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Household Incomes in Canada and the United States: Who is Better Off?

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Abstract

It is commonly noted that Americans are on average richer than Canadians. For example, in 2016, GDP per capita was US \$47,294 in Canada (PPP-adjusted) compared to US \$57,798 in the United States. However, this comparison of average incomes does not necessarily imply that all or even most Canadians are worse off than Americans. This report shows that Canadian households in the bottom 56 per cent of the income distribution are in fact better off than American households at the same point of the income distribution. This finding is driven by the lower income inequality in Canada, and illustrates how the usual comparison of incomes between Canada and the United States using GDP per capita or average household income hides a critical part of the story.

Résumé

Il est fréquemment observé que les Américains sont en moyenne plus riches que les Canadiens. En 2016, par exemple, le PIB par habitant était 47 294 \$US au Canada (en termes de parité de pouvoir d'achat), comparé à 57 798 \$US aux États-Unis. Par contre, cette comparaison entre revenus moyens n'implique pas nécessairement que tous, ou même la plupart des Canadiens se trouvent dans une situation défavorable aux Américains en termes de revenus. Ce rapport montre que les 56 pour cent des ménages canadiens au bas de la répartition des revenus sont en fait plus riches que les ménages américains au même niveau de la répartition des revenus. Ce résultat est expliqué par l'inégalité des revenus plus faible au Canada, et illustre comment la comparaison habituelle entre les revenus moyens au Canada et aux États-Unis ignore une explication importante de la différence.

Household Incomes in Canada and the United States: Who is Better Off?¹

Introduction

It is commonly noted that Americans are on average richer than Canadians. On a GDP per capita basis, this observation is certainly true. In 2016, GDP per capita in Canada was CAN \$56,169, or US \$47,294 adjusted using Purchasing Power Parities (PPPs) from Statistics Canada (Table 1). In the United States, GDP per capita was about 22 per cent higher, at US \$57,798. This difference reflects mainly the labour productivity gap between the two countries.²

However, this comparison of average incomes does not necessarily imply that all or even most Canadians are worse off than Americans. In fact, the 2009 report of the Commission on the Measurement of Economic Performance and Social Progress, commonly known as the Stiglitz-Sen-Fitoussi Commission, made a recommendation to “give more prominence to the distribution of income, consumption and wealth” (Stiglitz *et al.*, 2009, Recommendation 4), instead of focusing only on averages. This report takes this recommendation to heart, and analyzes median incomes as well as incomes over the whole distribution.

The main take-away from the analysis is that Canadian households in the bottom 56 per cent of the income distribution are better off than American households at the same point of the income distribution. This is due to the greater income inequality in the United States. However, this estimate is sensitive to the PPPs used. Our preferred estimations use PPPs from Statistics Canada, which are derived in a bilateral method, and uses greater detail on prices than those derived by the OECD.³

Wolfson and Murphy (1998) previously conducted a similar analysis. Also using PPPs from Statistics Canada, they concluded that in 1995, about the bottom third of Canadian households were better off than their American counterparts. To the best of the author's knowledge, this analysis has not been replicated since then. Comparing the results in this report to those of Wolfson and Murphy, the analysis thus reveals a positive trend for Canada in which an increasing proportion of households have incomes that compare favourably to incomes in American households.⁴

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² The difference also reflects differences in employment rates, ratio of the working age population to total population, and average hours worked.

³ The Appendix shows the estimates using the PPPs from the OECD.

⁴ Wolfson and Murphy also find that this estimate is highly sensitive to the choice of PPPs. Using PPPs from the Penn World Tables instead, they found that about two thirds of Canadians were better off than their US counterparts.

Table 1: GDP Per Capita in the United States and Canada

	CAN \$ / US \$	US \$ / CAN \$	United States	Canada		Ratio ^a
			US \$	CAN \$	US \$	
2016 Current Dollars			57,798	56,169		
2016 GDP PPP (OECD)	0.803	1.245			45,109	0.780
2016 GDI PPP (Statistics Canada)	0.842	1.188			47,294	0.818

Notes: a) The ratio refers to the ratio of GDP per capita in Canada in US \$ to GDP per capita in the United States in US \$.
Sources: GDP per capita from OECD Statistics. PPPs are from OECD Statistics SNA Table 4 and from Statistics Canada Table 36-10-0367-01.

The first section of this report describes the data sources. Section 2 provides a comparison of average and median household income in Canada. The third section then analyzes whether Canadian or American households are better off at all points of the income distribution. The last section concludes.

Data Sources

This section details the data sources used. For Canada, this report uses data on pre-tax incomes of Canadian households from the public microdata files (sample size of 26,675) of the 2016 Canadian Income Survey (CIS), conducted by Statistics Canada. In this survey, total income includes employment income, net income from self-employment, as well as income from government sources (i.e., transfers), pensions, investments, and other regular cash income (e.g., child support, alimony, scholarships). It excludes capital gains. A household is defined as a person or group of persons who occupy the same dwelling as their only usual place of residence, whether they are related or not.

