Is the Canada Summer Jobs Spending Equitable?

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Abstract— The Canadian Summer Job (CSJ) program is one major assistance initiative to help students jump-start their careers. One important objective of the CSJ program is to help these young people, among the most vulnerable groups, find employment opportunities. One intended outcome is to narrow the opportunity gap across the country. However, in this paper, despite all the good intentions, the CSJ program is not found to be equitable in all dimensions. Using the publicly available data in 2017, our regression results show this program is horizontally inequitable, but vertically equitable overall. NDP ridings, however, are favoured and may be vertically inequitable among 20-24-year-olds.

Keywords— Summer Jobs, Horizontal Inequity, Vertical Inequity, Political Inequity

1 Introduction

Young oung Canadians, aged 15-24, consistently have higher unemployment rates than other age groups. The unemployment rate is almost two times higher. Using Labor Market Data[1] between 2005 and 2019, the average April unemployment rate for these young Canadians is 13.21%, compared to 7.18% for all other age groups. Whereas this unemployment rate gap exists for many reasons, the relative lack of job opportunities is among the top causes. Inexperienced, young, short-term workers require more on-hand training, such that employers usually prefer experienced workers. Consequently, the number of job opportunities for youths is usually less than the social optimum.

Given these inequalities in job opportunities, the Canadian government uses the Canada Summer Job Program (CSJ) to provide partial wage subsidies to employers, public or private, for every young worker they hire during the summer months. Depending on the nature of the job and the employer, they can reimburse up to 50% of the total salaries paid if they hire a young worker. This tremendously cuts the cost to the employer, and about 30,000 employers[2] receive funding annually. With the CSJ program, the Canadian federal government spends hundreds of millions every year, giving wage subsidies to employers who are willing to hire and train students, creating thousands of jobs. These employees can be from the public, private, or not-for-profit sectors. The subsidy per job is not the same for all jobs created, with private businesses getting a lower rate.

1.1 The competition processes

The CSJ program substantially reduces the cost of hiring a student, and tens of thousands of employers take advantage or try to take advantage of this program every year. Not surprisingly, the selection process of the program is not automatic. Employment and Social Development Canada (ESDC) is the principal coordinating agency for the entire Youth Employment Strategy[3] (YES) program (Government of Canada, 2018a,b)[4]. Despite other initiatives the government offers to help students with employment opportunities, the CSJ program is the main program the federal government offers.

Surprisingly, the competition process depends on the elected Member of Parliament (MP) for their electoral riding[5]. First, each MP gives ESDC a list of "priorities" for their

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[1]Source: Statistics Canada. Table 14-10-0287-02 Labour force characteristics by age group, monthly, seasonally adjusted.

[2]For instance, in 2017, 2018 and 2019, there are a total of 29,553, 30,816 and 30,816 organizations received CSJ funding respectively.

[3]Earlier government reports discussing the YES program envelope are: Government of Canada (1997) and Government of Canada (2000).

[4]The department itself runs three programs, with the 2017-18 planned spending in parentheses: Career Focus ($26.8 million); Skills Link ($82.3 million); and Canada Summer Jobs ($241.1 million). In addition, there are eight other line departments running smaller job experience programs: Agriculture and Agri-Food Canada, Global Affairs Canada, Canadian Heritage, Environment and Climate Change Canada, Innovation Science and Economic Development Canada, the National Research Council, Natural Resources Canada, Indigenous and Northern Affairs Canada and Parks Canada. All of these programs are designed for the purpose of providing skills, work experience, and employment to finance fall and winter schooling (Government of Canada, 2018b).

