



Munich Personal RePEc Archive

# **The Fiscal Burden of Recent Immigrants to Canada**

Kapsalis, Constantine

Retired

18 August 2020

Online at <https://mpra.ub.uni-muenchen.de/102505/>  
MPRA Paper No. 102505, posted 27 Aug 2020 09:56 UTC

# **The Fiscal Burden of Recent Immigrants to Canada**

**Constantine Kapsalis, Ph.D. Economics\***

**August 2020**

## **ABSTRACT**

In a recent report by the Fraser Institute, Grady and Grubel (2015) concluded that, because of the low taxes they pay and the government services they receive, the fiscal burden of recent immigrants to Canada was significant (\$5,329 in 2010). This study, however, shows that the fiscal burden is only significant in the case of refugees and sponsored immigrants. By contrast, economic immigrants actually pay more in taxes than the benefits they receive. This is an important finding since economic immigrants are selected primarily on economic grounds, while refugees and sponsored immigrants are accepted primarily on humanitarian and compassionate grounds.

---

\* The author is a retired economic consultant based in Ottawa.

## TABLE OF CONTENTS

<b>1. INTRODUCTION .....</b>	<b>3</b>
<b>2. LITERATURE REVIEW .....</b>	<b>4</b>
<b>3. METHODOLOGY .....</b>	<b>5</b>
<b>4. AGE DISTRIBUTION .....</b>	<b>6</b>
<b>5. GOVERNMENT TRANSFERS .....</b>	<b>8</b>
<b>6. EDUCATION BENEFITS .....</b>	<b>9</b>
<b>7. HEALTH BENEFITS .....</b>	<b>11</b>
<b>8. TAXES.....</b>	<b>12</b>
<b>9. NET FISCAL IMPACT .....</b>	<b>13</b>
<b>10. CONCLUSION .....</b>	<b>13</b>
<b>REFERENCES .....</b>	<b>14</b>

## 1. INTRODUCTION

The question addressed here is whether recent immigrants to Canada pay enough taxes to cover the cost of government benefits received. The importance of this question has increased in recent years since studies have shown that the earnings of recent immigrants relative to the rest of the population have declined and, as a result, their ability to pay taxes has also diminished.<sup>1</sup>

This study attempts to address this question by analyzing the 2016 Census Public Use Microdata File (PUMF) data. One important distinction from previous studies is that the results are broken down by class of immigrant. The distinction is important because economic immigrants are selected primarily on economic grounds, while refugees and sponsored immigrants are accepted primarily on humanitarian and compassionate grounds.<sup>2</sup>

Recent immigrants refer here to immigrants who landed in Canada during the 20-year period 1995-2014. Immigrants who arrived in 2015 or 2016 are excluded from the analysis because most of them had been in Canada for less than one year.<sup>3</sup> The rest of the population refers to earlier immigrants and individuals born in Canada. The total weighted sample is summarized in Table 1.1. The table shows that recent immigrants account for 11.1% of the total Canadian population, while among recent immigrants the economic class accounts for 57.7%.

**Table 1.1 Sample distribution by immigration status, 2016**

	Weighted count	Percentage of immigrants	Percentage of total population
Recent immigrants (1995-2014)			
- Economic class	2,126,603	57.7%	6.4%
- Sponsored class	1,117,477	30.3%	3.4%
- Refugees	441,449	12.0%	1.3%
All recent immigrants	3,685,529	100.0%	11.1%
Rest of the population <sup>1</sup>	29,593,176		88.9%
Total population	33,278,705		100.0%

*1. Born in Canada or immigrated before 1995.*

*Note: The sample excludes non-permanent residents. It also excludes 0.9% of all records because the age of the respondent was not reported. Finally, in 1.5% of the cases the year of immigration of immigrants was not reported. Those records were excluded but the total weight of immigrants was inflated by 1.5% so that the share of immigrants in the total population remains unaffected.*

*Source: Census 2016 PUMF.*

<sup>1</sup> See, for example, Picot (2004); Crossman (2014).

<sup>2</sup> These are the three immigrant classes identified in the 2016 Census.

<sup>3</sup> The census date for the 2016 census was May 10, 2016.