For the United States, this report uses data on 2016 pre-tax household incomes from the public microdata files (sample size of 69,957) of the 2017 Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS), conducted jointly by the US Census Bureau and the Bureau of Labor Statistics.⁵ Households are defined similarly; they include all the people who occupy a housing unit. In this survey as in the CIS, total income includes all pre-tax money income received in the preceding calendar year (excluding some sources, notably capital gains), as reported by the respondents to the interviewer.

Purchasing Power Parities (PPPs) are used to convert Canadian dollars to US dollars. In a very simple form, PPPs are price ratios between two countries. They are the exchange rate that equalizes the purchasing power of different currencies for the same basket of goods and services. For a Canada-US comparison, PPPs are available from two sources: the OECD and Statistics Canada. The OECD obtains price quotes for a large number of products in member countries, and then estimate multilateral PPPs.⁶ Statistics Canada publishes its own estimates of PPPs

⁵ The 2017 Annual Social and Economic Supplement of the Current Population Survey details incomes in 2016.

⁶ The OECD calculates PPPs every three years in a benchmarking exercise (2014 being the latest currently available). In the years following the benchmarking exercise (such as 2016), the OECD obtains annual PPPs by extrapolating from the latest benchmarking year using the relative changes in the GDP deflators of a given country and the reference country (the United States). For a year t between two benchmarking exercises, the OECD

between Canada and the United States in a bilateral manner, adding additional price quotes to improve the estimates.

Since the estimates of PPPs provided by Statistics Canada are derived bilaterally, prices in other countries have no chance at “contaminating” the comparison of prices between Canada and the United States. Moreover, Statistics Canada improves the accuracy of the PPPs by using a larger number of price quotes than the OECD. For these reasons, this report will use the Statistics Canada PPPs as preferred estimates. However, the large variation in the estimates do introduce significant differences in the incomes converted to US dollars. As a robustness check, the Appendix shows income calculations using the OECD PPPs.

Table 2 shows the various PPP estimates for 2016. The estimates will use PPPs for consumption, as this expenditure category is more relevant in comparisons of individual or household incomes. In 2016, the PPP for actual individual consumption from Statistics Canada was 0.841 Canadian dollars per US dollar.

Table 2: PPP Estimates between Canada and the United States, 2016

	US \$ per CAN \$	CAN \$ per US \$
OECD, GDP	1.245	0.803
OECD, Actual Individual Consumption	1.288	0.776
OECD, Private Individual Consumption	1.337	0.748
Statistics Canada, Gross Domestic Income	1.188	0.842
Statistics Canada, Actual Individual Consumption	1.189	0.841

Source: Statistics Canada Table 36-10-0367-01, OECD Statistics SNA Table 4
https://stats.oecd.org/index.aspx?DataSetCode=SNA_Table4

Average and Median Household Incomes

This section looks at the overall picture for household incomes in Canada and the United States. The first part of Table 3 compares average household incomes. In 2016, the average household income in the United States was US \$82,957.⁷ In the same year, Canadian average household income was CAN \$88,861. Interestingly, average household incomes in domestic currencies are higher in Canada. Of course, this is not a meaningful comparison, as price levels differ in the two countries in domestic currencies, and are in general lower in the United States. Using Statistics Canada's consumption-based estimates of PPPs, average household income in Canada in US dollars was between US \$74,581, or about 10 per cent below the average in the United States.⁸

The second part of Table 3 looks at median household incomes. In 2016, the median household income in the United States was US \$58,849. In the same year, the median household income in Canada was CAN \$70,675. In US dollars, using again the same consumption-based PPPs, this is equivalent to US \$59,438. In other words, the median household income in Canada was about 1

extrapolates from the benchmarking year that precedes year t and reinterpolates (i.e., extrapolates backwards) from the benchmark year that follows year t , and then takes the geometric means of the reinterpolated and extrapolated PPPs.

⁷ These estimates are obtained from sample data. Therefore, they are not accurate to the last dollar.

⁸ Table 3 shows comparable estimates using PPPs from the OECD.

per cent *higher* than the American median, a much smaller gap than between average household incomes.

Table 3: Average and Median Household Income, Canada and the United States, Current Dollars and PPP-Adjusted (2016)

Average Household Income in 2016						
			United States	Canada		
	CAN \$ / US \$	US \$ / CAN \$	US \$	CAN \$	US \$	Ratio ^a
2016 Current Dollars			82,957	88,681		
<i>2016 PPP and Source:</i>						
Actual Individual Consumption (OECD)	0.776	1.288		68,846		0.830
Private Individual Consumption (OECD)	0.748	1.337		66,341		0.800
Actual Individual Consumption (Statistics Canada)	0.841	1.189		74,581		0.899
Median Household Income in 2016						
			United States	Canada		
	CAN \$ / US \$	US \$ / CAN \$	US \$	CAN \$	US \$	Ratio ^a
2016 Current Dollars			58,849	70,675		
<i>2016 PPP and Source:</i>						
Actual Individual Consumption (OECD)	0.776	1.288		54,868		0.932
Private Individual Consumption (OECD)	0.748	1.337		52,871		0.898
Actual Individual Consumption (Statistics Canada)	0.841	1.189		59,438		1.010

Notes: a) The ratio refers to the ratio of average or median household income in Canada in US \$ to the corresponding quantity in United States in US \$.