[5]For details, see: https://www.canada.ca/en/employment-social-development/services/funding/canada-summer-jobs/local-priorities.html

riding; second, ESDC bureaucrats take the priorities from each MP – along with other criteria determined by the ESDC – and undertake a ranking of all applications that come into the ESDC Third, the ESDC bureaucrats establish a budget for each riding. Then, each MP takes the scored applications and establishes the final list of approved applications given their budget. Final approval comes from the list provided by the ESDC, and the money is paid through Service Canada. To our knowledge, the process is quite hidden to the public, and only the successfully selected recipients' information is available to the public domain. The unsuccessful applications, however, are not disclosed, and the reason for rejections is not available. The clear objective of the program is to help students with employment opportunities; given that students are usually among the most vulnerable within the labour force. Consequently it is critical to examine the equity aspects of the CSJ program. The remaining of this paper is organized as follows: Section 2 reports some evidence of inequities; section 3 reviews the literature on funding inequities in government welfare programs; section 4 discusses our data set; section 5 presents our least square analysis; and section 6 concludes our study and describes potential future research.

2   Evidence of Inequities

There are many ways to define inequities. In this paper, we will describe three different dimensions of inequities with regards to the CSJ program. We hypothesize that more than one dimension of inequity exists within the CSJ program. First, there could be regional disparities (horizontal inequity). Western provinces receive less funding, per capita than eastern provinces. Second, there could be wealth inequity (vertical inequity). In terms of income per capita, richer federal ridings could receive more CSJ funding than poorer federal ridings. Finally, there could be inequity arising from political party preferences (political inequity). The federal Liberal ridings could receive more CSJ funding than ridings won by opposition political parties.

2.1   Horizontal Inequity

Horizontal Equity, in the context of this paper, means regardless of geographical location, each job-seeking student will have an equal probability of receiving CSJ funding. In an earlier paper (See Chan and Murrell (2019)), we have already demonstrated that the CSJ program is horizontally inequitable (See Table 1 below). Ontario and the Prairie provinces receive less money per capita. However, in this current paper, we will extend the earlier paper a bit further and re-examine horizontal equality after adjusting for both the income effect and the effect of governing political parties.

2.2   Vertical Inequity

The other dimension of inequity is vertical inequity. In the context of this paper, the CSJ program will be vertically equitable if there is a negative correlation between income

and grants offered. In other words, the higher-income ridings should receive less grants, and vice versa. From Table 2 below, one sees that students in Newfoundland and Labrador enjoy far higher CSJ aid in terms of dollars per student and per unemployed student, and thus this result is horizontally inequitable. At the same time, since students in Newfoundland and Labrador have higher wage incomes than their counterparts in the Maritimes, the gap in CSJ spending is vertically inequitable.

These earlier findings motivate our renewed study. After combining data from the Canadian Census (population data) and the Canada Revenue Agency (income data), we see traces of vertical inequality by looking at grants awarded and income-per-capita for each riding[6]. An Equity Goodness of fit test χ^2 was performed in the raw data and the calculated p-value =0.0000. Please see the Appendix on the ranking of each riding in terms of grant per capita and income per capita. Our raw data result indicates possible strong evidence of vertical inequity. Therefore, there is a need to perform regression analysis and check if this inequity still exists after some variable adjustments.

3   Literature Review

During the 2008 global recession, LaRochelle-Côté and Gilmore (2008) argued that employment had declined by about 10% among those aged 15-24. This represents 225,000 jobs being lost. Marshall (2010) argues that the postsecondary tuition rate had risen faster than inflation, and this is attributed to a higher student borrowing rate, larger debts, lower savings, and investment levels after graduation. To make up the differences in tuition costs, post-secondary students often did not choose to, but needed to work, in the summer to avoid having too much debt upon graduation. Therefore, the CSJ Program, despite its relatively small grant sizes, has been an essential policy for these vulnerable students. Is this policy done fairly to all students? Does it favour any political party ridings? Does it promote equal access to all students from different regions? Does it help more to those who need help the most? There are at least three aspects that we want to study in this paper: Regional Disparity (horizontal inequality), Opportunity Disparity (vertical inequality), and Political Disparity (political inequality). After correcting for income level and political party favouritism, Regional Disparity seeks to answer the question whether CSJ funding is available equally for students across all provinces and regions. Opportunity Disparity examines whether a poorer riding will get more CSJ funding than wealthier ones. Political Disparity results if the governing political party favors