Net fiscal impact refers to the gap between government benefits received and taxes paid toward those benefits. The study focuses on income taxes and three primary benefits: income transfers (excluding Canada/Quebec Pension Plan benefits since the programs are fully funded by employee/employer contributions) and government spending on education and health.

## **2. LITERATURE REVIEW**

Two recent Canadian studies have addressed the question of net fiscal impact of immigrants. Using 2006 Census data, Grubel and Grady (2011) focused on immigrants arriving over the 17 year period 1987-2004. They concluded that “in the fiscal year 2005/06 the immigrants on average received an excess of \$6,051 in benefits over taxes paid” (pp. v).

This estimate was later revised based on the 2011 Census data (Grady and Grubel, 2015). The new study focused on immigrants arriving over the 24 year period 1985-2009. Their estimate of the net fiscal impact of recent immigrants for fiscal year 2010/11 was \$5,329.

Using the 2006 Census data, and effectively the same methodology as Grady and Grubel, Javdani and Pendakur (2011) found “a fiscal transfer from Canadian-born people to immigrants of \$450 per immigrant” (pp. 7), a considerably lower estimate than that of the Grady and Grubel study.

While there are a number of specific methodological differences between the two studies, the main reason for the difference in results appears to be that the Grady and Grubel study focused on recent immigrants, while the Javdani and Pendakur study covered immigrants over a much longer period (1970-2004). Their rationale for the broader selection was that “it would be more revealing to examine the entire immigrant population, so as to capture their entire life cycle of incomes” (pp.6). The focus on recent immigrants, however, is important since, as it was pointed in the introduction, there has been a deterioration in the earnings of recent immigrants relative to the rest of the population and as a result their ability to pay taxes.

### 3. METHODOLOGY

The two studies reviewed here covered all government spending and taxes. This approach is problematic for two reasons: (a) presently, there are no detailed estimates on consolidated government revenues and expenditures; and (b) the incidence of many revenues and expenditures is not clear – e.g. of corporate income taxes or spending on defence and general administration.

The present study follows a different approach. Instead of estimating the incidence of all government revenues and benefits, it focuses on two major taxes (income taxes and sales taxes) and three major expenditure areas (income transfers, education expenditures, and health expenditures).

Table 3.1 shows estimates of the taxes and expenditures included in the analysis. They represent roughly half of the total government revenues and expenditures. We exclude from the analysis 10 per cent sales taxes in order to balance total revenues and expenditures.

**Table 3.1 Government revenues and expenditures included in the analysis, 2015 (\$mil.)**

Revenues included in the analysis		Expenditures included in the analysis	
Personal income taxes <sup>1</sup>	228,106	Old Age Security and related payments <sup>1</sup>	38,504
Sales taxes <sup>2</sup>	131,436	Employment insurance benefits <sup>1</sup>	17,929
		Federal child benefits <sup>1</sup>	19,777
		Social assistance and other transfers <sup>1</sup>	26,545
		Health <sup>3</sup>	165,025
		Education <sup>3</sup>	91,762
<b>Total revenues included</b>	<b>359,542</b>	<b>Total expenditures included</b>	<b>359,542</b>

1. As reported in the census.

2. Source: Statistics Canada. Revenue, expenditure and budgetary balance - General governments, 2015. Of the total \$146,270 million taxes on products, we included only 90%, so that total revenues match total expenditures.

3. Statistics Canada. Canadian Classification of Functions of Government (CCOFOG) by consolidated government component, 2015.

Taxes and expenditures were allocated to individuals as follows: (a) Income taxes and income transfers were allocated to individuals as reported in the census data; (b) sales taxes were allocated to individuals in proportion to their total after-tax income; (c) government spending on health was allocated to individuals according to per capita provincial spending by age; (d) government spending on education was allocated to individuals according to school enrolment rates by age and per student costs. The allocation of health and education expenditures relied on census data on age, as well as external data on per capita costs.

## 4. AGE DISTRIBUTION

A key component in estimating the net fiscal impact of recent immigrants is their age distribution relative to the rest of the population. This is so because the level of benefits of key government programs, such as health, education, and public pensions, differ significantly by age.

One of the methodological challenges with the census PUMF data is identifying the children of recent immigrants, including not only children born abroad but also children born after they immigrated to Canada. For this calculation we used the hierarchical PUMF file to link together all the members of each census family. The details of the methodology are explained in Box A.