Source: PPPs are from Statistics Canada Tables 36-10-0367-01 and OECD Statistics SNA Table 4

(https://stats.oecd.org/index.aspx?DataSetCode=SNA_Table4). Canadian household incomes are calculated using microdata from the 2016 Canadian Income Survey (CIS) by Statistics Canada. US household incomes are calculated using microdata from the 2017 Annual Social and Economic Supplement of the Current Population Survey, for 2016 incomes.

These observations reflect the lower income inequality in Canada. One indicator of inequality is the Gini coefficient. In 2016, this indicator was 0.306 in Canada, compared to 0.391 in the United States.⁹ Another indicator is the ratio of the average income to the median. Using the data in Table 3, that ratio was 1.25 in Canada, compared to 1.41 in the United States. While it is true, then, that American households are richer than Canadian ones on average, that difference is driven by much greater incomes at the top of the income distribution. In fact, the microdata used

⁹ These Gini coefficients are obtained from Osberg, Sharpe, and Stephens (forthcoming). Official estimates of the Gini coefficient in the US can differ. In one official table by the US Census Bureau (Historical Income Tables, Table A-2, <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-inequality.html>), the Gini coefficient in 2016 is estimated at 0.481. The numbers used in this report are meant for international comparisons.

in this report reveals that the top 1 per cent of households in the United States receive about 8.56 per cent of total income, while this group receives only 5.68 per cent of total income in Canada.¹⁰

Our income estimates may actually underestimate the economic well-being of Canadians relative to Americans. Indeed, Canadians usually receive more in-kind benefits from their governments, including notably in health care (as noted also by Wolfson and Murphy, 1998). Had these benefits been included in the estimates, the median augmented household income in Canada would likely surpass the American median by a greater margin. While these benefits also come with higher taxes, the progressivity of the income tax system is such that the median household is most likely a net beneficiary.¹¹

Household Incomes over the Whole Distribution

The figures in the previous section paint only a partial picture of the income differences between Canada and the United States. The higher income inequality in the United States is such that a potentially large fraction of Canadian households are actually better off than American households at the same point of the income distribution. This section divides each country's population into 100 equal sized groups, ordered from lowest to highest income. Then within each of these “percentile” income groups on each side of the Canada-US border, households' incomes are compared.

To find this information, the analysis proceeds in two steps. First, the detailed microdata is used to calculate the income forming the boundary between each successive one per cent group of the distribution of household incomes in both countries. These percentiles cut-points split the income distribution into 100 intervals that each contain exactly 1 per cent of the households in each country. Second, the average household income is estimated for households in each interval. In other words, the average household income is estimated within each 1 per cent slice of the income distribution.¹²

Table 4 gives these average household incomes for the United States in US dollars. Table 5 gives the same for Canadian households, in US dollars adjusted using PPPs from Statistics Canada.

Using the estimates from Tables 4 and 5, the difference between the average household incomes in Canada and the United States is calculated within each interval and shown in Table 6. Average household incomes are higher in all intervals from the second to the 56th percentile.¹³ In the first interval, representing the bottom 1 per cent of the income distribution, a large number of households report negative incomes. Negative incomes usually reflect operating losses from

¹⁰ These numbers reflect the income share for the top 1 per cent of households, as this grouping is the focus of this research report. It is lower than the more commonly-reported income share for the top 1 per cent of individuals.

¹¹ For example, Wolfson and Corscadden (2014) find that the public health care system is a major source of redistribution in Canada.

¹² Appendix Table 3 provides similar estimates using quintiles and deciles instead of percentiles as cut-off points. The general picture remains the same; Canadian households in about the bottom half of the income distribution are better off than their counterparts in the United States.