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[6]For instance, the top funded ridings, and their rank in income per capita are tabulated in Table 2 and the bottom funded ridings are tabulated in Table 4. If vertical equality is achieved, the top ranked recipient (#1) should have the lowest ranked income per capita (#338) and the second ranked recipient (#2) should have the second lowest ranked income per capita (#337). The sum of the ranking should be 339. Any ridings with a score less than 339 can be viewed as "winners" of the CSJ program; any ridings with a score over 339 can be viewed as "losers" of the CSJ program. For instance, the Ville-Marie-Le Sud-Quest-Ile-des-Sœurs riding is ranked #4 in the amount of CSJ funding it received, and the Income per capita ranks #32 among all ridings. At the same time, the Cypress Hills-Grassland riding in South Western Saskatchewan ranks #329 in the amount of funding received and #336 in terms of income per capita. This could signal severe vertical inequality.

TABLE 1: CANADA STUDENT JOBS DATA, PER STUDENT POPULATION AND UNEMPLOYED, BY PROVINCE AND CANADA – 2017

Province	$ per student population	$ per student unemployed	# of sub. Jobs per student population	# of sub. Jobs per 1,000 students unemployed
Newfoundland & Labrador	255	2,856	104	1,165
Prince Edward Island	137	2,138	49	767
Nova Scotia	121	1,104	44	404
New Brunswick	161	1,882	61	711
Quebec	82	1,174	29	416
Ontario	66	773	21	236
Manitoba	60	753	22	275
Saskatchewan	62	582	25	234
Alberta	57	530	18	171
British Columbia	64	1,048	20	335
Canada	72	812	25	276

TABLE 2: TOP 10 FUNDED RIDINGS IN 2017, 338 RIDINGS IN TOTAL

Riding	Province	Income	Grant/capita	Party	Fund Rank
Long Range Mountains	NL	32,518.2	$18.18	LIB	1
Coast of Bays–Central–Notre Dame	NL	32,596	$18.67	LIB	2
Bonavista–Burin–Trinity	NL	32,424.5	$17.72	LIB	3
Ville-Marie-Le Sud-Ouest-Île-des-Soeurs	QC	49,907.3	$16.16	LIB	4
St. John's South–Mount Pearl	NL	39,407.9	$11.23	LIB	5
Avalon	NL	42,102.6	$16.34	LIB	6
Halifax	NS	39,054	$14.50	LIB	7
Sydney–Victoria	NS	29,290.4	$12.55	LIB	8
Edmonton Strathcona	AB	48,744.1	$11.18	CON	9
Outremont	QC	47,188.8	$18.18	NDP	10

students more in their winning ridings compared to the ridings of their opposition parties. Regional Disparity of government policies is among the most studied topics in Canadian politics because of its vastness and unequal economic growth. Western provinces and Ontario are generally believed to be wealthier than the eastern provinces. Every year, the Canadian government evaluates regional disparities and uses the equalization payments to reduce access to resources across different provinces. Gross and Schmitt (2012) point out there are substantial regional labour market disparities across Canada. They have a different focus, which is on temporary foreign workers. The government is allowing temporary foreign workers to fill the need, but the policy is not likely effective because of adverse effects on the labour market. In this paper, we are looking at student summer jobs as an alternative method to fill the needs of the labor market. Despite Canada's progressive income tax system, combined with a generous welfare system, Opportunity Disparity still exists in Canada. This disparity in bolstered by Regional Disparity, by the disparities in economic growth in different regions. There are structural differences among all four economic regions (western Canada, Ontario, Quebec, and Atlantic Canada); Maroto and Pettinicchio (2020) give an excellent review of regional disparities across different people groups in Canada. They studied the interprovincial barriers, including assets disparity and employment disparity, using data from 1999 to 2012. Political Disparity is the least studied form of inequality in Canadian literature. Sawer and Laycock (2009) have an excellent review of how political parties can favour the elite voting members of society