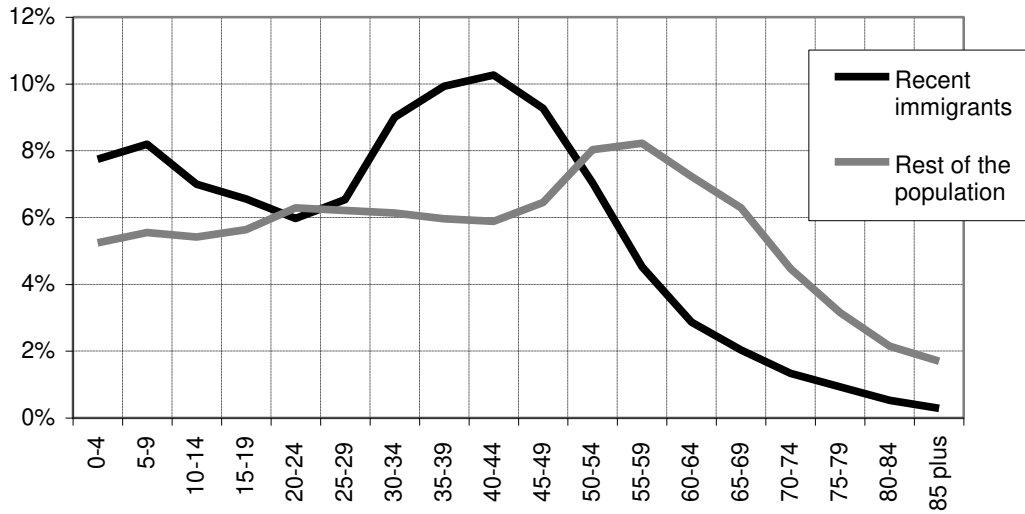
### **Box A: Estimation of Number of Children under Age 20**

The estimation of the number of children is based on the hierarchical census PUMF file. The unit of the analysis was the census family. The latter is defined as couples with children, lone parents, and single individuals. From each census family we selected the census reference person (which is one of the two parents or the single parent) and attributed to him/her all children under 20. Children were then allocated to recent immigrants and the rest of the population based on the immigration status of the reference person. Finally, the share of children of recent immigrants was applied to the total number of individuals under age 20 to distinguish between children belonging to recent immigrants and those belonging to the rest of the population. Finally, children were distributed by class of recent immigrants in proportion to the number of recent immigrants in each class.

Chart 4.1 compares the age distribution of recent immigrants to that of the rest of the population (i.e. those born in Canada and earlier immigrants). The chart shows that recent immigrants are more likely to have children less than 20 years of age and to be in the primary labour force (30-54), and less likely to be an older worker (55-64) or of retirement age (65+).

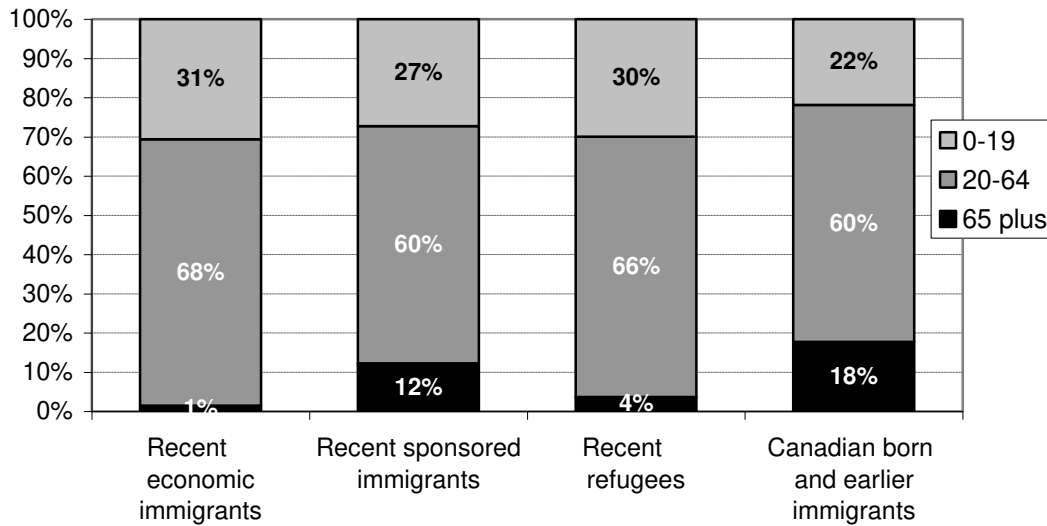
Chart 4.2 compares the age distribution by broad age groups of the three classes of recent immigrants to that of the rest of the population. The chart shows that, regardless of class, recent immigrants are more likely to have children and less likely to be of retirement age.