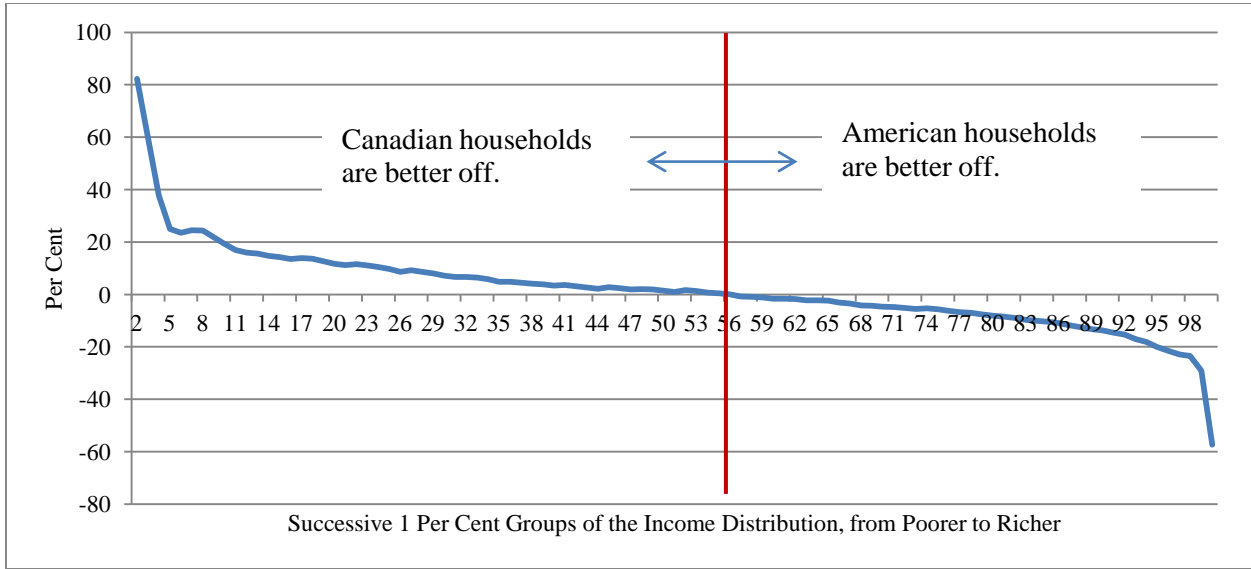
¹³ Using the PPPs from the OECD instead, between 25 and 32 per cent of Canadian households would be better off than their American counterparts. The Appendix provides the full estimates using PPPs from the OECD.

small businesses. Therefore, such individuals are not necessarily what we would consider the “poorest” one per cent.¹⁴ Abstracting then from households in this first percentile group, Canadian households with incomes up to the 56th percentile are better off than American households at the same point in the income distribution, meaning that a little over half of Canadian households are better off.

At the top end of the distribution, American households fare much better. In the top 1 per cent interval, for example, the average household income in the United States is US \$288,129 higher than in Canada (or 57.3 per cent higher), at US \$ 711,801 vs. US \$423,188. In the interval just below (between the 98th and 99th percentile), American households have incomes on average US \$94,127 higher than Canadian ones (or 29.0 per cent higher). However, the difference levels off quickly, reaching US \$23,428 by the 90th percentile (or 13.7 per cent). Again, this observation is illustrative of the high income inequality at the top in the United States.

Chart 1 illustrates the differences shown in Table 6, but expressed as a share of Canadian average household income for each interval, starting with the second.

Chart 1: Difference between Canadian and US Average Household Income Within Each Percentile Interval, 2016, Expressed as a Percentage of Canadian Average Household in Percentile Interval (PPP-Adjusted using Statistics Canada PPPs for Actual Individual Consumption)



Source: Tables 4 and 6.

¹⁴ Moreover, different ways to report losses in each country may introduce measurement error.

Table 4: Average Household Income Within Each Percentile Interval in the United States, 2016 (US Dollars)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	-175	26	29,706	51	59,604	76	107,345
2	172	27	30,322	52	60,473	77	110,222
3	2,287	28	31,468	53	62,034	78	113,077
4	5,318	29	32,533	54	63,719	79	116,256
5	7,701	30	33,790	55	65,188	80	119,637
6	9,033	31	34,947	56	66,734	81	122,698
7	9,966	32	35,789	57	68,609	82	126,457
8	10,868	33	36,838	58	70,152	83	130,336
9	11,981	34	38,044	59	71,771	84	134,590
10	12,976	35	39,527	60	73,628	85	139,300
11	14,083	36	40,234	61	75,158	86	144,295
12	15,034	37	41,434	62	76,702	87	149,584
13	16,029	38	42,579	63	78,744	88	154,665
14	17,100	39	43,878	64	80,279	89	160,735
15	18,170	40	45,042	65	82,062	90	167,143
16	19,525	41	46,097	66	84,331	91	174,427
17	20,280	42	47,467	67	86,245	92	182,897
18	21,214	43	48,769	68	88,783	93	192,941
19	22,294	44	49,984	69	90,686	94	203,775
20	23,464	45	50,820	70	92,894	95	217,401
21	24,581	46	52,241	71	95,190	96	235,826
22	25,253	47	53,731	72	97,566	97	259,390
23	26,218	48	55,039	73	99,836	98	296,022
24	27,399	49	56,309	74	101,754	99	366,849
25	28,523	50	57,921	75	104,424	100	711,801

Notes: The values represent average household income in each interval defined by the indicated percentile (inclusive) and the one preceding it (exclusive). The first interval is between the minimum value and the first percentile. The last interval is between the 99th percentile and the maximum value.

Source: Author's calculations using microdata from the 2017 Annual Social and Economic Supplement of the U.S. Current Population Survey.