and welfare policies can increase rather than reduce inequality. McMenamin (2012) uses the example of Quebec to illustrate how a winning political party could introduce policies that favor their winning ridings. In the case of CSJ funding, political party favouritism is more likely to occur because of its selection process . Understandably, each favor Member of Parliament (MP) will seek the best interests in their ridings, and at the same time, the political parties controlling the government are more likely to favour their MPs. With the ever-changing political culture in Canada, it is also reasonable to assume that the political party in control will try to reduce resources available to ridings won by the opposition party. This could potentially soften the support of the opposing party in that riding and hence increase the likelihood of winning in the next round of elections.

4 Data Discussion

In our studies, we must compile data through different sources because of the data availability. It is noted that the 2018 and 2019 CSJ data are also currently available. However, one objective of this study is to determine the impacts of the elected parties and the 42nd Canada general election runs from 2015 to 2019. We purposely chose the midpoint year 2017 for our analysis to minimize the effects of election campaigns. First, we took the 2017 CSJ data from the publicly-available federal ESDC website (Government of Canad, 2018). We gathered data on the amount of CSJ grants and the number of jobs created for each of the 338 federal electoral ridings. Second, we went through each rid-

TABLE 3: BOTTOM 10 FUNDED RIDINGS IN 2017, 338 RIDINGS IN TOTAL

Riding	Province	Income	Grant/capita	Party	Fund Rank
Nunavut	NU	28,559	$3.25	LIB	338
Edmonton Manning	AB	37,545.4	$1.41	LIB	337
Calgary Rocky Ridge	AB	51,874.7	$1.92	CON	336
Calgary Signal Hill	AB	68,069.9	$2.09	LIB	335
Fleetwood-Port Kells	BC	39,485.5	$2.24	LIB	334
Carlton Trail-Eagle Creek	SK	33,897.8	$3.32	CON	333
Regina-Qu'Appelle	SK	34,656.3	$3.79	CON	332
Kitchener-Conestoga	ON	35,024.4	$2.76	CON	331
Calgary Nose Hill	AB	47,348.7	$2.58	CON	330
Cypress Hills-Grasslands	SK	19,933.1	$4.53	CON	329

TABLE 4: TOP 10 FUNDED RIDINGS IN 2017 BY POLITICAL PARTY

Liberals			Conservatives			New Democrats		
Riding	Grant ($000)	Overall Rank	Riding	Grant ($000)	Overall Rank	Riding	Grant ($000)	Overall Rank
Long Range Mountains	1,600	1	Edmonton Strathcona	1,100	9	Outremont	1,100	10
Coast of Bays–Central –Notre Dame	1,500	2	Calgary Centre	1,000	12	Louis-Hébert	1,000	16
Bonavista–Burin–Trinity	1,400	3	Calgary Confederation	966.04	21	Vancouver East	974.26	19
Ville-Marie-Le Sud-Ouest-Île-des-Soeurs	1,300	4	Sarnia-Lambton	875.28	32	Sherbrooke	964.19	22
St. John's South –Mount Pearl	1,300	5	Battle River-Crowfoot	856.86	36	Laurier-Sainte-Marie	891.79	29
Avalon	1,200	6	Edmonton Centre	846.44	39	Jonquière	875.07	33
Halifax	1,200	7	Longueuil-Charles-LeMoyne	788.97	52	Trois-Rivières	856.06	37
Sydney–Victoria	1,200	8	Durham	746.09	71	Windsor West	835.16	40
Lac-Saint-Jean	1,100	11	Oshawa	727.80	77	Hamilton Centre	816.85	47
St. John's East	1,000	13	Yellowhead	723.97	78	Burnaby South	791.61	51

ing and manually inputted the elected political party for each riding back in 2017. Third, we used the 2016 Census Data to input the total population, unemployment rate, and average income per riding. Finally, we used the Canada Revenue Agency website to get the income between 15 to 20 and the income between 21 to 24 per federal district statistics in 2017. With all these data, we can compute the income per capita and grant per riding for both descriptive and regression analyses. We also want to thank an unnamed referee for pointing out that this analysis can be improved by controlling for the industry compositions. Industry composition could be quite different across different provinces, and different industries may employ additional shares of young people. However, with the limitation of data availability, this control is not possible, and we acknowledge it as a limitation for our analysis.