**Chart 4.1 Age distribution: Recent immigrants vs. Canadian born and all earlier immigrants**



Source: Census 2016 PUMF

**Chart 4.2 Age distribution by class of recent immigrant**



Source: Census 2016 PUMF



## 5. GOVERNMENT TRANSFERS

The estimate of government transfers per individual is straightforward since all government transfers are reported in the census. We excluded from the analysis CPP/QPP benefits since these two programs are fully funded and benefits depend on contributions.

Table 5.1 shows that the average recent immigrant received somewhat more government transfers than the rest of the population, by \$132. Compared to the rest of the population, recent immigrants received more child benefits, but less OAS/GIS benefits.

Recent sponsored immigrants and recent refugees received significantly more transfers than the rest of the population, by \$1,316 and \$1,730 respectively. By contrast, recent economic immigrants received less government transfers than the rest of the population, by \$823.

**Table 5.1 Per capita government transfers by immigration status, 2015**

Per capita government transfers (\$)	Recent immigrants				Rest of the population	Total population
	Economic	Sponsored	Refugees	All recent immigrants		
Child benefits <sup>1</sup>	1,008	1,844	1,678	1,342	501	594
Employment Insurance <sup>2</sup>	551	645	625	588	533	539
Old Age Security <sup>3</sup>	101	980	370	400	1,251	1,157
Other government transfers <sup>4</sup>	590	920	2,131	875	788	798
Total per capita gov't transfers <sup>5</sup>	2,251	4,389	4,803	3,205	3,073	3,088
Gap from rest of population	-823	1,316	1,730	132	0	

1. Payments to parents or guardians with dependent children from various federal, provincial and territorial child benefit programs

2. It includes benefits for unemployment, sickness, maternity, paternity, adoption, compassionate care, work sharing, retraining and benefits to self-employed fishers received under the federal Employment Insurance Program or the Québec Parental Insurance Plan.

3. Refers to Old Age Security pension and Guaranteed Income Supplements paid to persons aged 65 years and over, and to the Allowance and Allowance for the Survivor paid to 60- to 64-year-old spouses of old age security recipients or widow(er)s by the federal government.

4. The key components of this variable are social assistance benefits, workers' compensation benefits, Working Income Tax Benefit, Goods and Services Tax credits and Harmonized Sales Tax credits, refundable provincial tax credits, provincial income supplements for seniors, other provincial credits, benefits and rebates, veterans' pensions, war veterans' allowance, pensions to widow(er)s and dependants of veterans.

5. A major program excluded from the analysis is the Canada/Quebec Pension Plan which is fully funded by employee and employer contributions.

Source: Census 2016 PUMF

## 6. EDUCATION BENEFITS

Government spending on elementary, high school, and postsecondary education is a major government budget item. Naturally, most of the direct recipients of education benefits are children and young adults.

Table 6.1 provides estimates of government spending on education per capita. The table relies on Statistics Canada data on enrolments by the age of students and per student government costs on education. Per capita costs were calculated by simply dividing total cost by the total population, rather than the number of students.