Table 5: Average Household Income Within Each Percentile Interval in Canada, 2016 (PPP-adjusted US Dollars, Using Statistics Canada PPPs for Actual Individual Consumption)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	-1,130	26	33,045	51	60,293	76	99,830
2	4,436	27	34,043	52	61,651	77	102,067
3	7,957	28	35,016	53	62,984	78	104,419
4	9,662	29	35,925	54	64,252	79	106,615
5	10,948	30	36,932	55	65,533	80	109,118
6	12,469	31	37,927	56	66,835	81	111,448
7	14,009	32	38,893	57	68,021	82	114,262
8	15,302	33	39,902	58	69,375	83	116,893
9	16,178	34	40,842	59	70,816	84	120,128
10	16,839	35	41,793	60	72,252	85	123,897
11	17,621	36	42,654	61	73,722	86	127,678
12	18,562	37	43,729	62	75,141	87	131,182
13	19,661	38	44,747	63	76,641	88	134,708
14	20,731	39	45,963	64	78,221	89	138,850
15	21,885	40	46,913	65	79,801	90	143,699
16	23,075	41	48,155	66	81,382	91	148,603
17	24,201	42	49,272	67	82,794	92	154,780
18	25,323	43	50,328	68	84,481	93	160,432
19	26,261	44	51,334	69	86,170	94	167,559
20	27,201	45	52,579	70	88,006	95	175,382
21	28,152	46	53,717	71	90,023	96	187,791
22	29,210	47	54,951	72	91,911	97	203,968
23	30,213	48	56,374	73	93,711	98	231,169
24	31,227	49	57,613	74	95,754	99	272,539
25	32,184	50	58,889	75	97,774	100	423,188

Notes: The values represent average household income in each interval defined by the indicated percentile (inclusive) and the one preceding it (exclusive). The first interval is between the minimum value and the first percentile. The last interval is between the 99th percentile and the maximum value.

Source: Canadian household incomes are calculated using microdata from the Canadian Income Survey (CIS) by Statistics Canada. Incomes are adjusted using PPPs from Statistics Canada Table 36-10-0367-01 (for actual individual consumption). In 2016, that PPP was 0.841 CAN \$ per US \$.

Table 6: Difference between PPP-Adjusted Canadian and US Average Household Income, Within Each Percentile Interval, 2016 (PPP-Adjusted US Dollars, Using Statistics Canada PPPs for Actual Individual Consumption)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	n.a.*	26	3,374	51	699	76	-7,506
2	4,339	27	3,756	52	1,189	77	-8,153
3	5,669	28	3,592	53	950	78	-8,659
4	4,344	29	3,436	54	536	79	-9,642
5	3,247	30	3,142	55	347	80	-10,519
6	3,483	31	2,981	56	101	81	-11,248
7	4,075	32	3,106	57	-587	82	-12,193
8	4,436	33	3,064	58	-774	83	-13,436
9	4,198	34	2,798	59	-951	84	-14,447
10	3,863	35	2,383	60	-1,375	85	-15,391
11	3,539	36	2,478	61	-1,437	86	-16,597
12	3,529	37	2,297	62	-1,559	87	-18,384
13	3,634	38	2,171	63	-2,096	88	-19,940
14	3,634	39	2,085	64	-2,052	89	-21,863
15	3,719	40	1,871	65	-2,255	90	-23,428
16	3,695	41	2,058	66	-2,945	91	-25,824
17	4,007	42	1,805	67	-3,442	92	-28,117
18	4,110	43	1,560	68	-4,233	93	-32,495
19	3,965	44	1,351	69	-4,480	94	-36,182
20	3,786	45	1,762	70	-4,889	95	-41,975
21	3,744	46	1,502	71	-5,167	96	-47,991
22	4,028	47	1,245	72	-5,654	97	-55,353
23	3,995	48	1,336	73	-6,124	98	-64,728
24	3,898	49	1,303	74	-5,996	99	-94,127
25	3,724	50	968	75	-6,643	100	-288,129

Note: *The difference within the first interval is not shown as it includes negative incomes.

Source: Calculated from Tables 4 and 5.

Conclusion

This report compared household incomes in Canada and the United States within each one per cent interval of the income distribution. The main finding is that 56 per cent of Canadian households are better off than American households at the same point of the income distribution. This result illustrates how the usual comparison of incomes between Canada and the United States using GDP per capita or average household income hides a critical part of the story. Indeed, American society has greater income inequality, such that the higher average is driven by incomes at the top of the distribution. For poorer or middle-class Canadians, their incomes actually compare favourably to those of their American counterparts.

One limitation is that this analysis has looked only at money incomes before tax. Ideally, a full comparison of real incomes and purchasing power between Canadian and US households would take account of income and payroll taxes. Likely even more important would be to take account of major government transfers in kind – public education, publicly funded health care, and publicly supported housing. In a much earlier analysis (Smeeding *et al.*, 1993), these in-kind transfers were shown to be highly significant, and at that time, in the late 1980s, favoured Canada much more.