5 Regression Results

We want to study if horizontal and vertical inequality exist in the CSJ program. Since per-capita variables employed are either ratio data or dummy variables, a simple ordinary regression will be adequate to perform the analysis. In our regression model, we treat 2017 as our sample year; the dependent variable is the total amount of grants per riding. The following regression was performed:

$$
\begin{aligned}
\text{CSJ Grant} \quad = \quad & \alpha + \beta_1 \text{Population} + \beta_2 \text{Unemployment Rate} \\
+ \quad & \beta_3 \text{Income (15-20)} + \beta_4 \text{Income (20-24)} \\
+ \quad & + \gamma \text{Region} + \delta \text{Political Party} + \varepsilon
\end{aligned}
$$

5.1 Stage 1 Analysis

All data are used in Stage 1 analysis, and the least square output is tabulated in Table 5.

In our results, CSJ grants increase significantly with population and unemployment rate. They decrease with median income among 15-20-year-olds, implying vertical equity after adjusting for the unemployment rate and demographic variables. Regional disparities are observed, with British Columbia, Nunavut, and the Prairies receiving significantly less funding than Ontario, while the Maritimes receive more. Political inequity is significant only in NDP ridings, which receive more funding after adjusting for income and region.

TABLE 5: REGRESSION RESULTS (ADJUSTED $R^2 = 0.3019$)

Variable	Coefficient	P-value
Population (000)	0.0066836***	0.0000
Unemployment rate	0.0153700**	0.0270
Income (15-20)	-0.0000787***	0.0030
Income (20-24)	0.0000093	0.5640
BC	-0.1959116***	0.0000
NU	-1.4901770***	0.0000
NW	-0.0967895	0.7440
QC	0.0298305	0.5200
YK	-0.0981013	0.7420
Maritimes	0.2725499***	0.0010
Prairies	-0.2526531***	0.0000
LIB	0.1322025	0.1400
CON	0.0577521	0.5370
NDP	0.2075934**	0.0290
Constant	5.6472100***	0.0000

* denotes 0.1 significance; ** denotes 0.05 significance;
*** denotes 0.01 significance

5.2 Stage 2 Analysis

With the first stage analysis failing to show political inequity, we decided to break the population into subsamples based on the three major political parties. It will be interesting to recheck if the horizontal and vertical inequality degree is the same for them. The least-square results for Conservatives, Liberals, and the New Democrats are tabulated in Table 6.

Table 7 shows vertical equity among the 15-20-year-olds are found in Liberal and Conservative ridings. However, it is interesting to point out that we have found evidence of vertical inequity among NDP ridings for 20-24-year-olds. More CSJ funding is going to NDP ridings with a higher median 20-24-year-old income, compared to the NDP ridings with a lower median 20-24-year-old income. Horizontal inequity is also significant within the Liberal ridings. The Prairies ridings for all three parties receive less compared to other ridings of the same political party. It is worth noting that none of the ridings in the Maritimes is Conservative. However, CSJ funding is still horizontally inequitable among Liberal ridings. BC. Prairie Liberal ridings receive less than the Liberal ridings in Ontario; and Liberal ridings in the Maritimes receive more than Liberal ridings in Ontario. Like the Conservatives, NDP ridings show both vertical inequity and horizontal inequity. Grants increase significantly with income per capita among NDP ridings. At the same time, the Prairie NDP ridings receive less than Ontario NDP ridings.