**Table 6.1 Estimates of the per capita government spending on education by age**

Age	Total population <sup>1</sup>	Full-time enrolment		Gov't cost/student		Gov't cost per individual (\$) <sup>6</sup>
		Elementary/ Secondary school <sup>2</sup>	Post-secondary education <sup>3</sup>	Elementary/ Secondary school (\$) <sup>4</sup>	Post-secondary education (\$) <sup>5</sup>	
0-4	1,856,147	464,037	0	14,297	0	3,574
5-9	1,963,281	1,963,281	0	14,297	0	14,297
10-14	1,872,708	1,872,708	0	14,297	0	14,297
15-19	1,916,869	1,257,676	455,172	14,297	12,306	12,303
20-24	2,077,265	0	735,747	0	12,306	4,359
25-29	2,081,751	0	195,990	0	12,306	1,159
30-34	2,169,182	0	77,013	0	12,306	437
35-39	2,161,571	0	39,396	0	12,306	224
40-49	4,423,467	0	49,344	0	12,306	137
50+	12,756,464	0	0	0	0	0
<b>Total</b>	<b>33,278,705</b>	<b>5,557,702</b>	<b>1,552,662</b>			

1. Source: Census 2016 PUMF.

2. Source: Census 2016. There is no information in the census on school attendance for ages under 15. We assumed that one quarter of children aged 0-4 attended pre-school and all kids aged 5-14 attended school. The school attendance for ages 15-19 is as reported in the census.

3. Source: Statistics Canada. Table 37-10-0015-01 Postsecondary enrolments, by credential type, age group, registration status, program type and gender  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710001501>

4. Estimated by dividing total government spending on elementary and high school education by enrolments. The source of data are the following two Statistics Canada sites:  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710006601>  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710000701>

5. The source of estimates of government spending per postsecondary student is the Higher Education Strategy Associates:  
<http://higheredstrategy.com/comparing-provincial-expenditures-on-post-secondary-education/>

6. This estimate was derived by dividing the total government spending on both levels of education by the total number of individuals (regardless if they attended school or not).

Table 6.2 allocates the estimates of per capita government spending on education by class of immigrant. The allocation is done by taking the weighted average of the overall per capita spending, using their age distribution as weights.

The results show that on a per capita basis recent immigrants receive \$768 more education benefits than the rest of the population. This result reflects the fact that recent immigrants tend to be younger and have more young children than the rest of the population. The education gap is greater for economic immigrants and refugees relative to sponsored immigrants, who tend to be older.

**Table 6.2 Per capita government spending on education by immigration status, 2015**

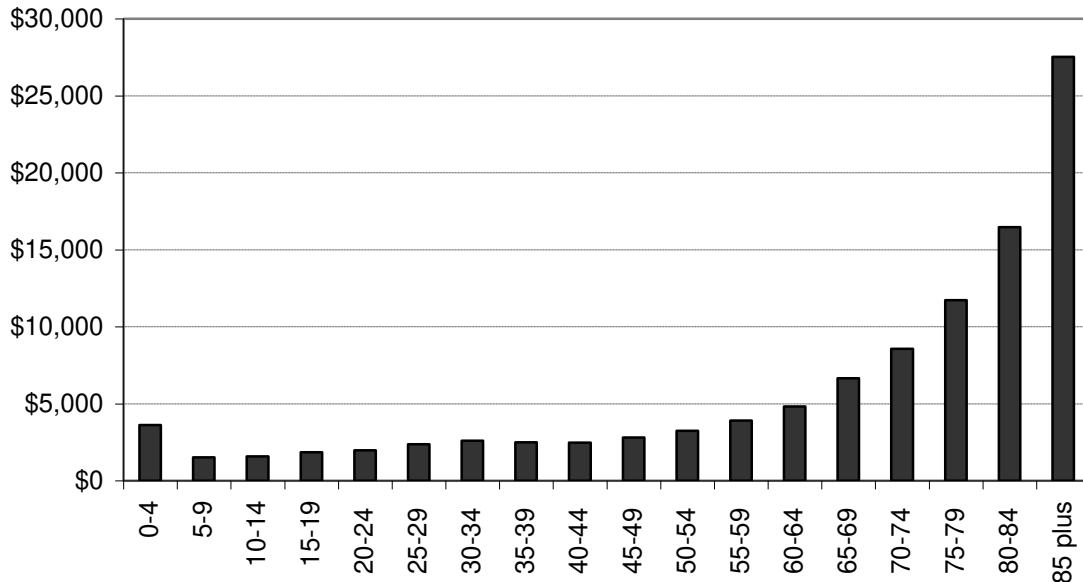
Government spending on education (\$)	Recent immigrants				Rest of the population	Total population
	Economic	Sponsored	Refugees	All recent immigrants		
Per capita spending	3,564	3,087	3,563	3,414	2,646	2,749
Gap from rest of population	918	441	917	768	0	

*Note: Per capita education costs were reduced by 6.9% so that total education benefits match total government expenditures on education in Table 3.1.*

## 7. HEALTH BENEFITS

Chart 7.1 presents estimates of the per capita cost of government spending on health by age. Per capita health benefits tend to be somewhat higher than average in the first year of age, but they rise significantly after about age 55.