As noted, the results are highly sensitive to the choice of PPP estimates. Future research should explore the drivers of these differences in PPPs. A second avenue for future research would be to explore the trends in the observations made in this report. The introduction noted that Wolfson and Murphy (1998) found that about one third of Canadians were better off than Canadians in 1995. This increase in the proportion of Canadian households that are better off than their American counterparts reflect the slower increase in economic inequality in Canada compared to the United States. Indeed, between 1995 and 2016, the Gini coefficient increased by 2.3 percentage points (0.368 to 0.391) in the United States, vs. 1.3 percentage points in Canada (0.293 to 0.306), a difference of 1.0 percentage point (Osberg *et al.*, forthcoming). Producing comparable estimates over the period between 1995 and 2016 would offer an interesting look at the evolution of incomes in both countries.

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Appendix: Additional Tables

Appendix Table 1: Average Household Income in Canada Within Each Percentile Interval, 2016 (Canadian Dollars)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	-1,343	26	39,293	51	71,692	76	118,704
2	5,274	27	40,480	52	73,307	77	121,364
3	9,461	28	41,636	53	74,892	78	124,160
4	11,489	29	42,717	54	76,399	79	126,772
5	13,018	30	43,915	55	77,922	80	129,748
6	14,826	31	45,098	56	79,471	81	132,518
7	16,657	32	46,246	57	80,881	82	135,864
8	18,195	33	47,446	58	82,491	83	138,993
9	19,237	34	48,563	59	84,205	84	142,840
10	20,022	35	49,694	60	85,913	85	147,321
11	20,952	36	50,718	61	87,660	86	151,817
12	22,072	37	51,996	62	89,347	87	155,983
13	23,378	38	53,207	63	91,130	88	160,176
14	24,650	39	54,653	64	93,009	89	165,101
15	26,022	40	55,782	65	94,888	90	170,867
16	27,437	41	57,260	66	96,768	91	176,698
17	28,776	42	58,587	67	98,447	92	184,043
18	30,110	43	59,843	68	100,453	93	190,764
19	31,225	44	61,039	69	102,461	94	199,238
20	32,344	45	62,519	70	104,644	95	208,540
21	33,474	46	63,873	71	107,043	96	223,294
22	34,732	47	65,340	72	109,288	97	242,530
23	35,925	48	67,032	73	111,428	98	274,874
24	37,130	49	68,505	74	113,858	99	324,065
25	38,268	50	70,022	75	116,259	100	503,196

Notes: The values represent average household income in each interval defined by the indicated percentile (inclusive) and the one preceding it (exclusive). The first interval is between the minimum value and the first percentile. The last interval is between the 99th percentile and the maximum value.

Source: Author's calculations using microdata from the 2016 Canadian Income Survey (CIS) by Statistics Canada.

Appendix Table 2: Difference between Canadian and US Average Household Income Within Each Percentile Interval, 2016, Expressed as a Percentage of Canadian Average Household in Percentile Interval (PPP-Adjusted using Statistics Canada PPPs for Actual Individual Consumption)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	n.a.*	26	8.6%	51	1.0%	76	-6.3%
2	82.3%	27	9.3%	52	1.6%	77	-6.7%
3	59.9%	28	8.6%	53	1.3%	78	-7.0%
4	37.8%	29	8.0%	54	0.7%	79	-7.6%
5	24.9%	30	7.2%	55	0.4%	80	-8.1%
6	23.5%	31	6.6%	56	0.1%	81	-8.5%
7	24.5%	32	6.7%	57	-0.7%	82	-9.0%
8	24.4%	33	6.5%	58	-0.9%	83	-9.7%
9	21.8%	34	5.8%	59	-1.1%	84	-10.1%
10	19.3%	35	4.8%	60	-1.6%	85	-10.4%
11	16.9%	36	4.9%	61	-1.6%	86	-10.9%
12	16.0%	37	4.4%	62	-1.7%	87	-11.8%
13	15.5%	38	4.1%	63	-2.3%	88	-12.4%
14	14.7%	39	3.8%	64	-2.2%	89	-13.2%
15	14.3%	40	3.4%	65	-2.4%	90	-13.7%
16	13.5%	41	3.6%	66	-3.0%	91	-14.6%
17	13.9%	42	3.1%	67	-3.5%	92	-15.3%
18	13.7%	43	2.6%	68	-4.2%	93	-17.0%
19	12.7%	44	2.2%	69	-4.4%	94	-18.2%
20	11.7%	45	2.8%	70	-4.7%	95	-20.1%
21	11.2%	46	2.4%	71	-4.8%	96	-21.5%
22	11.6%	47	1.9%	72	-5.2%	97	-22.8%
23	11.1%	48	2.0%	73	-5.5%	98	-23.5%
24	10.5%	49	1.9%	74	-5.3%	99	-29.0%
25	9.7%	50	1.4%	75	-5.7%	100	-57.3%

Note: *The difference within the first interval is not shown as it includes negative incomes.

Source: Calculated from Tables 4 and 6.

