECD.Stat (National Accounts Section, national definition of population)

Employment: OECD.Stat (Productivity Section)

FIGURE 16

Household disposable income: Statistics Canada, CANSIM, table 384-0040

Total population: Statistics Canada, CANSIM, table 051-0001

FIGURE 17

Market Basket Measure (MBM) thresholds: Statistics Canada, CANSIM, table 206-0093

Regional weight based on population: Statistics Canada, 2011 census

FIGURE 18

Household disposable income: Statistics Canada, CANSIM, table 384-0040

Total population: Statistics Canada, CANSIM, table 051-0001

Market Basket Measure (MBM) thresholds: Statistics Canada, CANSIM, table 206-0093

Regional weight based on population: Statistics Canada, 2011 census

FIGURE 19

Market Basket Measure (MBM) thresholds: Statistics Canada, CANSIM, table 206-0093

Regional weight based on population: Statistics Canada, 2011 census

FIGURE 20

Market Basket Measure (MBM) thresholds: Statistics Canada, CANSIM, table 206-0093

Regional weight based on population: Statistics Canada, 2011 census

FIGURE 21

Gini coefficient, disposable income after income taxes and transfers:
Statistics Canada, CANSIM 206-0033

OECD MEMBER COUNTRIES

Gini coefficient, disposable income after income taxes and transfers:
OECD.Stat (Social Protection and Well-being Section)

FIGURE 22

Gini coefficient, disposable income after income taxes and transfers:
Statistics Canada, CANSIM 206-0033

Gini coefficient, market income before income taxes and transfers:
Statistics Canada, CANSIM 206-0033

FIGURE 23

Average disposable income, after income taxes and transfers, by
income decile: Statistics Canada, CANSIM 206-0032

FIGURE 24

Average disposable income, after tax and transfers, by income decile:
Statistics Canada, CANSIM 206-0032

Market Basket Measure (MBM) thresholds: Statistics Canada,
CANSIM, table 206-0093

Regional weight based on population: Statistics Canada, 2011 census