**Chart 7.1 Per capita government costs on health, 2015**



Source: Canadian Institute for Health Information: National Health Expenditure Trends, 1975 to 2019.

Table 7.1 allocates health benefits by class of immigrant. Given the younger age profile of recent immigrants, it is not surprising that their per capita health benefits are significantly lower than that of the rest of the population, by \$1,587. Health benefits are even lower among recent economic immigrants and recent refugees.

**Table 7.1 Per capita government spending on health by immigration status, 2015**

Government spending on health (\$)	Recent immigrants				Rest of the population	Total population
	Economic	Sponsored	Refugees	All recent immigrants		
Per capita spending	3,208	4,327	3,410	3,584	5,171	4,959
Gap from rest of population	-1,963	-844	-1,761	-1,587	0	

Note: Per capita health costs were increased by 20.6% so that total health benefits match total government expenditures on health in Table 3.1.

## 8. TAXES

The final question is how much recent immigrants and the rest of the population paid to cover the cost of the above listed benefits. We focus on two taxes, personal income taxes and sales taxes:

- a) Personal income taxes: According to the census data personal income taxes were \$228 billion in 2015. Their incidence on individuals is as reported in the census.
- b) Sales taxes: According to the consolidated government finances, sales taxes were \$146 billion in 2015. We included in our calculations only \$131 billion (90% of total) in order to balance total revenues and expenditures. Sales taxes were allocated to individuals in proportion to their total after-tax income.

Table 8.1 shows the incidence of taxes by immigration status. It shows that recent immigrants paid less taxes towards the benefits identified earlier than the rest of the population, by \$2,790. The gap is much smaller for economic immigrants (\$1,289), but considerably higher for sponsored immigrants and especially refugees. The gap is higher with respect to income taxes than sales taxes since the former is more progressive than the latter.

**Table 8.1 Selected per capita taxes by immigration status, 2015**

Per capita taxes (\$)	Recent immigrants				Rest of the population	Total population
	Economic	Sponsored	Refugees	All recent immigrants		
Personal income taxes	5,987	3,590	2,492	4,842	7,105	6,854
Sales taxes	3,837	3,103	2,728	3,481	4,008	3,950
Total per capita taxes	9,824	6,693	5,220	8,323	11,113	10,804
Gap from rest of population	-1,289	-4,420	-5,893	-2,790	0	

Source: Census 2016 PUMF

## 9. NET FISCAL IMPACT

Table 9.1 summarize the previous results with respect to the incidence of benefits and taxes by immigration class. It shows that recent immigrants received \$1,879 more in benefits than the taxes they paid toward these benefits. The gap is particularly high among recent sponsored immigrants (\$5,110) and even more so among recent refugees (\$6,557). By contrast, recent economic immigrants had a negative gap – i.e. they paid more in taxes than the benefits they received, by \$801.

Finally, the rest of the population (i.e. the Canadian-born population and earlier immigrants) paid on average \$223 more in taxes than the benefits they received, to make up for the deficit created by net fiscal impact of recent immigrants.

**Table 9.1 Per capita fiscal impact of government benefits and taxes by immigration status, 2015**

Per capita benefits and taxes (\$)	Recent immigrants				Rest of the population	Total population
	Economic	Sponsored	Refugee	All recent immigrants		
Gov't transfers	2,251	4,389	4,803	3,205	3,073	3,088
Gov't spending on education	3,564	3,087	3,563	3,414	2,646	2,749
Gov't spending on health	3,208	4,327	3,410	3,584	5,171	4,959
Personal income taxes	5,987	3,590	2,492	4,842	7,105	6,854
Sales taxes	3,837	3,103	2,728	3,481	4,008	3,950
Net fiscal impact: Taxes-Benefits	801	-5,110	-6,557	-1,879	223	0

*Note: Figures may not add up due to rounding errors.*

*Source: Census 2016 PUMF*

## 10. CONCLUSION

Our estimates show that immigrants who arrived in Canada during the 20-year period 1995-2014 received \$1,879 more in government benefits than the taxes they paid toward those benefits. As a result, the rest of the population had to pay \$223 more in taxes to cover the deficit of recent immigrants.