Appendix Table 3: Average Household Income in Canada and the United States, Within Each Deciles and Quintile Groups, and Difference between Canada and the United States, 2016 (PPP-Adjusted Using Statistics Canada PPPs for Actual Individual Consumption)

Interval	United States		Canada		Difference	Difference as
	US \$	CAN \$	US \$	US \$		Share of Canadian Average
						%
1	6,990	12,686	10,669	3,679		34.48
2	18,742	26,722	22,473	3,731		16.60
3	28,972	38,770	32,606	3,634		11.14
4	39,813	50,334	42,331	2,518		5.95
5	51,833	63,404	53,323	1,490		2.79
6	66,188	78,695	66,182	-6		-0.01
7	83,575	95,879	80,634	-2,941		-3.65
8	106,529	117,844	99,107	-7,422		-7.49
9	142,973	150,144	126,271	-16,701		-13.23
10	284,067	252,666	212,492	-71,575		-33.68
1	12,893	19,691	16,560	3,667		22.15
2	34,419	44,554	37,470	3,050		8.14
3	59,011	71,043	59,747	736		1.23
4	95,052	106,871	89,879	-5,173		-5.76
5	213,520	201,390	169,369	-44,152		-26.07

Notes: The values represent average household income in each interval defined by the indicated quantile (inclusive) and the one preceding it (exclusive). The first interval is between the minimum value and the first quantile The last interval is between the last quantile and the maximum value.

Source: Author's calculations using microdata from the 2017 Annual Social and Economic Supplement of the U.S. Current Population Survey, for 2016 incomes. Canadian household incomes are calculated using microdata from the Canadian Income Survey (CIS) by Statistics Canada. Incomes are adjusted using PPPs from Statistics Canada Table 36-10-0367-01 (for actual individual consumption). In 2016, that PPP was 0.841 CAN \$ per US \$.

Appendix Table 4: Average Household Income in Canada Within Each Percentile Interval, 2016 (PPP-adjusted US Dollars, Using OECD PPPs for Actual Individual Consumption)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	-1,043	26	30,504	51	55,658	76	92,155
2	4,095	27	31,426	52	56,911	77	94,219
3	7,345	28	32,323	53	58,142	78	96,390
4	8,919	29	33,163	54	59,312	79	98,418
5	10,106	30	34,093	55	60,494	80	100,728
6	11,510	31	35,011	56	61,696	81	102,879
7	12,932	32	35,902	57	62,791	82	105,477
8	14,125	33	36,834	58	64,041	83	107,905
9	14,934	34	37,702	59	65,372	84	110,892
10	15,544	35	38,580	60	66,697	85	114,371
11	16,266	36	39,374	61	68,053	86	117,862
12	17,135	37	40,367	62	69,363	87	121,096
13	18,149	38	41,307	63	70,748	88	124,351
14	19,137	39	42,429	64	72,207	89	128,175
15	20,202	40	43,306	65	73,665	90	132,651
16	21,301	41	44,453	66	75,125	91	137,177
17	22,340	42	45,483	67	76,428	92	142,879
18	23,376	43	46,459	68	77,985	93	148,097
19	24,241	44	47,387	69	79,545	94	154,676
20	25,110	45	48,536	70	81,239	95	161,898
21	25,987	46	49,587	71	83,101	96	173,352
22	26,964	47	50,726	72	84,844	97	188,285
23	27,890	48	52,039	73	86,506	98	213,395
24	28,826	49	53,183	74	88,392	99	251,584
25	29,709	50	54,361	75	90,257	100	390,650

Notes: The values represent average household income in each interval defined by the indicated percentile (inclusive) and the one preceding it (exclusive). The first interval is between the minimum value and the first percentile. The last interval is between the 99th percentile and the maximum value.

Source: Canadian household incomes are calculated using microdata from the Canadian Income Survey (CIS) by Statistics Canada. Incomes are adjusted using PPPs from the OECD (for actual individual consumption). In 2016, that PPP was 0.776 CAN \$ per US \$.

Appendix Table 5: Difference between PPP-Adjusted Canadian and US Average Household Income, Within Each Percentile Interval, 2016 (PPP-Adjusted US Dollars, Using OECD PPPs for Actual Individual Consumption)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	n.a.*	26	834	51	-3,937	76	-15,182
2	3,998	27	1,139	52	-3,551	77	-16,000
3	5,057	28	899	53	-3,892	78	-16,687
4	3,601	29	674	54	-4,404	79	-17,839
5	2,405	30	302	55	-4,692	80	-18,909
6	2,525	31	65	56	-5,037	81	-19,816
7	2,997	32	116	57	-5,817	82	-20,978
8	3,259	33	-4	58	-6,108	83	-22,423
9	2,954	34	-342	59	-6,395	84	-23,683
10	2,568	35	-830	60	-6,931	85	-24,917
11	2,184	36	-802	61	-7,105	86	-26,414
12	2,102	37	-1,065	62	-7,336	87	-28,470
13	2,122	38	-1,270	63	-7,989	88	-30,298
14	2,041	39	-1,449	64	-8,066	89	-32,539
15	2,036	40	-1,736	65	-8,390	90	-34,477
16	1,921	41	-1,645	66	-9,202	91	-37,249
17	2,146	42	-1,984	67	-9,807	92	-40,017
18	2,163	43	-2,310	68	-10,728	93	-44,830
19	1,946	44	-2,596	69	-11,105	94	-49,065
20	1,695	45	-2,280	70	-11,655	95	-55,460
21	1,580	46	-2,628	71	-12,089	96	-62,429
22	1,782	47	-2,980	72	-12,720	97	-71,035
23	1,672	48	-2,998	73	-13,329	98	-82,502
24	1,497	49	-3,127	74	-13,358	99	-115,081
25	1,250	50	-3,560	75	-14,160	100	-320,666

Note: *The difference within the first interval is not shown as it includes negative incomes.