6 Summary and Future Research

This paper examines potential inequities within the Canadian Summer Job Program. Using data from 2017, we illustrate that the program not only has regional disparity (horizontal inequity) but also has economic disparity (vertical inequity) within the NDP ridings. Regarding regional disparity, Per-capita CSJ funding awarded to the West is less than that granted to Ontario, which is less than those awarded the Maritimes. It is also noted that when we break the population based on winning political parties, we find very surprising results. Regional disparities exist for all winning parties, but economic disparities are only significant among the Conservative and the New Democrat ridings. In other words, among the Conservatives and the New Democrats, wealthier ridings are associated with higher levels of CSJ funding. However, we cannot conclude that more CSJ funding is awarded to higher-income Liberal ridings. This finding could lead to future studies.

7 Acknowledgment

TABLE 6: REGRESSION RESULTS BY POLITICAL PARTY

Variable	Liberals ($R^2 = 0.3181$)	Conservatives ($R^2 = 0.1419$)	NDP ($R^2 = 0.3436$)
Population (000)	0.0061842***	0.0085153***	0.0017107
Unemployment rate	0.0194451**	0.0055894	-0.0127800
Income (15-20)	-0.0000712**	-0.0001283**	-0.0000984
Income (20-24)	0.0000052	0.0000101	0.0000877**
BC	-0.3304198***	-0.0035103	-0.1964780
NU	-1.6187270***	0.0000000	0.0000000
NW	-0.1779596	0.0000000	0.0000000
QC	0.0016636	0.0076321	0.1247107
YK	-0.1760656	0.0000000	0.0000000
Maritimes	0.2005177**	0.0000000	0.0000000
Prairies	-0.3691555***	-0.1212899*	-0.4417314***
Constant	5.8379050***	5.6701530***	6.1413740***

* denotes 0.1 significance; ** denotes 0.05 significance; *** denotes 0.01 significance

A   Appendices

References

Chan, A. and D. Murrell (2019). Background information to the canada summer jobs program: A progress report. *paper read at the Atlantic Canada Economics Association conference, Fredericton.*

Government of Canad (2018, Feb). Organizations funded by summer jobs in 2017. Technical report, Employment and Human Resources Canada.

Government of Canada (1997, June). Effectiveness of employment-related programs for youth: Lessons learned from past experience – final report. http://publications.gc.ca/collections/collection_2013/rhdcc-hrsdc/RH64-40-1997-eng.pdf.

Government of Canada (2000, February). Youth employment strategy: A formative evaluation of youth internship canada and other hrdc youth initiatives - final report. http://publications.gc.ca/collections/collection_2013/rhdcc-hrsdc/RH64-90-2000-eng.pdf.

Government of Canada (2018a, April). Youth employment strategy. https://www.canada.ca/en/employment-social-development/services/funding/youth-employment-strategy.html.

Government of Canada (2018b). Youth employment strategy: Planning information. https://www.tbs-sct.gc.ca/hidb-bdih/plan-eng.aspx?Org=0&Hi=38&Pl=744.

Gross, D. M. and N. Schmitt (2012). Temporary foreign workers and regional labour market disparities in canada. *Canadian Public Policy 38*(2), 233–263.

LaRochelle-Côté, S. and J. Gilmore (2008, December). Canada's employment downturn. *Perspectives on Labour and Income. 10*(12).

Maroto, M. and D. Pettinicchio (2020). Barriers to economic security: Disability, employment, and asset disparities in canada. *Canadian Review of Sociology/Revue canadienne de sociologie 57*(1), 53–79.

Marshall, K. (2010). Employment patterns of postsecondary students. *Perspectives on Labour and Income 22*(4), 5.

McMenamin, I. (2012). If money talks, what does it say? varieties of capitalism and business financing of parties. *World Politics 64*(1), 1–38.

Sawer, M. and D. Laycock (2009). Down with elites and up with inequality: Market populism in australia and canada. *Commonwealth & Comparative Politics 47*(2), 133–150.