Our estimate of \$1,879 is between the \$450 estimate by Javdaniand and Pendakur (2011) and the \$5,329 estimate by Grady and Grubel (2015). In fact, our estimate is likely to be even closer to the Grady and Grubel estimate since we only took into account about half of all government benefits and expenditures.

However, the more interesting finding of this study is that economic immigrants do not have a negative impact on government finances. In fact, in 2015 they had a positive impact by \$801. This is an important finding since economic immigrants are selected primarily on economic grounds, while refugees and sponsored immigrants are accepted primarily on humanitarian and compassionate grounds.

## REFERENCES

- Crossman, Eden (2014). *Low-income and Immigration: An Overview and Future Directions for Research*. Citizenship and Immigration Canada, R21-2012  
<https://www.canada.ca/content/dam/ircc/migration/ircc/english/resources/research/documents/pdf/r21-2012-low-income-ec-eng.pdf>
- Grady, Patrick and Herbert Grubel (2015). *Immigration and the Welfare State Revisited - Fiscal Transfers to Immigrants in Canada in 2014*. Fraser Institute.  
<https://www.fraserinstitute.org/sites/default/files/immigration-and-the-welfare-state-revisited.pdf>
- Grubel, Herbert, and Patrick Grady (2011). *Immigration and the Welfare State 2011*. Studies in Immigration and Refugee Policy. Fraser Institute.  
<http://global-economics.ca/immigration-and-the-canadian-welfare-state-2011.pdf>
- Javdaniand, Mohsen and Krishna Pendakur (2011). *Fiscal Transfers to Immigrants in Canada*. Simon Fraser University, Working Paper No. 11-08  
[https://www.academia.edu/3312980/Fiscal Transfers to Immigrants in Canada](https://www.academia.edu/3312980/Fiscal_Transfers_to_Immigrants_in_Canada)
- Kesselman, Jonathan R. and Cheung, Ron (2004). *Tax Incidence, Progressivity, and Inequality in Canada*. Available at SSRN:  
<https://ssrn.com/abstract=612304>
- Picot, Garnett (2004). *The Deteriorating Economic Welfare of Immigrants and Possible Causes*. Statistics Canada, Catalogue no. 11F0019MIE — No. 222  
<http://envision.ca/pdf/w2w/11F0019MIE2004222.pdf>
- Statistics Canada. *Postsecondary Enrolments, by Credential Type, Age Group, Registration Status, Program Type and Gender*. Table 37-10-0015-01.  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710001501>
- Statistics Canada. *Public and Private Elementary and Secondary Education Expenditures*. Table: 37-10-0066-01.  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710006601>
- Statistics Canada. *Number of Students in Regular Programs for Youth, Public Elementary and Secondary Schools, by Grade and Sex*. Table: 37-10-0007-01  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710000701>
- Statistics Canada. *Canadian Classification of Functions of Government (CCOFOG) by consolidated government component*.  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1010000501>
- Statistics Canada. *Revenue, expenditure and budgetary balance - General governments*.  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610047701&pickMembers%5B0%5D=2.2&pickMembers%5B1%5D=3.1&cubeTimeFrame.startMonth=01&cubeTimeFrame.startYear=2015&cubeTimeFrame.endMonth=10&cubeTimeFrame.endYear=2015&referencePeriods=20150101%2C20151001>

Usher, Alex (2018). *Comparing Provincial Expenditures on Post-Secondary Education*. Higher Education Strategy Associates.

<http://higheredstrategy.com/comparing-provincial-expenditures-on-post-secondary-education/>

Vermaeten, Frank, W. Irwin Gillespie, and Arndt Vermaeten (1994). "Tax Incidence in Canada." *Canadian Tax Journal*, Vol. 42, no. 2, pp. 348-416.

[file:///C:/Users/Costa%20user/Downloads/1994CTJ2\\_Vermaeten.pdf](file:///C:/Users/Costa%20user/Downloads/1994CTJ2_Vermaeten.pdf)