Source: Calculated from Table 4 and Appendix Table 4.

Appendix Table 6: Average Household Income in Canada Within Each Percentile Interval, 2016 (PPP-adjusted US Dollars, Using OECD PPPs for Private Individual Consumption)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	-1,005	26	29,394	51	53,632	76	88,801
2	3,946	27	30,282	52	54,840	77	90,790
3	7,078	28	31,147	53	56,026	78	92,882
4	8,595	29	31,956	54	57,153	79	94,836
5	9,738	30	32,852	55	58,292	80	97,062
6	11,091	31	33,737	56	59,451	81	99,135
7	12,461	32	34,596	57	60,506	82	101,638
8	13,611	33	35,494	58	61,710	83	103,978
9	14,391	34	36,329	59	62,992	84	106,856
10	14,978	35	37,176	60	64,270	85	110,208
11	15,674	36	37,941	61	65,577	86	113,572
12	16,512	37	38,897	62	66,839	87	116,688
13	17,489	38	39,804	63	68,173	88	119,825
14	18,440	39	40,885	64	69,579	89	123,510
15	19,467	40	41,730	65	70,984	90	127,823
16	20,526	41	42,835	66	72,391	91	132,185
17	21,527	42	43,828	67	73,646	92	137,680
18	22,525	43	44,768	68	75,147	93	142,707
19	23,359	44	45,663	69	76,650	94	149,047
20	24,196	45	46,770	70	78,283	95	156,006
21	25,042	46	47,782	71	80,077	96	167,043
22	25,983	47	48,880	72	81,757	97	181,433
23	26,875	48	50,145	73	83,357	98	205,629
24	27,777	49	51,247	74	85,175	99	242,428
25	28,628	50	52,383	75	86,972	100	376,433

Notes: The values represent average household income in each interval defined by the indicated percentile (inclusive) and the one preceding it (exclusive). The first interval is between the minimum value and the first percentile. The last interval is between the 99th percentile and the maximum value.

Source: Canadian household incomes are calculated using microdata from the Canadian Income Survey (CIS) by Statistics Canada. Incomes are adjusted using PPPs from the OECD (for private individual consumption). In 2016, that PPP was 0.748 CAN \$ per US \$.

Appendix Table 7: Difference between PPP-Adjusted Canadian and US Average Household Income, Within Each Percentile Interval, 2016 (PPP-Adjusted US Dollars, Using OECD PPPs for Private Individual Consumption)

Percentile	Household Income	Percentile	Household Income	Percentile	Household Income	Percentile	Household Income
1	n.a.*	26	-277	51	-5,963	76	-18,536
2	3,849	27	-5	52	-5,623	77	-19,429
3	4,790	28	-277	53	-6,008	78	-20,195
4	3,276	29	-533	54	-6,563	79	-21,421
5	2,037	30	-938	55	-6,893	80	-22,575
6	2,106	31	-1,209	56	-7,283	81	-23,561
7	2,527	32	-1,191	57	-8,103	82	-24,817
8	2,745	33	-1,345	58	-8,439	83	-26,350
9	2,410	34	-1,714	59	-8,775	84	-27,719
10	2,002	35	-2,234	60	-9,358	85	-29,079
11	1,592	36	-2,235	61	-9,582	86	-30,703
12	1,478	37	-2,535	62	-9,860	87	-32,878
13	1,462	38	-2,773	63	-10,564	88	-34,823
14	1,344	39	-2,993	64	-10,694	89	-37,203
15	1,301	40	-3,312	65	-11,071	90	-39,304
16	1,146	41	-3,263	66	-11,936	91	-42,242
17	1,333	42	-3,639	67	-12,589	92	-45,217
18	1,312	43	-4,001	68	-13,566	93	-50,219
19	1,063	44	-4,321	69	-14,000	94	-54,695
20	781	45	-4,047	70	-14,612	95	-61,352
21	634	46	-4,433	71	-15,113	96	-68,738
22	801	47	-4,826	72	-15,808	97	-77,888
23	657	48	-4,892	73	-16,478	98	-90,268
24	448	49	-5,062	74	-16,575	99	-124,237
25	169	50	-5,538	75	-17,445	100	-334,883

Note: *The difference within the first interval is not shown as it includes negative incomes.

Source: Calculated from Table 4 and Appendix Table 6.